



**COMMENT-RESPONSE DOCUMENT (CRD)
TO NOTICE OF PROPOSED AMENDMENT (NPA) 2011-16**

amending Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council – Annex I (Part-FCL)

and

amending Decision 2011/016/R of the Executive Director of the European Aviation Safety Agency of 15 December 2011 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-FCL)

and

amending Decision 2012/006/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ARA)

and

amending Decision 2012/007/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ORA)

'Qualifications for flying in Instrument Meteorological Conditions (IMC)'

CRD to NPA 2011-16 (A) – EXPLANATORY NOTE

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EXECUTIVE SUMMARY

When developing the requirements for the future European regulations for pilot licensing (Part-FCL) based on the existing JAR-FCL requirements and national regulations, the European Aviation Safety Agency (the 'Agency') decided that certain elements had to be postponed and further reviewed at a later stage. With its Notice of Proposed Amendment (NPA) 2008-17b the Agency agreed with stakeholder concerns that the proposed requirements for the instrument rating seemed to be too demanding for Private Pilot Licence (PPL) holders and indicated that a separate rulemaking task would be started for this purpose.

Within the same task the need for review of the existing national regulations for a cloud flying rating for sailplane pilots was identified and it was decided to include the development of requirements for a cloud flying rating in the same rulemaking task.

Consequently, the Agency initiated rulemaking task FCL.008(a)&(b) (new numbers RMT.0198 & RMT.0199), together with experts from national aviation authorities (NAAs), flight crew organisations, training schools and the general aviation community. The NPA has been published on 21 September 2011 and contained three main elements:

- an en-route instrument rating (EIR) for aeroplane licence holders;
- a more accessible ICAO compliant aeroplane Instrument Rating (IR) called competency-based IR; and
- a cloud flying rating for sailplane pilots.

The Agency proposed some key changes compared with the IR-related requirements provided in Part-FCL in order to establish more proportionate rules for PPL holders. Together with the experts the Agency developed the EIR which should be a new entry level of instrument training and experience. During the working group meetings it was also proposed to add EIR privileges to Commercial Pilot Licence (CPL) holders. Compared with the existing IR (as introduced with Part-FCL) the EIR requires less training, though nevertheless a slightly more detailed flight training than for the basic instrument flight module of the IR. As the EIR focuses mainly on the en-route part of an IFR flight, the future EIR holder should be enabled to fly safely under Instrument Flight Rules (IFR) and in IMC in the en-route phase of the flight. It was proposed that the rating will not only allow the holder to get used to the en-route IFR procedures and to cope with unforeseen deteriorating weather conditions, but should also be a module to be credited for the IR using the new modular route proposed.

The proposed 'competency-based' modular IR is addressing the need for a more accessible route to obtaining the full IR as requested by General Aviation stakeholders. This new training route is accessible for both PPL and Commercial Pilot Licence (CPL) holders. Some key elements of this proposal are the significantly reduced theoretical knowledge (TK) syllabus focussing only on those items related to the PPL or CPL holder flying under IFR and reflecting this change also with a different level of TK examinations. Moreover, the competency-based IR includes a pre-entry assessment to evaluate prior instrument experience (e.g. as an EIR holder or as a holder of a national IR) as well as the option for crediting flight training with an instrument instructor outside of an Approved Training Organisation (ATO) completed before commencing the final training course at an ATO. A high uniform level of safety is ensured by requiring the applicants to pass exactly the same skill test as established already for the IR in Part-FCL. It should be highlighted that this competency-based IR will also provide for a specific crediting system for Part-FCL licence holders holding also an ICAO compliant IR issued by a third country.

The third element, the cloud flying rating for sailplane pilots, already exists in a few Member States. Based on these national regulations and the group's proposals, the Agency developed Implementing Rules (IRs) as well as Acceptable Means of Compliance (AMC) and Guidance Material (GM) and proposes an EU cloud flying rating for sailplane pilots. This rating should allow the rating holders to enter clouds taking into account the airspace structure and the required minima in different airspace categories and the relevant Air Traffic Control (ATC) procedures.

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EXPLANATORY NOTE

I. General

1. The purpose of this Comment-Response Document (CRD) is to amend the provisions pertaining to qualification for flying in Instrument Meteorological Conditions (IMC) of Commission Regulation (EU) No 1178/2011 (Annex I — Part-FCL), of Decision 2011/16/R, of Decision 2012/06/R, and of Decision 2012/07/R of the Executive Director of the European Aviation Safety Agency of 3 November 2011 and 19 April 2012. The scope of this rulemaking activity is outlined in the Terms of Reference (ToR) FCL.008(a) & (b), Issue 1, published on 31 October 2008 and is described in more detail below.
2. The European Aviation Safety Agency (hereafter referred to as the 'Agency') is directly involved in the rule-shaping process. It assists the Commission in its executive tasks by preparing draft regulations, and amendments thereof, for the implementation of the Basic Regulation¹ which are adopted as 'Opinions' (Article 19(1)). It also adopts Certification Specifications (CSs), Acceptable Means of Compliance (AMC) and Guidance Material (GM) to be used in the certification process (Article 19(2)).
3. When developing rules, the Agency is bound to follow a structured process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'².
4. This rulemaking activity is included in the Agency's Rulemaking Programme for 2012. It implements the rulemaking task RMT.0198 & RMT.0199 (FCL.008(a)&(b)) 'Qualification for flying in IMC'.
5. The Agency received in total 1 535 comments from 731 different commentators representing national aviation authorities, the FAA, General Aviation organisations, training organisations and individual stakeholders. A majority of the comments received dealt with the proposed sailplane cloud flying rating. Most of the remaining comments dealt with the proposed new route of an en-route instrument rating and with the crediting conditions for third-country IR holders.
6. The text of this CRD has been developed by the Agency with the assistance of the Review Group RMT.0198 & RMT.0199 (FCL.008(a)&(b)). It is submitted for reactions in accordance with Article 52 of the Basic Regulation and Article 7 of the Rulemaking Procedure.
7. The proposed rule has taken into account the development of the European Union and international law (ICAO), and the harmonisation with the rules of other authorities of the European Union's main partners as set out in the objectives of Article 2 of the Basic Regulation. The proposed rule on the competency-based IR is equivalent to the ICAO Standards and Recommended Practices (SARPs). The proposed sailplane cloud flying rating and the en-route instrument rating will be European ratings only and are not based on ICAO SARPs.

II. Summary of changes — Implementing Rule

8. As a general remark it should be noted that the Agency received several comments identifying the need for using the following terms consistently:
 - instrument flight time/instrument ground time;

¹ Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC.

² Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB Decision No 01-2012, 13.3.2012.

- dual instrument instruction time;
- flight time solely by reference to instruments;
- aerodrome/airfield.

The Agency followed this advice and reviewed all the terms used in order to clarify what is exactly meant if a certain terminology is used.

9. As another general remark the Agency would like to point out that some comments have been received addressing the question raised with the Explanatory Note of the NPA if a similar rating should be developed also for helicopter operations in IMC. The feedback is clear as all comments dealing with this issue indicated that such a review of the existing requirements for an IR(H) would be useful and should be initiated soon. The Agency will further discuss these proposals with helicopter experts and may initiate a similar task in the future.
10. **FCL.025(c)(1)(ii) 'Theoretical knowledge examinations for the issue of licences'** was amended to also include a requirement defining that the successful completion of the theoretical knowledge examinations will be valid for a period of 36 months for the issue EIR. This issue of validity of the examination and the total length of the training course was questioned in several comments.
11. **FCL.035 'Crediting of flight time'** has been amended as a result of the review of the comments raising the question if ATPL theory examination would also be valid for the EIR. As this was simply not discussed during the drafting phase of the NPA this issue was overlooked and will be included now. As a consequence ATPL theory will also be valid for the EIR.

As an additional item the phrase 'in another' was added in (b)(4) as this was an editorial mistake published in the NPA. This requirement will now specify that the holder of an IR who has completed a competency-based modular IR course shall only be credited in full towards the requirements for theoretical knowledge instruction and examination for an IR in another category of aircraft when also having passed the theoretical knowledge instruction and examination for the IR part of the High Performance Aeroplane course (see FCL.720(b)(2)). The same requirement applies for the EIR holder. One comment requested the removal of sub-paragraph (d) in **FCL.055 'Language proficiency'** for the competency-based IR to make the rating more accessible. The Agency reviewed the request and concluded that the FCL.055 requirement asking IR holders to demonstrate a certain level of English proficiency, although not required by the ICAO SARPs, is an essential element to ensure high standards among IR holders in Europe. However, the rule allows the competent authority to establish the method of assessment. Therefore, through the use of AMC to FCL.055 or by developing an Alternative Means of Compliance the competent authority will be able to make the English language assessment for IR holders more reasonable for their licence holders wishing to obtain a competency-based IR. Several comments stated that an English language proficiency requirement, in accordance with FCL.055, would make the EIR too restrictive and thereby less accessible for a majority of pilots. The Agency would like to highlight that the current text in FCL.055 only refers to holders of an IR and not holders of an EIR.

12. The Agency received a reasonable number of comments proposing the review of **FCL.610 'IR – Prerequisites and crediting'** in order to solve the issue of pilots not being able to obtain a night rating (i.e. due to non-compliance with the colour vision requirements in Part-MED) but wishing to attain the EIR or IR. This issue was further evaluated together with the Review Group. Based on these discussions and the fact that ICAO SARPs do not require a night rating as a prerequisite for the IR, the Agency decided to keep the proposed route to allow a day-EIR without any link to the night rating but to also allow EIR operations by night if the required night rating is held. As a logical consequence of this decision the text in FCL.610(a)(1)(i) for the IR was also amended in order to clarify that a night rating according to FCL.810 is only required if the privileges

of the IR will be exercised at night. However, it should be highlighted that current medical requirements for IFR flying in Part-MED will be reviewed in order to verify the impact on medical issues related to this decision.

13. **FCL.825 'En-route Instrument Rating (EIR)'** provides the framework for the new European rating detailing the privileges for flying IFR in the en-route phase of the flight but not giving any IFR approach or departure privilege. The following issues were the main items raised by the comments and reviewed by the Agency together with the experts of the Review Group.

Type or class of aeroplane

The Agency proposed to make this rating available to all licence holders who hold at least a PPL and not to limit this rating to a specific aircraft type or class. Some comments were received proposing to limit the privileges to non-high performance non-complex aeroplanes or to single-engine piston (SEP) aeroplanes only. No specific justification was provided by the commentators why certain aircraft types or classes should be excluded. In addition, based on the fact that to operate a high performance complex aeroplane the licence holder needs to hold an IR, the Agency decided not to further limit the EIR privileges. The same principles apply for the competency-based IR.

Extension to en-route instrument flights by night

Several comments proposed to introduce an option to extend the EIR to en-route IFR flights at night. As already explained above the Agency discussed this proposal with the Review Group. Although the initial idea was to limit the EIR to flights during day only, the Agency reached the conclusion that holders of an EIR who also hold a night rating according to FCL.810 should be allowed to fly also IFR in the en-route phase of the flight at night. Please see item 13 of this document for further details.

Weather conditions

Based on some comments the Agency reworded the text in FCL.825(a)(2) under 'Privileges and conditions' in order to clarify the weather conditions for EIR pilot. On departure the conditions shall be such as to enable the segment of the flight from take-off to a planned VFR-to-IFR transition point to be conducted in compliance with VFR. In addition to this, at the estimated time of arrival at the planned destination aerodrome the weather conditions shall be such as to enable the segment of the flight from an IFR-to-VFR transition point to landing to be conducted in compliance with VFR. The minima provided in FCL.825 (a)(3) were also reworded to highlight that in any case the holder of the EIR shall not, during departure or arrival, operate in IMC within 1 000 feet above the highest obstacle within 5 NM of the aerodrome reference point.

ATC procedures

Several comments suggested that European Air Traffic Control (ATC) service providers should also be aware of the limitations of the EIR, in particular those pertaining to the prohibited instrument approach privileges. The Agency agrees that it would be beneficial to emphasise these limitations and will liaise with the appropriate European ATC bodies prior to the introduction of the EIR.

EIR Monitoring Board

During the review phase the Agency discussed with some Member States the idea of setting up an EIR Monitoring Board similar to the MPL Advisory Board. This board should assess the implementation of these new requirements for the EIR in Europe, identify potential problems, and make an assessment if any further amendments would be required.

Prerequisites to commence the training

Several comments questioned the proposal to require a minimum amount of 20 hours cross-country flight time on aeroplanes and proposed to allow also flight time on TMG. In addition to this some comments proposed to change the wording in FCL.610 and to allow that the required cross-country flight time for the IR should also allow for flight time be allowed on a TMG. The Agency agrees that the required 50 hours of cross-country should also be allowed for flight time on TMGs. However as the text for the IR further specifies that at least 21 hours of these 50 hours shall be completed in the relevant aircraft category this will be kept and the same principle transferred to the EIR. This is the reason why this requirement will be changed to require 20 hours in total, but only 10 on aeroplanes.

Flight instruction provided by an IRI(A) or an FI(A)

The proposal to allow some training (maximum of 5 hours) outside an ATO was on one hand questioned by several commentators, mainly by national aviation authorities (NAAs) but on the other hand heavily supported by a significant number of comments. The supporting comments stated that this criteria of training provided by a qualified instructor outside an ATO is a crucial element of these new proposals. The Agency reviewed this issue and came to the conclusion that the proposed method of training outside an ATO should be kept. The text was reworded in order to align the proposals with the structure given by Part-FCL and with the principles proposed for the competency-based IR. It is now clarified that the required minimum amount of 15 hours flight training should normally be provided by an ATO. However, in the case of prior instrument flight training completed with a qualified instructor, up to a maximum of 5 hours may be credited towards the 15 hours.

Several comments indicated that FCL.825(g)(4)(i) should include a reference to the TRI, as the TRI has the privilege to instruct for renewal of the EIR according to the amended FCL.905.TRI. The Agency agrees and has changed the text in FCL.825 to reflect this.

Documentation of flight instruction provided by IRI or FI in a training record

Several comments questioned the quality of training provided by a qualified instructor outside an ATO. The comments also questioned where to find the course content or the training syllabus to be followed in such cases. The Agency has introduced an additional requirement and an AMC in order to structure the process and to define the responsibilities and tasks. The completion of the instrument flight under instruction provided by an IRI(A) or FI(A) shall be documented in a specific training record and signed by the instructor. In addition the Agency decided to add a 5-year record-keeping requirement. Further details are to be found in the newly developed AMC.

EIR course for multi-engine aeroplanes

The requirements developed for a multi-engine (ME) EIR were reviewed and amended. Several commentators proposed to define the amount of hours on ME aeroplanes more clearly. As a result this has been clarified and the total instrument flight time was reduced to 16 hours of which at least 4 hours shall be on multi-engine aeroplanes. A credit to be given for training outside an ATO up to a maximum of 6 hours was also included. However, it was emphasised that in any case the required flight instruction on multi-engine aeroplanes shall be provided by the ATO. The final skill test has to be flown on ME aeroplanes.

Some comments also proposed to review the route for the single-engine (SE) EIR holder to extend the privileges to ME aeroplanes. The Agency agrees with these proposals and will keep this route similar as the route for the IR. The proposed text was changed and will now require at least 2 hours instrument flight instruction in multi-engine aeroplanes.

Revalidation and renewal

A few stakeholders criticised the published validity period of one year for the EIR and proposed to extend the time frame to 24 months or even to 36 months. The Agency is not in favour of changing this 12-month time frame as it is also a general principle for the IR. Only with such a 1-year period, requiring either a proficiency check or a certain minimum amount of flight time under IFR, the required high level of training and experience can be guaranteed. In parallel several comments addressed the issue of revalidation of an EIR by proposing other means than simply the proficiency check. The Agency reviewed the issue and introduced in addition to the proficiency check an alternative requirement asking for the completion of 6 hours as PIC under IFR and a training flight of at least 1 hour with an instructor holding privileges to provide training for the EIR. However, for at least each alternate subsequent revalidation the holder of the EIR shall have to pass a proficiency check.

Since there were no specific criteria included so far for the revalidation of an ME EIR, the Agency added also a new requirement clarifying that if a ME EIR is held the proficiency check and the training flight mentioned above have to be completed in a multi-engine aeroplane. It was also clarified that if a ME EIR is held, the proficiency check taken in a multi-engine aeroplane will also revalidate the SE EIR.

Crediting for third-country IR holders

As some commentators raised the question why there is no credit for third-country IR experience in a similar way as for the competency-based IR, the Agency decided to introduce such credit for consistency reasons as an additional requirement under FCL.825(h). Although being aware that most of these licence holders with a third-country IR will prefer the competency-based IR, the same crediting principles should apply for the EIR. The text included clarifies that applicants for the EIR holding a Part-FCL PPL or CPL and a valid IR issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country may be credited in full towards the training course requirements. In order to have the EIR, the applicant shall:

- successfully complete the skill test for the EIR;
- demonstrate an adequate level of theoretical knowledge of air law, meteorology and flight planning; and
- have a minimum experience of at least 25 hours of instrument flight time.

14. **FCL.830 'Sailplane cloud flying rating'** provides the Implementing Rules for an European rating for sailplane pilots to operate a sailplane or powered sailplane (except TMG) within cloud. The majority of the comments received on the NPA addressed issues concerned with this rating. Many commentators also referred to the items addressed by one national gliding association (see comment No 121). The Agency started the review by identifying the main technical items addressed in the comments. The following issues were the main topics stakeholders commented on.

LAPL and SPL

Some concerns were raised about whether the sailplane cloud flying rating would be available for LAPL(S) and SPL holders. The Agency clarified that this was already proposed by the NPA and therefore it remains part of the proposal.

Restricted cloud flying rating

The Agency explained in the Explanatory Note of the NPA why the NPA does not support the development and introduction of an additional restricted cloud flying rating (as actually in place in one Member State). As this issue was heavily debated and raised in hundreds of comments it was reviewed again and discussed also with the Review Group. The Agency concluded that a rating with basically no training requirements but with certain additional privileges which would allow sailplane pilots not to comply with the ICAO airspace requirements will not be introduced. However, it should be stated as well

that Member States may further continue to define certain specific airspace categories in which sailplane operations have to follow specific rules. But this cannot be solved and addressed by the licensing rules in Part-FCL.

Use of the TMG

Several comments referred to the use of the Touring Motor Glider (TMG). The NPA was not clear on whether exercising the privileges of the cloud flying rating were allowed on a TMG or whether a TMG could be used during training or the skill test. The Agency reviewed the issue and decided that the privileges of a cloud flying rating should not allow a rating holder to use a TMG to exercise the associated rating privileges. In addition, the Agency decided to allow certain elements of the training (as already proposed by the NPA) and the skill test to be conducted on a TMG. As the instructor and examiner will have the same cloud flying rating privileges and as in addition no TMG is so far certified for cloud flying, the exercises and test items performed in a TMG shall be flown under simulated IMC and not in clouds. The approval for the use of a TMG during the skill test was clarified in AMC2 FCL.830.

Prerequisites

The Agency received quite a number of comments questioning the proposed prerequisite of 30 hours as pilot-in-command of sailplanes after licence issue. The Agency believes that such an amount of experience will guarantee skills which are needed to operate a sailplane safely in clouds.

Flight instruction required

A significant number of comments was received questioning the need for the proposed 5 hours flight instruction. Although this requirement was based on existing national requirements in some Member States and discussions with the Review Group, it seems that the exercises required and contained in the syllabus could be completed in a shorter time frame. It was therefore decided during the review phase to lower these training requirements to 2 hours but to keep the requirement for at least 1 hour to be provided in a sailplane (except TMG).

An additional credit for holders of an EIR or an IR was also introduced in the Implementing Rule. These rating holders will be credited against the training requirements but will have to complete at least 1 hour dual flight instruction. This was already included in a similar way in AMC1 FCL.830 but has now been moved to the rule level.

Recency criteria

Based on the input received the Agency decided to amend the recency criteria for this rating and to use the same principles as for the LAPL or SPL. The NPA proposed that a proficiency check must be completed every 24 months. The text was amended and now provides several options for maintaining recency.

Use of sailplane simulators for training

Several comments suggested the use of sailplane simulators to replace parts of the cloud flying training elements, thereby reducing cost. The Agency understands the potential cost benefits of the use of simulators during training; however, currently no 'certified' sailplane simulators exist. Therefore, the Agency at present cannot allow the use of sailplane simulators for sailplane cloud flying training.

Conduct of sailplane towing near clouds

Several comments requested a sailplane towing aeroplane to be exempted from the requirement to remain 1 000 ft clear of clouds above 3 000 ft MSL during sailplane towing activities. The Agency cannot exempt these flights not to comply with the ICAO requirements. In any case, the Agency does not believe that sailplane towing up to the cloud base is required for the sailplane cloud flying training as the sailplanes are normally released far below the cloud base and climb afterwards by using the a thermal or a wave system. If a sailplane towing pilot intends to fly close to clouds, within 1 000 ft vertical distance flying above 3 000 ft MSL, then he/she shall have either an EIR or IR(A).

Availability of Approved Training Organisation (ATO)

Several concerns were raised on the availability of ATO's to provide training for the cloud flying rating. Sailplane clubs or training schools intending to provide training for the rating will need to establish a non-complex ATO by April 2015 at the latest in order to give or continue training for sailplane licences and/or ratings. Since Member States have chosen different dates to start applying the new Aircrew regulations, the exact date can differ for different ATO's. The Agency believes that the time frame given will provide ample time for such organisations to be established. Requirements for establishing an ATO are contained in Part-ORA.

Availability of instructors and examiners

Several concerns were raised on the availability of instructors and examiners for the cloud flying rating. The Agency believes that sufficient instructors and examiners will be available, as existing licences and ratings may be converted into Part-FCL licences and ratings during the conversion process.

15. **Subpart J – Instructors**

Some comments were received dealing with the instructor categories being allowed to provide training for the EIR and the competency-based IR. The proposal to lower the experience requirements for the instructor who wishes to provide training only for the EIR but not for the IR (and create a new instructor category for this task) was discussed with the Review Group. Based on the principle that the syllabus for the EIR contains now two 'real' IFR approaches in an emergency context and several exercises which require a high level of experience and skill of the instructor it was decided to maintain the same criteria as for the instructors being allowed to provide training for the IR as already proposed with the NPA.

16. **Subpart K – Examiners**

FCL.1005.FE Privileges and conditions for the FE(A)

Several comments addressed the issue of extending the privileges, in a similar way as for the instructors above, for some examiner categories to the EIR or the IR. The Agency reviewed the proposal and noticed that so far the privileges were not defined in a consistent way. As the FI(A) with a certain amount of IFR experience will be allowed to provide training for the EIR and IR, the FE(A) with a certain amount of instruction experience for the EIR or IR should receive the privilege to conduct tests or checks for these instrument ratings. At this stage the Agency will add a privilege for the FE(A) to conduct proficiency checks for the revalidation and renewal of the EIR, provided that the FE complies with the requirements of FCL.1010.IRE(a). The introduction of a similar privilege for testing and checking for the IR will not be proposed with this CRD as it is a general question with some consequences to be further reviewed.

FCL.1005.FE Privileges and conditions for the FE(S)

Several comments expressed the concern that the experience required to become an FE(S), allowed to conduct skill tests or proficiency checks for the sailplane cloud flying rating, will only be achieved by few examiners. With the NPA the Agency proposed to require the applicant for such examiner certificate to have completed at least 10 hours of instruction time for the cloud flying rating or other instrument ratings. The Agency followed the proposals and reduced the experience requirement. In conclusion, an FE(S) wishing to conduct a test or check for the cloud flying rating shall have completed at least 200 hours of flight time as pilot on sailplanes, including at least 5 hours or 25 flights of flight instruction for the cloud flying rating or at least 10 hours of flight instruction for the EIR or IR(A).

FCL.1005.TRE

In order to address some comments dealing in general with examiner qualifications for the EIR or IR, the Agency reviewed all examiner categories. The TRE(A) already has the privilege to conduct proficiency checks for the revalidation and renewal of the IR(A). Based on this fact there is no justification to not allow an TRE(A) to also conduct tests or checks for the revalidation or renewal of the EIR. The text was amended to reflect this.

FCL.1005.CRE

Following the same logic as explained above for the TRE(A) the privileges of the CRE(A) were amended accordingly. The part-FCL text already allowed the CRE(A) to conduct proficiency checks for the revalidation and renewal of IR(A)s, provided that the CRE(A) complies with the requirements of FCL.1010.IRE(a). As a result the Agency added a reference to the EIR revalidation and renewal.

17. **Appendix 1 – Crediting of theoretical knowledge**

As correctly identified by some comments the Agency decided to add in section 4 of this Appendix a reference to the EIR. Not only the applicant for an IR but also an applicant for the EIR having passed the relevant theoretical examinations for a CPL in the same aircraft category may be credited towards the theoretical knowledge requirements in the subjects 'Human performance' and 'Meteorology'.

18. **Appendix 6 A.2 – IR(A) Competency-based modular flying training course**

General issues

An majority of the comments received on the proposed competency-based IR support the general approach to create a more accessible IR which remains compliant with the IR ICAO criteria. Only a few technical changes were proposed but the new rating was not questioned.

Prerequisites

Several comments requested that the competency-based route should also be available for a CPL holder. This was already proposed in the NPA and the Agency confirms the rating will be kept for both PPL and CPL.

Also several comments requested the deletion of 'including the privileges to fly at night', to allow the IR rating to be restricted to IFR by day. The Agency reviewed the IR requirements and compared them to ICAO and agrees that IFR by day only should be allowed. It was also agreed to extend privileges to IFR by night for holders of a night rating in accordance with FCL.810. Please refer to item 13 of this document for the changes to FCL.610 'IR – Prerequisites and crediting'. Please note that, as stated previously, current medical requirements for IFR flying in Part-MED will be reviewed in order to verify the impact on medical issues related to this decision.

Maximum time given for completion of training

Some comments questioned the maximum time allowed to complete the training for the competency-based IR course. The Agency reviewed and changed the course completion requirement to the wording used in Appendix 6 for the modular IR.

Theoretical knowledge training course

A significant number of comments was received concerning the theoretical knowledge course requirement. Some comments requested that there should be no minimum hours; others requested a further reduction of the proposed 100 hours. The Agency and the Review Group discussed the issue and the Agency decided to keep a minimum amount of hours to ensure a minimum level of harmonisation. However, the number of hours were reduced to 80. In addition, some comments questioned whether theoretical training should be combined with practical flight instruction. This was also discussed and the Agency decided to delete the possibility to combine theoretical and practical training. The requirement for a minimum amount of classroom training, in accordance with ORA.ATO.305, was kept. As the same general theory requirements will apply for the EIR all the explanations provided above are also valid for the EIR theoretical knowledge training course.

Maximum amount of instrument ground time

Although addressed in only one comment the Agency amended the allowed maximum amount of training in FSTDs for the competency-based IR to ensure compliance with the ICAO SARPs. This has been reflected in the resulting text.

Completion of training with IRI(A) or FI(A) to be documented in a training record

Some comments queried to which training syllabus, in the absence of course approval, the IRI(A) or the FI(A) will provide the training outside an ATO. Similarly, comments also indicated that there should be a formal process which will allow an ATO to verify the quality of training provided to the student pilot outside the ATO. The Agency introduced a training record to address these issues. The requirements for the content of the training record are contained in a GM2 to Appendix 6 (see item 31 of this document for detailed information). In addition the Agency decided to add a 5-year record-keeping requirement.

Furthermore, the Agency believes that any below standard training provided outside an ATO will be communicated to the competent authority overseeing the ATO via the existing communication link. It is expected that the competent authority will investigate below standard training brought to its attention.

Aircraft used for training outside an ATO

During a review of the resulting text, the Agency recognised that no requirements existed for aircraft used for training outside an ATO. Therefore, it was decided to develop a new AMC to both the EIR and competency-based IR, with similar requirements as contained in Part-ORA (AMC1 ORA.ATO.135), and to amend the AMC in Part-ORA in order to reflect training towards the EIR.

Pre-entry assessment

Several comments requested clarification of the content of the assessment. The Agency believes that the content of the assessment should be established by the ATO based on the competency-based IR(A) training syllabus.

Crediting of prior experience

Several comments requested that prior dual instrument flight time provided by an IR instructor, other than a Part-FCL IR instructor, should be credited towards the 25 hours dual flight instruction requirement. The Agency reviewed the issue and decided to develop a GM defining the criteria for the circumstances under which PIC flight time by reference to instruments may be credited. In addition, this GM explains how to credit 15 hours of dual instrument flight instruction time, with other than Part-FCL IR instructors, towards the 25-hour requirement. In any case, 10 hours of dual instruction at an ATO will be required. Please see item 31 of this document for further details.

Separate course for the ME competency-based IR

Based on the input received and after consultation with the Review Group the Agency developed an additional course for the multi-engine competency-based modular IR(A). This training course shall include at least 45 hours of instrument time under instruction. For details see resulting text, Appendix 6, section A.2.

The same principles of crediting of prior flight time as already introduced for the single engine competency-based IR will apply, with the exception that 35 hours will be credited towards the 45 hours. In any case, the flight instruction part of the training course shall include at least 10 hours of dual instrument flight instruction in a multi-engine aeroplane at an ATO. The total amount of dual instrument instruction time shall not be less than 25 hours of which at least 15 hours shall be completed on a multi-engine aeroplane.

Training syllabus

A few comments were received on the exercises contained in item 7 of this appendix. The Agency reviewed these comments and proposals but based on the fact that all the exercises are based on the existing syllabus for the IR it was decided to keep this unchanged.

Crediting for third-country licence holders

The Agency introduced a few changes in order to simplify the criteria for Part-FCL licence holders also holding a third-country IR, to obtain their IR converted into a Part-FCL IR.

Firstly, the demonstration of theoretical knowledge was clarified by allowing the applicant to demonstrate an adequate level of knowledge to the examiner during the skill test. The number of subjects was also reduced to three and cover air law, meteorology, and flight planning & performance.

Secondly, several comments proposed to further review the requirement of 100 hours prior instrument flight time as PIC. As this requirement stems from criteria already established for the acceptance of licences and ratings, the Agency came to the conclusion that this could be reduced to 50 hours of minimum experience (instrument flight time) as PIC. The Agency also made provisions for those pilots with less than the 50 hours of minimum experience by allowing them to credit PIC hours towards the EIR and competency-based IR(A) courses. Please see paragraph 'crediting of prior experience' in this section and items 13 and 31 for further details.

Finally, several comments requested the deletion of the skill test and English language requirements. The Agency strongly believes that to ensure a minimum standard and consistency both requirements should be kept and therefore decided to keep the skill test and the FCL.055 English language proficiency requirements as proposed by the NPA. The method of assessment shall be established by the competent authority.

III. Summary of changes – AMC and GM

19. The Agency published 7 AMC to FCL.615 containing the Learning Objectives (LOs) for the theoretical knowledge instruction for the EIR and the competency-based IR. Most of the

comments clearly supported the deletion of the LOs based on the review performed by the Review Group. However, a few amendments were proposed aimed at further deleting LOs. In a few cases the reintroduction of certain LOs which had been moved to the HPA course (IFR part) was proposed. The Agency checked all these comments very carefully together with the Review Group experts and identified the required changes. In most cases the initial proposal was kept as the Agency is of the opinion that either this item is already covered by the normal PPL or CPL syllabus or in some other cases that this specific issue should be addressed in the HPA course instead as it has no relevance for a PPL/CPL holder wishing to fly IFR with a SEP or similar non-complex non-HPA aeroplane.

20. Based on comments received **AMC1 FCL.615 (Air law)** was amended by the Agency and the following issues contained in this AMC have been addressed and changed:

010 05 03 00 General rules — COM failure

One comment highlighted that certain specific IFR-related communication (COM) failure procedures should be included in the syllabus and not to be left to the HPA course. The Agency checked this issue and decided to reintroduce the LO specifying the necessary action items in case of a COM failure.

010 06 07 00 Simultaneous operation on parallel or near-parallel instrument runways

Another comment proposed to reintroduce all LOs dealing with the simultaneous operation on parallel runways as they address the differences between independent and dependent parallel approaches and also simultaneous instrument departures. The Agency reviewed this proposal and agrees partially. The comment is correct with stating that the first two LOs could also be relevant for the IR holder flying non-HPA aeroplanes. The Agency therefore decided to reintroduce them but not to require specific additional knowledge and move the other six LOs to the IFR part of the HPA course as proposed already with the NPA.

010 06 08 02 Operation of ACAS equipment

One commentator proposed to reintroduce all LOs related to the use of ACAS equipment. The Agency agrees that an IR holder flying non-HPA aeroplanes should be aware of the ACAS/TCAS systems and should have a basic understanding of the principles. However, it was decided to only reintroduce the first LO aimed at the use of ACAS and to keep the remaining nine LOs for the HPA course.

21. **AMC2 FCL.615 (Aircraft general knowledge)** was amended by the Agency as well and the following issue has been addressed:

022 13 03 03 Navigation display (ND) and Electronic Horizontal Situation Indicator (EHSI)

Based on one comment received clearly justifying why the LOs related to the Navigation Display (ND) and the Electronic Horizontal Situation Indicator (EHSI) should be deleted from the syllabus, the Agency decided to keep only the LO requiring the applicant simply to be able to state that an ND (or an EHSI) provides a mode-selectable colour flight navigation display.

22. Based on the comments received **AMC4 FCL.615 (Human performance)** was also amended by the Agency and the following issue has been addressed:

040 01 03 00 Flight safety concepts

One organisation stated that all LOs of this section should be kept in order to fulfil the ICAO SARPs for the IR in which the theoretical knowledge item 'Threat and error management' is required. The Agency agrees and has reintroduced the first seven LOs dealing with the matter.

23. **AMC1 FCL.825** containing the conditions for the exercise of the privileges of an EIR was amended as several stakeholders questioned the wording '... If an IFR approach procedure is established at the destination airfield, this IFR/VFR transition point should

be passed before reaching the Initial Approach Fix (IAF)...'. The Agency further discussed this issue with the experts and came to the conclusion that the original wording must be amended and the reference to the IAF deleted. This AMC was amended and will give more flexibility to an EIR holder. In any case, the rule text establishes a clear limit for changing from IFR to VFR before the approach phase of the flight. The amended text clarifies that an IFR/VFR transition point should be used in order to enable the pilot to complete the flight to destination under VFR. For this purpose, when filing a flight plan in accordance with operational rules, the holder of an EIR should include IFR/VFR transition points.

24. **AMC1 FCL.825(c)(a)(11) En-route Instrument Rating** was amended to require at least two IFR approaches, in the context of an emergency, instead of one approach. The Agency also amended the text to clarify the reasoning for including these exercises. It should be clarified, however, that this training is only foreseen to provide some general knowledge and skills for an emergency situation. The training will not lead to an extension of privileges to include IFR approach privileges. IFR approach privileges are outside the scope of the EIR because such privileges would require extensive additional training.
25. A new **AMC1 FCL.825(c)(2)(iv)(v)** was added in order to address comments asking for a more structured approach regarding the training provided by the IRI(A) or the FI(A). The Agency clarifies with this AMC that instrument flight instruction shall only be credited based on a training record. According to this AMC the pre-entry assessment should be based on the EIR training syllabus established in AMC1 FCL.825(c). Before initiating the pre-entry assessment the applicant should provide a training record to the ATO containing details of the flight training received by the IRI(A) or the FI(A). This training record should at least specify the aircraft type and registration used for the training, the number of flights and the total amount of instrument instruction time. It should also specify all the exercises completed during the training with reference to the syllabus contained in AMC1 FCL.825(c) and be signed by the instructor(s) having provided the training. Although the ATO will not be involved in the training provided by an IRI(A) or FI(A) this system will allow the Head of Training (HoT) of the ATO to review the training records and use them as a basis for the pre-entry assessment.
26. **AMC1 FCL.830** addresses the theoretical knowledge and the flight instruction for the sailplane cloud flying rating. Several comments stated that the sailplane theoretical knowledge syllabus was too demanding. The Agency disagrees, as no minimum training time is specified and only a revision or explanation of the items contained in the syllabus is required. The instructor should determine, based on the students' previous experience, which elements and to what extent the theoretical knowledge should be covered. Some comments questioned the required items of the theoretical lessons and proposed to delete some of the exercises (like advanced cloud escape manoeuvre on a nominated heading). The Agency discussed these proposals again with the experts and came to the conclusion that the AMC should be kept unchanged.
27. **AMC2 FCL.830** contains the sailplane cloud flying skill test. Several comments were received on the conduct and content of the test. With regard to the conduct of the test, the Agency requires all practical exercises to be completed by the applicant. However, the examiner should take into account prior experience, i.e. if the applicant already has an EIR, then the examiner should focus more on sailplane cloud flying related elements. In addition, some comments questioned the proposed two different minimum skills test levels. The Agency would like to clarify that the proposed different skill test levels are based on common practices on several Member States. To clarify: a single minimum skill level is indeed appropriate when both main and standby instruments are artificial horizons, i.e. current aeroplane practice. However, when an aircraft is fitted with a turn and slip indicator as the principle standby instrument, the wider limits are appropriate.

With regard to the content, a general comment was received stating that the skill test content was too demanding as sailplane instruments tend to be relatively

unsophisticated. In this respect, the Agency and the Review Group developed the requirements to take into account different airspaces and different types of sailplanes. This also includes some more complex airspace structures and sophisticated sailplane types.

In addition several comments were raised on:

- Straight flight requirement (turn & slip only)

The comments suggested the speed limit of ± 20 kt for turn & slip equipped sailplanes was too generous, even during turbulent conditions of a thermal where speed variations can be normal with no implications on the control exercised by the pilot. The Agency reviewed the requirements and decided to reduce the limit to ± 15 kt.

- Turning requirement (for both artificial horizon and turn & slip)

One comment suggested that a more stringent limit of 'small deviations in rate or turn or bank is set'. The Agency decided to amend the text to state 'small deviations in rate of turn or bank with a maximum deviation between $\frac{1}{2}$ and full scale'.

In addition, the proposed speed limits were reduced to ± 10 and ± 15 kt respectively to keep them consistent with the straight flight requirements.

- Achieving and maintaining heading and advance cloud escape manoeuvre on nominated heading

Some comments suggested these skill test items were not relevant to sailplane (cloud) flying. The Agency would like to clarify that the proposed skill test does not require the pilot to achieve this nominated heading instantly. Instead, the test allows normal practice: first to recover to approximate straight flight, and then refine the heading with small adjustments. This is achievable with all compass types. The Agency therefore, based on experience from several Member States, believes that especially in modern complex airspace these skills are essential, the associated limits are practical and must be demonstrated by a sailplane pilot under test conditions.

- Position fixing using GPS and position estimating using DR

Several comments questioned whether these skill test items are relevant. The Agency and the Review Group believe that there are many volumes of European airspace where position fixing and position estimating using DR (to cross-check GPS information) are essential. These are therefore appropriate requirements to train and test sailplane pilots.

28. **AMC2 Appendix 6** was amended to comply with Appendix 6 A.2 regarding the change of required theoretical knowledge instruction from 100 hours to 80 hours.

29. With **GM1 Appendix 6 (6)(c)** an additional GM was developed in order to address the issue of prior experience of flight time by reference to instruments. The three scenarios under which prior experience of flight time by reference to instruments as PIC will be credited as instrument flight time are:

Flight time should have been completed:

- instrument flight time under a rating providing the privileges to fly under IFR and in IMC issued by a competent authority of a Member State; or
- instrument flight time under a national instrument rating issued by a Member State completed before Part-FCL entered into force; or
- instrument flight time under a valid IR(A) issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country.

Also instrument time under instruction may be credited but up to a maximum of 15 hours towards the 25 hours of the dual training required.

30. A new **GM2 Appendix 6 (6)(a)(i);(b)(i)** is added to clarify that instrument time under instruction should only be credited based on a training record. This GM clarifies that the pre-entry assessment should be based on the competency-based IR training syllabus as established in Appendix 6. It also states that before initiating the pre-entry assessment the applicant should provide a training record to the ATO of the previous flight training provided by the IRI(A) or the FI(A). This training record should at least specify the aircraft type and registration used for the training, the number of flights and the total amount of instrument instruction time. The training record should specify all the exercises completed during the training by using the syllabus contained in Appendix 6. and should be signed by the instructor(s) having provided the training. Although the ATO will not be involved in the training provided by an IRI(A) or FI(A) this system will allow the Head of Training (HoT) of the ATO to review the training records and use them as a basis for the pre-entry assessment.

IV. Consultation

31. The NPA 2011-16 was published on the Agency's website (<http://www.easa.europa.eu>) on 21 September 2011.
32. By the closing date of 23 December 2011 the Agency had received 1 535 comments from 731 national aviation authorities, professional organisations, companies, and individual stakeholders.

V. Publication of the CRD

33. All comments received have been acknowledged and incorporated into this Comment-Response Document (CRD) with the responses of the Agency.
34. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This terminology is as follows:
- **Accepted** — The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
 - **Partially accepted** — The comment is either only agreed in part by the Agency, or is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
 - **Noted** — The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
 - **Not accepted** — The comment or proposed amendment is not shared by the Agency.

The resulting text highlights the changes as compared to the current rule.

35. The Agency's Opinion on 'Qualification for flying in instrument meteorological conditions (IMC)' will be issued at least two months after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.
36. Such reactions should be received by the Agency not later than **29 December 2012** and should be submitted using the Comment-Response Tool available at <http://hub.easa.europa.eu/crt>.

Abbreviations used:

A/C	Aircraft
EIR	En-route Instrument Rating
FE	Flight Examiner
FI	Flight Instructor
IR	Instrument Rating

**COMMENT-RESPONSE DOCUMENT (CRD)
TO NOTICE OF PROPOSED AMENDMENT (NPA) 2011-16**

amending Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council – Annex I (Part-FCL)

and

amending Decision 2011/016/R of the Executive Director of the European Aviation Safety Agency of 15 December 2011 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-FCL)

and

amending Decision 2012/006/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ARA)

and

amending Decision 2012/007/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ORA)

'Qualifications for flying in Instrument Meteorological Conditions (IMC)'

CRD to NPA 2011-16 (B) – COMMENTS AND RESPONSES

I. CRD table of comments and responses

(General Comments)

-

comment

6

comment by: *Stefan Freudiger*

This NPA is a disaster. For making safe IFR-pilots it is not necessary to educate them as amateur physicians, amateur nurses, amateur psychologist, etc. To improve safety it would be much more efficient to instruct an A330 pilot on how to handle a stall condition and to require AI to add a page to the AFM on how to exit parachute stall. This would save many more lives than requiring an answer on all problems which a bureaucratic champion may imagine.

Stefan Freudiger
40+ years aircraft engineer and pilot

response

Noted

The Agency acknowledges your comment. However, it should be highlighted that the way the comment is written is not fully understood as the group of licensing experts involved in the drafting of these proposals spent a lot of time in reviewing (and finally reducing) the existing syllabus for theoretical knowledge instruction. One of the main aims was to delete all the items not needed for a safe operation in IMC as well as all the topics already addressed in the PPL/CPL theory. Please review also the proposed AMC containing the learning objectives and you will discover that the issues kept are essential elements a pilot should know when flying IFR. As you did not provide any substantiated or justified proposal for a change your concerns could not be addressed during the review.

comment

7

comment by: *Rod GAMMONS*

General:-
This CRT is an awful system for posting comments on this proposed legislation, and is the worst of its kind I have ever encountered !.

Specific :-
I have a UK IMC rating, and have been flying for 30 years. I have over 100 hours PIC in IMC conditions.
I have speed read through the draft document explaining the proposed new IR and EIR legislation. I can see no provision anywhere for holders of an existing IMC rating. I have no intention of spending a further £12,000 on obtaining an EIR from scratch. Exactly what proposals do EASA have for holders of a UK IMC rating ??????

Also where is the clear information about holders of a US IR who fly in European Airspace with full IR privileges ?

I really do wish there was a little more clarity on this subject and whilst I generally welcome the proposals to harmonise the rating system for flying in IMC conditions, it is imperative that this is not done at the expense of existing Pilots with ratings which will become obsolete/unrecognised.

response

Noted

The Agency acknowledges your comment and the general positive feedback on

the harmonisation of the ratings to fly in IMC. The issue of the UK IMC holders is addressed in the Explanatory Note. However, as indicated in the Explanatory Note already, the conversion of existing national ratings does not fall under the remit of this task but will be solved already with the conversion of national licences and ratings based on the requirements in the Aircrew Regulation. The acceptance of an instrument rating issued by a third country is explained in the NPA. You will find the proposal in item 2.7 on page 10 of the NPA.

comment

8

comment by: *Colin Hampson*

I am encouraged by the proposals set out in this NPA and believe that they represent real and tangible benefits for European pilots. I applaud the pragmatic approach taken to make the Instrument Rating more accessible to all pilots, both private and commercial.

It is vitally important that existing IMCr holders have their privileges transferred into Part-FCL and that the experience gained through the IMCr serves as credit towards the modular [full] IR.

It is also important that those with valid (i.e. within 36 months) JAA ATPL theoretical exam passes cover the theoretical knowledge requirements for the Modular IR (including High Performance Aeroplanes).

The modular approach to the IR is to be welcomed and should go along way to making the rating more accessible to pilots.

I am a PPL(A) holder shortly to take the CPL(A). I *had* intended to go straight to obtaining a Flight Instructor Rating as a result of the existing IR being prohibitively expensive. If the proposals are passed there is a strong likelihood that I shall pursue the Modular IR as a priority. These proposals will make a difference.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence or rating during the conversion process. This process is the responsibility of the Member State in consultation with EASA. In this case the Agency will support UK CAA in finding a solution to the issue.

comment

18

comment by: *Peter Boneto*

I just wanted to know if you are planning to publish the questionnaire for the "IFR-Rating"? In my opinion as a FI-IR the questionnaire is a big barrier for the PPL holders at the beginning. For example, the FAA publishes the IR questionnaire and thus making it easier to achieve the IR for private purposes. This should just be an idea to make the theory-part appear to be more simple.

Greetings

P.Boneto

response

Noted

Thank you for providing your comment and raising the question regarding the publication of the Central Question Bank. At this stage the Agency is not supporting the publication of the question bank because a study dealing with this question showed that several other elements would have to be changed before a question bank could be published.

comment

30

comment by: *Matt Brown*

I have only scanned through the document and have not yet had time to study it depth.
However my first reaction to the proposed changes being made to PPL IMC privileges is very positive.
In the UK, the general reaction leading up to this latest publication has been very negative towards the EASA transition, mainly due to speculation concerning the UK IMC rating.
As a low hours PPL I am very encouraged by the EASA approach of identifying options and probable impact of those options relating to different I/R ratings. I believe this approach has led to very sensible conclusions.
As such I am now in the process of deciding which route to take for my instrument training.

response

Noted

Thank you for providing this positive feedback.

comment

31

comment by: *Marc Philipp*

I'm owner of the JAR-FCL-PPL (A) - CR SEP and TMG.
I like the idea of the "Competency-based modular course for the IR(A)" very much.
I have a remark to the requirements before beginning the "Competency-based modular course for the IR(A)":

Before you started the training for the "old JAR-IR(A)" you needed 50 hours of flight time as PIC (VFR) on single engine piston planes - flight time on TMG planes didn't count for that. I think that it makes sense if you also count the flight experience from TMG (the complexity of the plane is similar to an single engine piston plane) for the new licence.
Can you please tell me your actual proposal for the requirements (flight hours) before beginning the "Competency-based modular course for the IR(A)"?
Best regards
Marc Philipp

response

Accepted

Thank you for providing this comment.
The Agency can confirm, after discussion with the Review Group experts, that flight time experience on a TMG can be credited towards EIR and IR prerequisites.

The competency based IR(A) flight time prerequisite is 50 hrs of cross-country flight time as PIC in aeroplanes, TMGs, helicopters or airships of which at least 10 or, in the case of airships, 20 hrs shall be in the relevant aircraft category.

comment	53	comment by: <i>Kaspar Schindler</i>
	Congratulations to this new rules. I am sure, they will improve safety in general aviation! I read the text carefully and have no further comments. I agree fully.	
response	<i>Noted</i>	
	Thank you for providing this positive feedback.	
comment	59	comment by: <i>Robert Lahnsteiner</i>
	I am a private pilot with an IR and MEP for 2 years now. I fly approx. 120 hours/year. I always fly IFR even during VMC since I feel much safer this way. The theoretical part of my IR was really overloaded with content that belongs to ATPL and has nothing to do with flying IFR in general aviation. I think that these new ratings will make flying much safer since CFIT is one of the biggest risks for non instrument rated pilots.	
response	<i>Noted</i>	
	Thank you for providing this positive feedback.	
comment	69	comment by: <i>Fuzzy Gruber</i>
	I support option 3	
response	<i>Noted</i>	
	Thank you for providing feedback.	
comment	70	comment by: <i>PPL Frank</i>
	I really appreciate the new IFR licence. This is a realistic possibility for the common private pilot to improve his pilot skills. Doing the new IFR rating brings more profession for the pilot and more safety for all.	
response	<i>Noted</i>	
	Thank you for providing this positive feedback.	
comment	72	comment by: <i>PPL/IR Europe</i>
	DRAFT - ALL PPL/IR COMMENTS IN THE CRT AT PRESENT ARE SUBJECT TO FINAL REVISION We support the NPA in its entirety, and only have amendments to suggest in a few matters of detail. However, since we strongly oppose any "dilution" of the NPA from its present form, we have a number of comments to make on important items we think should not be changed during the CRD and Final Opinion process. We have made few comments on the Explanatory Notes (section A) and all of our comments on the Draft Opinion may be read as applying equally to the corresponding material in section A.	

response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback. Further responses will be provided in the respective sections.</p>
comment	<p>109 comment by: <i>Peter GELDARD</i></p> <p>The drafters of this legislation are to be congratulated on clearly having listened to, and recognised, many of the genuine concerns of GA pilots who have/are flying in IFR/IMC conditions and producing, overall, a series of very sensible and fair recommendations.</p> <p>It is hoped that in reflecting on these, or any other submitted comments, they will be persuaded by the <u>validity</u> of the points raised; rather than be influenced by the 'size' or 'commercial' aspect of any correspondent or submission.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>119 comment by: <i>Bjoern Rupp</i></p> <p>The accessible competency based IR is a most welcome move. Finally, learning objectives that are of no relevance to regular GA pilots have been removed from a syllabus that previously seemed to be exclusively targeted at ATPL candidates. This and the new, more flexible approach in regard to computer-based training vs. classroom teaching should make the competency based IR much more accessible to regular GA pilots (who generally hold a job outside of aviation), thus resulting in vastly improved safety for everyone concerned. The accessible competency based IR should be introduced without delay. It will have a dramatic positive impact on the safety of General Aviation.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>120 comment by: <i>Richard Coundley</i></p> <p>This CRT does not work properly with either latest versions of Firefox or Internet Explorer. As a web based entrepreneur I am appalled by this situation. Either this is the result of serious incompetence, or the result of conspiracy i.e. EASA does want to receive comments.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment.</p> <p>Since you were able to submit four comments by using the CRT the problem with the system seemed to be solved. The Agency would like to confirm that this consultation process was established in order to receive stakeholder feedback and not to limit the number of comments. More than 1 500 comments were received, a fact that shows on the one hand the interest in the subject and on the other hand it proves also that the system works very well.</p> <p>The Agency would like to confirm as well that the review of the comments was conducted with the aim to optimise the proposals and to review the items</p>

identified by stakeholders as 'critical'. Please check the resulting text in order to find out which changes were introduced during the consultation phase.

comment 121

comment by: *British Gliding Association*

The British Gliding Association (BGA) is the governing body for gliding within the UK. The BGA currently has derogated responsibility for the safety management of UK gliding as a self-regulated sport flying activity. As such, the BGA has historically carried out and continues to carry many of the functions which are now being gathered by Part-FCL, Part-OPS and others.

These functions, under the oversight of the UK CAA, have been carried out successfully for over half a century, giving the BGA unique experience in regulating flying activity. In general, the achieved level of safety is equivalent to nationally regulated gliding activity in other Member States. In certain aspects, a higher level of safety is achieved because the self regulation is recognised - importantly - by participants as relevant and necessary. The UK CAA has frequently stated that there is no reason to regulate UK gliding activity. Put simply, 35 years of detailed national and BGA accident and incident data identifies that additional regulation is unnecessary. However, the BGA accepts that a regulatory framework is in place, that Part FCL has been established and as such, the proposals within NPA 2011-16 are welcome as an essential extension of Part FCL.

Flight within cloud has always been an integral part of UK glider flying; it is an integral part of this Member State's safety record. The extras hazards that would be introduced by exclusion from cloud are well established; they have been previously stated by the gliding community and reflected by the EASA FCL008 working group.

The BGA welcomes this NPA and supports, strongly, the main thrust of the proposed Sailplane Cloud Flying Rating. We offer four responses:

1. LAPL(S) & SPL

The SCFR is vital for safe glider flying in the UK.

This NPA indicates that it will be available to both LAPL(S) and SPL holders.

The BGA considers it essential that this privilege is retained and therefore that the SCFR is established within the regulation resulting from this NPA.

2. Dual Flight Training Requirement

With a specified skill test in place, this qualification is competency based, a welcome contrast to much of the rest of Part-FCL that is welcomed by the BGA. The requirement for a specific minimum of dual flight instruction of 5hrs is excessive.

Doubtless, some pilots will need to fly more than this minimum. Their training will be directed by gaining the skills to pass the test.

Others, perhaps having done other instrument training elsewhere, will be able to pass the test after less than 5hrs training. For these, the 5hr requirement is an unfair, unnecessary, extra expense.

The BGA has a safe record of glider cloud flying: it has never needed to specify any minimum amount of training.

We do, however, recognise the realities of negotiating this sort of figure and could accept, as a poor compromise, a 3hr dual flight instruction minimum.

3. TMGs

The BGA is in sympathy with the concerns expressed by the UK CAA and others about the privileges of the rating including use in TMGs.

It is essential, however, that training for this rating be possible in TMGs.

Every TMG of which we are aware is restricted, by its Flight Manual, to VFR only.

We would not recommend that any TMG pilot should fly under IFR.

We would be content if use of the SCFR rating were to be prohibited in TMGs, but must repeat:

It is essential that training for the SCFR be possible in TMGs.

Recommendation

We recommend that the following be added to FCL.830

"(d) The privileges of the Sailplane Cloud Flying Rating may not be exercised in a TMG"

4. Restricted SCFR

The BGA had proposed that, in addition to the SCFR, a Restricted SCFR be made available for flight under IFR but clear of cloud.

This RSCFR would need no new flying skills for a licence holder, but would require the Theoretical Knowledge training from the SCFR.

We are still of the view that there could be airspace categories where such RSCFR would be important, and are disappointed that the group did not include it.

Summary

The BGA:

1. Strongly supports the SCFR & considers it essential that the rating be available to both LAPL(S) & SPL holders
2. Recommends that the requirement for 5 hrs dual flight instruction be removed – if a minimum training time requirement can be justified, then in our view that time should not exceed 3hrs.
3. Recommends that training in TMGs is essential for the SCFR, but would be content to see pilots prohibited from exercising the privileges of an SCFR in TMGs.
4. Recommends that the RSCFR option is re-considered by EASA.

response

Partially accepted

Thank you for providing this positive feedback on the proposals for a cloud flying rating and the supportive proposals.

1. LAPL(S) & SPL

The Agency recognises that the British Gliding Association (BGA) considers cloud flying rating for sailplane pilots essential. The Agency confirms that this rating will be available for LAPL(S) and SPL holders.

2. Dual flight training requirement

The BGA and several other comments stated that the proposed amount of dual flight training is too excessive and further discussed this requirement with the Review Group experts. Taking into account that if no TGM would be available for the training (although the NPA already allowed a maximum amount of

4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

3. Use of the TMG

The Agency also agrees with the BGA's standpoint that the privileges of a cloud flying rating should not allow to exercise these privileges on a TMG and will change the resulting text accordingly. However, it should be clarified that certain elements of the training (as already proposed with the NPA) can be performed on TMGs. As the instructor will have the same privileges regarding this rating, these exercises have to be flown under simulated IMC and not in clouds. This will be addressed in AMC FCL.830.

4. Restricted SCFR

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are thoroughly explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from the clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

127

comment by: *Kevin Houlihan*

I support this proposal.

I have been a pilot for c30 years. I fly light aircraft and gliders. I am a qualified gliding instructor and examiner and as such I have taught, supervised, appraised and rated hundreds of pilots over the years. I am the Irish National Cross Country and Competition Coach. I have flown in National, European and International Competitions throughout Europe.

In all that time to my knowledge there has only been 1 incident in Ireland and that was when a glider pilot was suddenly, and unintentionally, enveloped in orographic cloud while hill soaring. In the case of thousands of other flights, the vast majority of which would involve soaring at or near cloud there have been absolutely no problems.

This proposal, if passed, would in my opinion enhance safety for the pilots in question.

response

Noted

Thank you for providing this positive feedback.

comment

152

comment by: *Tim Macfadyen*

I would like to support the EASA proposal for glider flying in and close to cloud within NPA 2011-16.

I have flown over 1000 cross country glider flights in the UK, over 300 of them of over 300 kilometres. On virtually every flight I have at some stage been within 1000 feet of cloud, often much of the flight is in this height band. Glider flying as we know it would thus not be possible if our present privileges, as given in NPA 2011-16 were withdrawn.

I am probably one of the most experienced gliders pilots in the UK (and thus the world) at flying gliders in cloud. Glider flying in cloud, as conducted in the UK, is a proven safe practice. It is sometimes necessary to climb in cloud in order to get high enough to complete a cross country flight. It would be a major restriction to glider flying if this privilege was withdrawn and the result would be more field landings and thus a higher risk of accidents.

Tim Macfadyen

response

Noted

Thank you for providing this positive feedback.

It should be mentioned that further information on the specific issues concerning cloud flying rating are provided with the response to the BGA comment No 121.

comment

159

comment by: *Steve BARBER*

A provision to enable sailplanes to be flown in cloud is essential for UK gliding. I support Option 1 in Section IV 3 (RIA 2)

A simpler provision similar to Option 2 based on past safe practice in the UK would meet most of the requirements, (ie flight near cloud, but in clear air and in sight of the ground) without necessitating the complications of the full cloud-flying rating. EASA should implement a restricted rating to meet these standards.

The knowledge and tests for Option 1 are reasonable and necessary, except that the requirement for 5 hrs actual flight training is excessive. Many pilots would be able to meet the standard required in far less time, and the additional flight time required solely to meet the regulation would be an unnecessary expense and burden on individuals, and a waste of resources. Provision for undertaking some of the training in simulators should also be made.

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

The additional item you raised (i.e. the acceptance of flight time in simulators) was discussed but as there is no simulation device for training towards a

sailplane licence or rating certified yet, the Agency will not introduce such a requirement at this stage.

comment

172

comment by: Roy Wilson

Dear Sir,

Sailplane Cloud Flying Rating.

After reviewing the proposed rules governing Instrument Flying by Glider Pilots in cloud, I offer the following for your information and consideration.:-

I am a glider pilot with over 3000 hours gliding over the last 47 years and have an Instructor rating.

I have read the proposed document and consider that it has analysed the predicament of Glider Pilots reasonably thoroughly. I fully support the British Gliding Association's position and Comments with respect to the detailed elements and the desired way forward.

I regularly cloud fly in order to be able to employ the capability of a Glider and to be able to fully enjoy the sport. Clearly, proximity to clouds is a key factor in the Sport. Separate the two and the sport dies. Close proximity to cloud and cloud flying go hand in hand with cross country soaring. Without access then the fun is gone and safety is compromised. We say, "height is safety".

Much of the cloud flying that is practiced by glider pilots is discretionary. We elect to cloud fly to avoid getting low, or landing in fields, or to achieve our goal. But there is a price to pay if that choice is prohibited. The consequences of landing out or attempting to glide at low level over rough terrain can be serious.

My flying is in the mountains using thermals and mountain waves. Wave flying is ordinarily conducted close to or above cloud. Cloud cover can change rapidly and, from time to time, we have no recourse but to descend through cloud. To limit wave flying to days when there is little risk of blanket cloud cover would do untold damage to the sport.

I support Option 1. However, I think that to mandate 5 hours as a minimum training period to achieve the Sailplane Cloud Flying rating is a costly proposal that fails to recognise prior training, acquired skills and experience.

Roy Wilson

response

Noted

Thank you for providing this comment.

However, as you refer to the comment sent by the British Gliding Association (BGA) and as all the issues you raised were also identified by BGA please check the response provided to its comment No 121.

comment

191

comment by: Ian Kennedy

Gliding has for many years existed without the need for a cloud flying rating and do not need one now. Accident and Incident reports prove this statement. To add a cloud flying rating will restrict the use of uncontrolled airspace unnecessarily. In updating IFR regulations EASA must understand that a 'one size fits all' approach will damage the General Aviation Community as they have vastly different requirements to Commercial Aviation. For example the 5 hour training requirement may be good for commercial pilots but does places

	<p>un-necessary cost on the general aviation pilot who should gain a rating on ability rather than hours. Gliders need to fly within 1000 feet of cloudbase to make satisfactory and safe progress. Accident data proves this is safe. I call upon EASA to remove the need for a cloud flying rating from sailplanes</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/need to fly close to clouds) were also identified by BGA.</p> <p>However, it should be highlighted that the Agency does not agree with your proposal 'to remove the need for a cloud flying rating'. Based on the comments received the requirements for the rating were reviewed and some changes introduced. The rating for cloud flying activity is widely supported and will aim to achieve a common European safe standard for cloud flying operations.</p>
comment	<p>193 comment by: <i>Tim Jenkinson</i></p> <p>I am an active sailplane pilot based in the UK.</p> <p>I strongly support the retention of the ability to fly in IMC conditions via a SCFR.</p> <p>As the consultation suggests the SCFR would have clear social, economic and safety benefits.</p> <p>I also have over 15,000hrs flying powered aircraft commercially all over Europe for over twenty years and hold both TRI and TRE ratings. I have never had one single incident relating to the operation of sailplanes in IMC conditions anywhere.</p> <p>As someone with significant experience in the training and examining of instrument flying skills, it is clear that the sailplane pilot does not have the full raft of instrument flying skills that a powered pilot needs. Protracted flight in IMC conditions and navigation by radio aids is not what gliding is about and would be highly unusual / impossible. I would suggest therefore the 5 hour training requirement is overkill and much better to remove a minimum training flight time altogether but retain the requirement to pass the relevant test. This way people will only be required to access the training they need on an individual basis.</p> <p>Hopefully 'grandfather' rights to those with the necessary skills on other types will be part of any legislation.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (e.g. 5 hours training requirement) were also identified by BGA.</p> <p>It should be added that the question of grandfathering existing ratings will not</p>

be part of this task as this is already solved by the conversion reports to be established by Member States based on the introduction of Part-FCL in Europe.

comment

195

comment by: *Martin Hayden*

As a glider pilot restrictions on cloud flying would dramatically change my ability to continue the sport flying that I am used to. My ability and freedom to fly cross country would be seriously reduced without the inclusion of cloud flying.

With a requirement to remain 1000ft clear of cloud my ability and freedom to fly cross country would be reduced to such an extent that on most days this will be impossible. I would have to seriously consider the benefit of continuing the sport with such a restriction. If I am unable to fly closer to cloud than 1000ft it is most likely that I would sell out of my single seat sailplane and revert to dual and club flying alone.

I strongly support the need for a qualification to allow cloud flying to continue.

I strongly support the continuation of our ability to fly up to cloudbase with a qualification if necessary.

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

197

comment by: *Chris LEWIS*

As a sailplane pilot I strongly support this proposal, which provides for a formalised sailplane cloud-flying rating that is appropriate for glider pilots flying in, or close to cloud.

response

Noted

Thank you for providing this positive feedback.

comment

206

comment by: *David SEARLE*

I am in large part in agreement with the BGA's (British Gliding Association) comments already submitted.

However I believe that any minimum time of dual instruction is pointless and irrelevant. A fully instrument rated qualified commercial pilot who takes up gliding is unlikely to require much dual instruction, other than the mechanics of glider handling. A retired person approaching gliding for the first time may require much longer. An Instructor will readily distinguish the appropriate level and duration of instruction required in each case. Skills and Competency are the issues to be assessed on an evidence base, rather than a rule base

I believe it would contribute to safety if glider pilots were able to obtain a Restricted SCFR for flying under IFR but clear of cloud. It could form an important halfway house to obtaining a full SCFR.

response

Training time does not ensure skills, examination of skills does. In general safety relies on appropriate skills for the task being undertaken.

Partially accepted

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

It should be mentioned as well that the NPA already proposed the crediting for CPL/IR holders.

comment

218

comment by: *Mike gatfield*

Inexperienced glider pilots, conscious of landing out, are often taught to stay as high as possible right up to the cloud base for as much as the flight as possible.

On marginal days, enforcing gliders to stay in strict VFR would result in a much lower working band and more dangers associated with landing out and having to pick a field at lower altitudes, especially in competitions.

The regulatory system at the moment relies very much on pilots being taught when to seek additional training in areas such as cloud flying and is partly covered in bronze badge (glider pilots licence) syllabus to a degree where most cloud flying is done safely.

There is the danger that overly strict regulation and difficulties in policing would lead to pilots going into clouds unsafely without radio calls or proper formal training causing possible safety dangers.

response

Noted

The Agency acknowledges your comment.
However, the reasoning is not understood since a glider pilot should not enter clouds without proper training. Please see also the response provided to the BGA comment No 121.

comment

229

comment by: *Martin SMITH*

I am commenting as an experienced and regular cross country sailplane pilot based in the UK. I have safely enjoyed the cloud flying and proximity to cloud privileges that UK gliding currently permits and wish to continue to do so.

I am in favour of Option 1 of the Sailplane Cloud Flying Rating for all sailplane pilots. In addition to the document text that describes the operational range limits and related landout frequency imposed by not having this option, I would make the following observations based on my own gliding experience:-

1. On any given day the cloudbase is often extremely variable and constantly changing.
2. Remaining outside of cloud is easy to judge by simple observation.

3. Remaining 1000ft vertically clear of cloud on a typical gliding flight which climbs and descends repeatedly is impossible to judge without first visiting the current cloudbase and then descending 1000ft, which both defeats the object and is an extremely inefficient way to fly a sailplane.

4. Policing the 1000ft vertical clearance from cloud is impossible.

5. Sailplanes often fly in close groups, having everybody with their heads down looking at their altimeters and worrying about whether they are 900 or 1100 feet below a difficult to judge cloudbase will adversely affect lookout.

Given all of the above a rating such as Option 1 of the SCFR which permits close proximity to clouds is the only practical answer.

With regards to the training required for this rating, as a Full Rated BGA Instructor I understand that some students would learn the required skills very quickly and some students would simply never get it. As such I am in favour of the skills and competency tests but feel that the minimum training duration requirement such as the 5 hours proposed is excessive given that sailplane pilots will already have most of the skills required. It is also important that TMGs which are normally restricted to VFR are permitted to operate closer to cloud when conducting training flights for students preparing for their SCFR.

Martin Smith
December 2nd 2011

response *Noted*

Thank you for providing this comment.

Please check also the response provided to the British Gliding Association (BGA) comment No 121 as some of the issues you raised (5 hours/use of TMG) were also identified by BGA.

However, some additional items should be mentioned.

The requirement to stay 1 000 ft below cloud base is an airspace requirement for certain airspace categories. It is provided by the ICAO airspace classification. The vertical distance to clouds was introduced also in order to allow the 'see and avoid' system — especially in airspace blocks shared by VFR and IFR traffic at the same time (e.g. airspace E). The opinion that 'policing the 1 000 ft vertical distance from clouds is impossible' can therefore not be shared as this is a clear safety issue.

The statement that a short altimeter check in order to verify the actual altitude will end up in problems regarding the look-out is not shared as there are other height restrictions due to airspace regulations which have to be verified in the same way. The check of the actual altitude can be done without causing additional safety risks.

comment 233

comment by: *Paul Richer*

I have been flying gliders since 1970.

I would like to make four points.

1. Integral to every cross country flight is the capability to circle in a thermal up to cloudbase before setting off to the next thermal. At the start of the day cloudbase may be as low as 2500feet rising to 5000feet during the

afternoon. To not be able to circle in a thermal up to cloudbase will severely restrict my ability to fly cross country and so limit the amount of cross-country flying that I do.

2. In my 40+ years of flying I am not aware of any safety issues that have arisen due to flying up to cloudbase.

3. I also exercise my current privilege to fly my glider in cloud. Once again, I am not aware of safety ever being compromised by doing this. In the UK, it is a vital addition to one's cross country capability to climb in a thermal into cloud when it is necessary to gain the extra height in order to continue one's flight.

4. Not being able to exercise these privileges would result in more gliders landing in farmers' fields when, with the additional height, they could glide to an airfield and land there with the resultant reduced risk of damage by not having to land in a farmer's field that may have rocks or ditches that cannot be seen from the air.

response *Noted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised were also identified by BGA.

Please review also the response provided to comment No 229 (M. Smith) as this response provides an answer to the issue of the minimum vertical distance to clouds as defined by ICAO.

comment 238

comment by: *Robert Corbin*

I would like to fully endorse the British Gliding Associations view on the proposals. Flight in IMC is a critical privilege as it improves the safety of cross country flying in the UK and I welcome EASA recognition of this fact.

I am disappointed that the option for a Restricted SCFR could not be made available together with the full cloud flying rating as the RSCFR would not require the training for controlling the plane by reference to instruments alone and so could be incorporated as a basic privilege of the licence for a sailplane pilot.

Training for the rating will pose practical difficulties and the requirement for a minimum number of hours is inconsistent with a competency based training and testing regime. I would urge that the requirement for minimum hours is dropped or reduced.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and all the issues you raised (e.g. 5 hours of training) were also identified by BGA.

Please review also the feedback provided to comment No 229 (M. Smith) as this response provides an answer to the issue of the minimum vertical distance to clouds as defined by ICAO (restricted cloud flying rating).

comment	242	comment by: <i>Neal Clements</i>
	I support the cloud flying rating for sailplanes. I am a sailplane pilot based in the UK and frequently use cloud flying to extend the range of the glider on a cross country. I am also a flight examiner and cannot see the reason for having a minimum hours requirement for the rating. The skill test and the knowledge should be sufficient	
response	<i>Noted</i> Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as all the issues you raised were also identified by BGA.	
comment	245	comment by: <i>Cotswold Gliding Club</i>
	Whilst this document is not perfect, I accept that it is the best possible compromise for a glider pilot wishing to fly near or in cloud and therefore accept the document as is	
response	<i>Noted</i> Thank you for providing this positive feedback.	
comment	252	comment by: <i>PhilKING</i>
	I am in favour of this amendment. Without this amendment there would be very few days when it would be possible to soar above 3000' altitude. In the Welsh border area where I do much of my cross-country soaring many of the hill tops are over 2000' and it is necessary to climb well above 3000' to cross these hills safely in an unpowered aircraft. The prevailing westerly wind is moist and generally restricts the cloud base so that it is rarely higher than 4000'. With this amendment I will be able to climb up to cloud base legally, and, if it is safe to do so, climb in cloud or climb in small gaps between clouds thus enabling me to cross the hills safely. Without this amendment I would only be able to soar cross country legally on a few days with exceptionally high cloud base or when there happens to be little or no cloud.	
response	<i>Noted</i> Thank you for providing this positive feedback.	
comment	254	comment by: <i>John Thomson</i>
	I would like to comment that I consider the Sailplane Cloud Flying Rating a vital qualification to be available to glider pilots. I agree with all the requirements for achieving the rating except for the requirement for 5 hours of dual training which is excessive and should be reduced significantly. Many gliding sites do not have access to a motor glider or other powered aircraft making 5 hours of cloud flying relatively difficult to achieve for pilots of those clubs. I would also like to have more detail on the requirements of the 2 yearly revalidation check. I also strongly and fully support the BGA's proposal for a Restricted Sailplane Cloud Flying Rating to allow gliders to fly safely under instrument flight rules	

	<p>but free of cloud.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p> <p>More detailed requirements for the recency requirements have been added to the rule text. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. If the holder of a cloud flying rating does not comply with this requirement, the holder shall pass a proficiency check with an examiner or perform the missing flight time flying dual with an instructor in order to fulfil the requirement. Holders of a valid EIR or an IR(A) will be credited in full against the requirements.</p>
comment	256 comment by: <i>Lindsay McLane</i>
	<p>I have, when necessary, flown my glider in or near cloud for the last 50 years or so. It is my intention to continue to do so. I am advised by the BGA that if I wish to continue to remain legal whilst cloud flying in a glider, then I should support your document. The purpose, therefore, of this email is to lend my support for this document. I should add that I lend my support reluctantly, as to do so, appears to endorse the bureaucrats who increasing parasitise the society they are supposed to be serving. However, the BGA suggest that if NPA 2011-16 should fail, then the outcome will be even more dire.</p>
response	<p><i>Noted</i></p>
	<p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 for more detailed answers on technical matters.</p> <p>At general level the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.</p>
comment	257 comment by: <i>Glenn Turpin</i>
	<p>I fully support the position of my governing body the British Gliding Association. I speak as both a glider pilot and a professional pilot since 1966, having held Helicopter ATPL and Fixed wing ATPL with heavy jet experience, 19000 hours in total.</p> <p>I would like to add some other points.</p> <p>When considering a Europe wide rating or no rating, the average cloud base in the UK is lower than continental Europe, thus the available operating airspace available to British pilots is less than our neighbours. If there is no rating then under ICAO rules our available airspace is very much reduced.</p> <p>I believe your option 2 (RSCF) is a more practical option, perfectly safe and more affordable, an important point in an area already hit by considerable cost increases since the advent of EASA.</p>

	<p>All forms of regulation are attacks on the human spirit, the driving force of civilisation; progress is better made by education and information.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>259 comment by: <i>Lattermann</i></p> <p>Werte Damen und Herren Ich möchte mich positiv zu den Plänen der Neuregelung des Instrument Ratings äußern . Es wäre ein wichtiger Schritt zu einer modernen Ausbildung die uns privatpiloten mehr Sicherheit im Flugverkehr gibt . In meinem Falle ,ich Fliege für unsere kleine Firma um Kunden und Lieferanten in Deutschland und Europa zu besuchen , waere es ein großer sicherheits und Terminpuenklichkeits Faktor . Eine ifr Ausbildung die ich begonnen hatte scheiterte an der unglaublichen Theorie überfrachtung der ausbildung . Diese bisherige Praxis treibt Unmengen von Piloten nach USA und Verhilft der dortigen Wirtschaft zu guten Geschäften ! Ich werde diesen weg auch gehen falls die Regelungen hier nicht kommen . Sie sehen also das eine ueberfrachtung des Luftraumes ,so wie manche Gegner der neuen leichteren Ausbildung behaupten , durch eine Beibehaltung der alten Reglung nicht verhindert wird . Diese Befürchtung der ueberlastung wird auch nicht kommen da wir als Piloten der generalaviation nur wenig zum Verkehrsaufkommen beitragen und meist in Lufträumen unterwegs sind die von airlinern selten befliegen werden . Ich wäre gern bereit mit zuarbeiten bei einer Lösung da ich als Firmen Inhaber (www tl-Werkzeuge.de) und langjähriger pilot (mehr als 1000 h Erfahrung ppl,cvfr, Nachtflug , spl) sicher Ihnen bei der Umsetzung und beratung der komplizierten Materie etwas helfen kann .</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback on the proposals for a competency-based instrument rating and offering your support.</p> <p>However, as the Agency has to follow the published rulemaking procedure experts for the Review Group were nominated by the advisory bodies. Additional experts could not be involved.</p>
comment	<p>260 comment by: <i>Croft Brown</i></p> <p>I am a glider pilot in the United Kingdom. I have been flying for 15 years, with over 1000hrs and FAI Gold Badge with 2 Diamonds. I also have a lapsed Basic Instructor rating. My BGA glider licence No. 722 was issued in 2002. My gliding club is Bowland Forest Gliding Club.</p> <p>These comments are mine, not the gliding clubs.</p>

For many years, I have regularly flown in Instrument Meteorological Conditions (IMC) while flying my glider. I climb in thermal lift to just below cloud base and then fly on the to the next source of lift to climb yet again to cloud base. This is the way that most sailplane pilots fly many kilometres. At other times I fly in wave to many thousands of feet, with due regard to airspace restrictions, to cover huge distances above cloud. When the lift is no longer available, I then descend either through gaps in clouds or through the clouds with the appropriate Artificial Horizon and Turn and Slip instruments to get below cloud level before landing.

Will I have the right to continue with my current practice or have I to go through some training programme to do what I am doing already? (I don't expect an answer to this rhetorical question)

The British Gliding Association are the governing body for Gliding within the United Kingdom. They have responded to this NPA in their own right and their comments are endorsed by me in all respects. Their comments are summarised below

1. The Sailplane Cloud Flying Rating is essential for the safe operation of gliding in the United Kingdom and consider it is essential that the privilege is maintained.
2. The BGA membership have a safe record of cloud flying and it has never needed to put a specific figure on the training requirements to exercise their privilege.
3. The BGA require the training to be conducted in TMGs but would accept pilots be prohibited from exercising the privilege of the SCFR in TMGs
4. I agree with the BGA that a restricted SCFR be re-considered by EASA.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (TMG/restricted cloud flying rating) were also identified by BGA.

comment 261

comment by: *jim white*

I am a glider pilot with 2000 hours, an instructor, and have taken part in competition at National level in each of the last 9 years.

I appreciate that EASA is trying to accommodate IMC gliding in the new licensing rules but the proposed implementation seems somewhat clumsy. It is proposed that a new SCFR rating be introduced to allow glider pilots to fly in and up to cloud above 3000ft. I think that the training requirement for flying IN cloud is excessive and for flying UNDER cloud is inappropriate.

I believe that 5 hours of training for cloud climbing in a glider is excessive: This level of training may be appropriate for flying a sector in cloud as more skills are required, however this does not reflect how glider pilots actually use cloud climbs to extend range and their flight on days where there is low cloud or long gaps between climbs.

Typically the glider pilot will spend a few minutes climbing in cloud then roll level to exit the cloud in the general direction required. Once clear of cloud the skill required is similar to that used in VMC conditions. This is because useful climbs are generally only present in discrete cumulus or cumulonimbus clouds i.e. convective cloud. When there is advective or layer cloud there are no useful climbs. The key skills therefore are to maintain a constant bank angle in multiple 360 degree climbing turns with reference to blind flying instruments, recovery from unusual attitudes, and the ability to roll out onto a heading within 30 degrees ^(see note below) or so. In my opinion there a few pilots that would require as much as 1 hour additional tuition to do these things competently. Glider pilots do not fly a heading in the same way as power pilots ^(see note below).

Note: Glider pilots fly between climbs in a meandering fashion flying anything up to 40 degrees off course to find lift. It is never necessary to fly a compass heading within a few degrees of accuracy and, obviously, we are unable to maintain a constant altitude.

The skills needed to fly below cloud be in IMC i.e. above 3000ft amsl and < 1000ft below cloud are essentially the same as flying in VMC. The only difference is an enhanced awareness of collision risk, a very good lookout, and the need to remain clear of cloud. No additional dual flight instruction is required for this. I have no problem with the theoretical part of the training proposed for either purpose.

It is my opinion, therefore, that there needs to be an option 3 combining option 1 for those pilots who wish to fly IN cloud and are willing to undergo an appropriate amount of further training and option 2 for those who simply wish to fly under and up to cloud, but in clear air. One to two hours of dual flight training is sufficient for the former and to require the latter to undergo 5 hours of training is disproportionate, too expensive, inappropriate, and will have a seriously negative effect upon gliding in the UK.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 262

comment by: *Tony Murphy*

I am a British glider pilot, with 780hrs total, including 720hrs solo in sailplanes. I regularly fly up to cloudbase, and climb above cloud in wave in Wales, which involves a technical cloud-flying situation for descents. I always descend in clear air.

My response to NPA 2011-16 is to support option 2 for sailplane pilots' cloud flying rating.

As it stands, the limitations of the Order would make gliding difficult if not impossible in the variable conditions and cloudbases found in the UK. Even a minimum re-training for instrument conditions would involve time, expense, and load on instructor resources : burdens that impinge upon our already stressed and almost completely voluntary gliding instructors.

A simple compromise would avoid conflict ,or damage to the gliding movement. Option 2 is the best answer.

Yours. Tony Murphy. Stratford on Avon Gliding Club. BGA Silver C rating plus cross-country.

response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>263 comment by: <i>Stephen Coles</i></p> <p>I support the comments and proposals made by the British Gliding Association. In addition to that I believe that highly prescriptive regulation is inappropriate in this field for the following reasons. I am 64 and have just started gliding. There are 16-year olds with more gliding experience than me. On the other hand they have not flown military aircraft like me. They are not TREs with 20,000 hours and do not have a Single engine Instrument Rating.. It is this huge range of background and experience in the SPORT of Gliding which makes proposals like 5 hours of Instrument Training so inappropriate (or even 3). The fine detail as to what is necessary for training (if anything) is best left to an Organisation with a proven track record such as the BGA. Figures such as 5 hours training which can only be 'plucked from the air' make no sense except to those who simply feel there must be a rule for everything. Surely it is an EU principal that power should be delegated where possible? I can personally attest to the fact that standards set by the BGA are highly professional and so are the BGA instructors I have met, without exception. So my comment is this. Please only make regulations where unavoidable, and where regulation is absolutely necessary give great weight to the views of the BGA which has earned the right to be regarded as a highly responsible organisation. In particular this should apply to their views on Sailplanes flying in cloud which I feel have great merit.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>264 comment by: <i>Richard WHITAKER</i></p> <p><u>Draft opinion p15</u> I strongly support the recommendation to choose Option 1 - Full Sailplane Cloud Flying Rating. The ability to fly close to or in cloud is fundamental to cross-country soaring in a sailplane. Inability to do so above 3,000ft would result in cross-country flying being impractical. I would definitely be forced to stop. A few people might continue, but the risks associated with outlandings and/or low-level sustainer engine starts would be increased dramatically. Outlandings result in far more accidents than flying in IFR conditions. I would also ask that Option 2 - Restricted Sailplane Cloud Flying Rating - be considered again in addition to Option 1. Many sailplane pilots in the UK fly close to cloud frequently, but rarely if ever actually fly in cloud, and therefore do not need the full rating. <u>P19 SCFR experience requirements</u></p>

The requirement for 5hr of dual training in instrument conditions seems to me to be artificial and inappropriate. 5 hours in a glider is a very long time and this will be an expensive and unnecessary burden for some pilots. For example, people who have been cloud-flying in gliders for years could probably go straight to the skills test. On the other hand, beginners with only the minimum 30hr of experience might need more than 5hr on instruments. The skills test should be adequate as a means of determining whether the pilot is competent – all sailplane instructing in the UK is based on this principle.

P190 SCFR theoretical knowledge and instruction requirements

These requirements seem to me to be appropriate and proportional for cloud flying in sailplanes, and will result in an enhancement of flight safety once implemented. However, for those who only wish to fly close to cloud and remain clear of it, the theoretical knowledge on its own would be sufficient.

The ability to undertake most of the training on TMGs is also of major practical importance, as this will be the most appropriate means operationally to undertake the training. However I recognise that it would not be appropriate to allow the privileges of this rating to be enjoyed in a TMG.

P191 SCFR skills test requirements

These requirements are very reasonable and should allow an appropriate outcome.

I make these comments based on 34 years of experience as a sailplane pilot, with 1,300hr, Diamond Badge, and as an ex Instructor.

response *Partially accepted*

Thank you for providing this feedback.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment 265

comment by: *Ed Smallbone*

Section III. Overview of the changes proposed in this NPA, 3. Sailplane cloud flying rating

1. To date, the British gliding movement has very competently and successfully managed our sport and has very effective safety measures in place. As part of this we are able to enjoy the privilege of flight up to and into cloud. Whilst I am not in favour of further regulation, I would support NPA 2011-16 as it applies to Sailplanes and the provision of a SCFR however, I would request that it is not be constructed in such a way that the regulation adversely affects current sailplane flying privileges. Limitations to this aspect of our sport are not undesirable and not necessary.

2. The SCFR should be available to holders of the LAPL(S) and SPL.

3. The requirement for dual-flight instruction should be solely competency based and does not require a mandatory minimum of 5 hours. For many experienced cross-country pilots 5 hours dual flight training will be unnecessary to achieve the required level of knowledge and skill and represents an undesirable cost burden.

4. A Restricted SCFR (without the need for additional flight training) should be made available to permit flight out of cloud but in IFR conditions.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised were also identified by BGA.

comment 268 comment by: *Robbie Robertson*

As a glider pilot with over 3000 hrs flying and diamond badges, I would like to express my support for NPA 2011-16. In an ideal world, we would like to continue as we have done in complete safety for the last 50 years.

One point is that actual cloud flying in gliders is very rare.... probably less than 1% of all gliding time is in cloud so I consider the need for 5 hours dual training to be excessive. At our club many pilots spend some time in a two seater suitably equipped to cut off visual references to the trainee pilot. I assume that this would count towards necessary dual time.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 271 comment by: *Clive Thomas*

Dear Sirs, It has been brought to my attention that proposed EASA regulation will effectively kill the currently held privilege of glider pilots to fly in or near cloud.

If this is true I have to protest most strongly as such legislation would virtually mean the end of gliding in the UK above 3000' because, even if not flying actually within cloud, pilots regularly fly very close to cloud. Pilots certainly fly to within 1000' of the base and within 1500' horizontally every soaring flight in uncontrolled airspace.

I can see no earthly reason why this practice should not be allowed to continue and feel that, perhaps, this aspect of sport aviation has not been considered by the legislators.

I request that the glider pilot cloud flying privilege is retained.

response *Noted*

Thank you for providing this comment. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders this issue was discussed again with the

Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

272

comment by: *Clive Thomas*

I have no desire to fly actually within a cloud but as I said in my original email if sailplane pilots are to be able to follow their sport they must be allowed to fly close to cloud in what are referred to as Instrument Meteorological Conditions when, in fact, no instruments are required as the pilot can fly perfectly well by visual reference to the horizon and the ground.

response

Note

Please see response to your original comment No 271.

comment

273

comment by: *phil punt*

I am the Chief Flying Instructor at a gliding club in the Northwest of England and as such come under the governing body of the British Gliding Association (BGA) and all that it entails. I support this NPA with the following four responses.

1. 1. LAPL(S) & SPL

I consider that SCFR is not only vital for safe flying of glider flight within the UK but consider that the privilege be applied to both LAPL(S) and SPL holders.

2. 2. Dual Flight Training requirements.

Specifying a training minimum of 5 hours would be seen as excessive to a pilot who has undergone instrument training previously. As with all training there are those who learn quickly and those who don't and the actual training time should be left to the examiner.

3. 3. TMG's

I think that training for the rating should be possible in TMG's but the SCFR itself not be exercised in a TMG due to flight manual restrictions.

4. 4. Restricted SCFR

I am aware that the BGA had proposed that this rating be made available for flight under IFR but clear of cloud. I would agree with this and suggest that EASA reconsider this option.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised were also identified by BGA.

comment 304

comment by: *Colin Hampson*

1. The proposals in general represent a welcome and pragmatic approach to promoting increased safety through wider adoption of Instrument Ratings for both PPL and CPL holders throughout Europe.

2. The competence based modular IR must reduce both the cost of and the unnecessary theoretical requirements associated with obtaining the rating. Both prohibit obtaining the IR and therefore both must be tackled in order for the proposals to be successful.

3. Holders of valid UK IMC Ratings must have the privileges grandfathered into Part-FCL. It is welcome that the proposals suggest doing so through some form of restricted IR.

4. Those with the JAA ATPL theoretical exam passes should be exempted from the theoretical requirements of the proposed IR. In addition, demonstrated knowledge should be sufficient (i.e. those having passed the ATPL exams more than 36 months should also be exempt). Many students having passed the exams in the last year are waiting for Part FCL to complete the modular IR and this could well be after the 36 month exam validity period has passed. What purpose does this validity period serve? Students who have passed the ATPL exams have worked very hard to do so and should not be penalised by an artificially imposed limit. I know of many pilots who have 'lapsed exam credit' and are put off the IR because of the need to resit the exams. Please consider making credit for the TK requirements for the IR based on demonstrated knowledge (i.e. making the IR accessible to those with 'expired' ATPL passes). I have ATPL passes from May 2011 but do not want to complete the IR until 4-5 years from now (as I wish to instruct VFR between now and then). It seems wrong that the IR will not be accessible to me and I would need to undertake yet more TK training.

response *Partially accepted*

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence or rating during the conversion process. This process is the responsibility of the Member State in consultation with EASA. In this case the Agency will support UK CAA in finding a solution to these issues.

In addition, the Agency would like to clarify that FCL.035(b)(1) gives full credit to the IR(A) and EIR theoretical knowledge requirements when the applicant has passed the ATPL theory examinations in the same category of aircraft.

JAA ATPL theoretical knowledge examinations will be treated as Part-FCL ATPL examinations which means that they are valid for the issue of an IR or EIR for a period of 36 months [see FCL.025(c)(1)(ii)]. The purpose of the validity period is that the theoretical knowledge is an important part of the training and the student needs to have acquired this knowledge when completing flying training. If the theoretical training (ie. ATPL theoretical knowledge) was completed a very long time ago, this may not be the case. For that reason if the theoretical examinations have expired, they have to be renewed first.

comment 305

comment by: *Ash*

response	<p>I strongly agree with your proposals for cloud flying in relation to UK Gliders/Sailplanes. It is essential for the sport that we can enter cloud at times.</p> <p><i>Noted</i></p> <p>The Agency acknowledges your positive feedback on the proposed cloud flying rating for sailplane pilots.</p>
comment	<p>316 comment by: <i>Fliegerverein München</i></p> <p>Our company is really glad to hear about EASA FCL.008. This Enroute-IFR will be warmly welcome to a lot of pilots. It is useless for privat pilots to study about the building technique of turbines if their own aircraft is a Cessna 172. It is way to complicated and to disappointing for students to learn something they don't and won't need. They are willingly to learn everything needed for their sort if machines. The amout of lessons sound reasonable and well thought about. The reason for privat pilots to study for an IFR licence is the increasment of their own safety. And for these sort of pilots it is enough to have a light IFR licence which allows them to fly guided through clouds. And for people who want and need more, they can still upgrade to a full IFR licence.</p> <p>A really great idea and we all hope EASA FCL.008 will come true!</p> <p>Kind regards</p> <p>FVM</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your positive feedback on the proposals for the en-route instrument rating.</p>
comment	<p>339 comment by: <i>David Clarke</i></p> <p>Reference SCFR-restricted as proposed in option 2</p> <p>Having read the document regarding the proposed I should like to add my support to the EASA proposal within NPA 2011-16 for glider flying in and close to cloud.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>346 comment by: <i>MarkDAVIS</i></p> <p>I back the implementation of a Sailplane Cloud Flying Rating (SCFR), but in addition suggest the addition of a Restricted Sailplane Cloud Flying Rating (RSCFR) to allow flight in VFR up to but clear of cloud.</p> <p>The 5 hour requirement for dual instruction in sailplanes is unnecessary and could be reduced to 2 hours</p>

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 348

comment by: *Mike FLYNN*

Overall I strongly support this NPA. Implementation of this NPA will substantially improve flight safety by providing better access to Instrument Qualifications for most European pilots. The improved level of safety is clearly documented in your own safety analysis.

Furthermore, the strong positive results of the UK IMCr rating and FAA IR operators in Europe show the reduced accident rates for pilots with these qualifications vs. the average accident rate of European PPLs.

response *Noted*

Thank you for providing this positive feedback.

comment 353

comment by: *Mike FLYNN*

The proposals for conversion of third country ICAO IRs into EASA part-FCL IRs is welcome. However, for pilots seeking to operate only third country aircraft, it is suggested that EASA-FCL Article 7.4 be modified to replace "type ratings" with "instrument and type ratings". This would reduce the administrative burden on existing third country operators while not adversely effecting safety. There is no safety or operational case for requiring third country operators to replicate the IR rating on their FCL licence.

response *Not accepted*

Thank you for providing feedback.

A pilot residing or established in the EU flying either an aircraft registered in a third country or registered in one of the Member States needs to hold a Part-FCL licence and to comply with the European rules. This principle was introduced by Articles 4 and 7 of the the Basic Regulation [Regulation (EC) No 216/2008] and it was agreed/supported by all Member States when the Basic Regulation was established.

Third-country licences may be accepted and the requirements for the acceptance of licences were therefore included in a Part-FCL regulation. The prior flying experience as PIC in IFR/IMC of third-country IR holders is taken into account in the requirements for EIR and competency-based IR.

comment 359

comment by: *Andrew WELLS*

As a glider pilot I support the choice of Option 1 for the sailplane cloud flying rating and look forward to reaching the 30h minimum flying time to embark on the training. A minimum of 5h dual training seems to me a long time to acheive the necessary proficiency. Glider pilots are continually turning and adjusting course onto new headings etc. and I think the would learn the

	<p>proposed syllabus in much less time. Could the EASA review this 5h minimum in the light of mine and other's comments please.</p>
<p>response</p>	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.</p>
<p>comment</p>	<p>360 comment by: <i>dylan davies</i></p> <p>As an enthusiastic glider pilot and I think that we need to be able to fly in cloud. Having a minimum amount of training of 5hrs seems to be excessive as the skill level needed to be able to get signed off flying in cloud I think requires less hours of training as cloud flying is nearly impossible without a good thermal day. The complete stopping of flying in cloud would be disastrous, this will mean that our club and a lot of clubs won't be able to launch half the flying days due to it being situated on a ridge and the cloud base rarely reaching over 1700ft not allowing a full winch launch.</p>
<p>response</p>	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to comment No 359 as the issue you raised (5 hours training) was also identified in that comment.</p>
<p>comment</p>	<p>363 comment by: <i>Walter Baumann</i></p> <p>As a sailplane pilot I frequently use cloudflying to extend my cross country flights. I therefore support the proposal to introduce a cloudflying qualification to be able to continue with this practice. As an instructor I feel the requirement for hours qualification is unnecessary, in my opinion a skill-based qualification is sufficient.</p>
<p>response</p>	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the</p>

training has to be flown on a sailplane or powered sailplane except TMGs.

comment 374 comment by: Robert BOLLLOM

This are test comments

response Noted

comment 399 comment by: Roy Cross

I have examined EASA Proposals for IMC Flight NPA2011-16 and I wish to strongly support option 1, since this will permit glider pilots like myself in the UK to continue to exercise a privilege which has been historically and traditionally ours, namely to fly in cloud on the occasions when it is advantageous.

response Noted

Thank you for providing this comment.

comment 401 comment by: Pete Harmer

I am an active glider pilot and instructor.
 I strongly support the SCFR.
 I think that the rating must be available to both LAPL(S) & SPL holders

response Partially accepted

Thank you for providing this comment.
 SCFR will be available for both SPL and LAPL(S) licence holders.

comment 408 comment by: John THOMPSON

I would like to make a general comment wrt this proposal. Having flown gliders in the UK for many years I can see sense in making sure that those pilots venturing near to, or into clouds, should be qualified to do so and to this extent I support the proposals. However, I believe it is imperative that qualified glider pilots can still fly in and close to cloud as issues arise in the UK, and I suspect in many other parts of Europe, where cloud bases over 3,000 ft e.g. 4,000 feet, would be produced by thermals whose usefulness would probably be initiated at around half the cloud base height, so 2,000 ft in this case. This would give a glider pilot only 1,000 ft of useable climb and leave him/her with a decision about where to find the next thermal on arriving at 3,000 ft. This causes two problems that I can think of. Firstly gliders are effectively "compressed" into a smaller amount of airspace (as a resultant height cap of 3,000ft would be enforced), and secondly, more reckless decisions could be made about which thermals the pilots are able to utilise for their next climb as the range of the glider over only a 1,000 ft height loss has been compromised significantly when compared to a 2,000 ft glide range. Bearing in mind for much of the UK gliding season a 4,000 ft cloud base is quite common, any restriction would severely compromise our sport to the extent where I suspect many pilots would not continue.

response Noted

Thank you for providing this comment. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud. Please check the response provided to the British Gliding Association (BGA) comment No 121 for more detailed answers on technical matters.

comment

409

comment by: Dr. Bert F. Smits

From the introduction, we notice the following two paragraphs :

It is highlighted in this Regulation that Member States should aim at allowing pilots to, as far as possible, maintain their current scope of activities and privileges.

During the drafting phase the Agency and the group members took special consideration of the requirements in place for the IR issued by the Federal Aviation Administration (FAA) in the United States of America.

Further down, in the overview of changes, we note that paragraph 2.7 highlights that *Appendix 6 A.2 also provides a proposal for crediting Part-FCL PPL or CPL holders holding also a current ICAO-based third country IR(A). With a certain amount of instrument flight time as PIC, the holder of a Part-FCL licence holding also a third country IR(A) will be credited in full towards the training course requirements. Nevertheless, the applicant has to pass the skill test and must demonstrate the appropriate knowledge of Air Law, Meteorology, Flight Performance and Planning and Human Performance.*

The latter comment is in contradiction with the two above. Indeed, many experienced IFR rated FAA PPLs have been flying the European skies for decades. Their safety record exceeds by far that of JAA (or before that) nationally rated PPLs.

During the FAA IR training, every successful candidate has passed a theoretical knowledge test comprising each of the four subjects mentioned above. In addition, many practical matters on the same subject have been quizzed during an extensive oral exam.

Also, because having a JAA(EASA) PPL is a prerequisite, most pilots will have sat already during the PPL-VFR conversion knowledge tests in Air Law and Human Performance.

Furthermore, the FAA IR is an ICAO-rating, that allows pilots of aircraft, for which the operator is not EU-resident, to fly N-registered aircraft under IFR in Europe. As residency of the operator cannot be discriminating safety factor, there can hence be no safety requirement that would force the Agency to propose anything other than automatic conversion.

Finally, I have been incident-free for more than 5 years now, with 350 flight hours, the majority of which have been under IFR in European Skies. An automatic conversion / grandfathering procedure for experienced pilots would allow pilots like me, without safety cost, to maintain my current flying privileges (Multi-Engine Instrument Rated PPL).

This is not just my opinion, several MEP's in the Transport Committee, such as the rt. hon. Philip Bradbourn have voiced the same concern. By imposing unnecessary onerous restrictions in appendix 6.2, one is trying to "fix

	<p>something that isn't broken".</p> <p>I am aware that various special interests are trying to influence EASA of the contrary. ATO's and Examiners obviously have a direct pecuniary interest in trying to obtain as many conversion fees as possible. By going along with these, EASA is jeopardizing not just the General Aviation community in Europe, but the citizen's appreciation of European Institutions in general.</p> <p>I've added a concrete proposal to amend appendix 6.A.2.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>A pilot residing or established in the EU flying either an aircraft registered in a third country or registered in one of the Member States needs to hold a Part-FCL licence and to comply with the European rules. This principle was introduced by Articles 4 and 7 of the Basic Regulation [Regulation (EC) No 216/2008] and it was agreed/supported by all Member States when the Basic Regulation was established.</p> <p>The prior flying experience as PIC in IFR/IMC has been taken into account in the proposed EIR and competency-based IR requirements. The Agency has also reviewed the required theoretical examinations and decreased the number of them for Part-FCL licence holders who also hold ICAO Annex 1 instrument rating issued by a third-country. It is good to notice that if the holder of such licence and rating also has a required amount of flying experience, he/she does not have to pass written IR theoretical examinations but to demonstrate the theoretical knowledge during the skill test.</p>
comment	<p>419 comment by: UK CAA</p> <p>Page No: All</p> <p>Paragraph No: N/A</p> <p>Comment: The NPA does not make any particular provision for aeroplanes that are towing gliders. It is common for the pilot of a tug aircraft to tow the glider into a position under a cloud. Whilst the glider pilot may fly into such a position with the Sailplane Cloud Rating, it appears that the pilot of the tug aeroplane would have to have an EIR, a modular IR or a standard IR.</p> <p>Proposed Text: None.</p>
response	<p><i>Noted</i></p> <p>Thank you for this feedback. A pilot who wishes to fly below VFR minima has to have a relevant rating.</p>
comment	<p>422 comment by: Nick Tillett</p> <p>As a glider pilot who currently practices cloud flying and a PPL holder with an IMC rating I broadly approve of these proposals. However, I would question the wisdom of introducing a fixed 5 hour training period for the proposed</p>

sailplane qualification. Whilst a more modest limit, say 2 hours, may be sensible it would seem better to make qualification dependent on pilot performance rather than ability to pay for a fixed training period. In practice glider pilots who already legitimately cloud fly under existing rules will not need a further 5 hours training to achieve the required standard. On the other hand I do know glider pilots for whom, I suspect, the 5 hours will be insufficient.

response *Partially accepted*

Thank you for providing this comment. BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment 423

comment by: *Damian LE ROUX*

1) I strongly support the introduction of the Sailplane Cloud Flying Rating, for the reasons given in the NPA 2011-16 document on pages 229 to 230 under 'Operational range of sailplanes'. Increased operational range of sailplanes is a major contributor to safe and efficient flight in sailplanes without statistical increased risk of collision with general aviation or commercial air traffic.

2) Also for that reason, I would strongly support the introduction of a Restricted Sailplane Cloud Flying Rating.

3) 5 hours dual instruction is excessive. I would suggest a minimum of one hour dual instruction plus sufficient extra airborne training to achieve a standard suitable to pass the flight test.

4) It is essential that training should be possible in a TMG.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/5 hours training/TMG) were also identified by BGA.

comment 443

comment by: *Peter Allingham*

Option 0 would mean the demise of gliding in this country
Without cloud flying the cross country flights would very restricted, with more chance of field landings, with risks to man and machine.
I have flown gliders for over thirty years, have flown inside and up the side of clouds all this time safely.
The impact is large reduction of pilot numbers, which will effect support company's and glider sales. (New & second Hand)

	<p>Option 1 seems to severe. The 5 hours training using pure gliding flights could mean over 20 flights to obtain the rating. The effort and the cost would deter a large number of pilots. This could have the same impact as option 0. It would be better if it was reduced to 2 or 3 hours, with either all or the majority of training flights in motor gliders. This would cut down the time and cost to obtain the rating.</p> <p>Option 2 is better. I spend much more time just below cloud base, than cloud flying. T</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>456 comment by: <i>Rowan</i></p>
	<p>As a UK glider pilot I am worried about the future of our sport and the changing regulations that EASA is charged with. I support this NPA and feel that the Sailplane Cloud Flying Rating (SCFR) is important for gliding in the UK. I strongly feel that the SCFR should be available to LAPL(S) and SPL holders. However I feel that the minimum of 5 hours of training is excessive.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised were also identified by BGA.</p>
comment	<p>460 comment by: <i>HUGH BROWNING</i></p>
	<p>I support RIA 2, option 1, which permits sailplane pilots to enter cloud and fly in IMC if national regulations permit this.</p> <p>I began gliding in 1958 and have made many climbs in cloud. As the proposal indicates, cloud climbs extend the range of sailplanes.</p> <p>In the UK all reportable glider accidents, lesser accidents, and serious incidents are communicated to the British Gliding Association. I maintain the BGA accident and incident database which contains 5728 records since 1974. In addition, I have personally studied all reports involving gliders in the CAA MOR database from 1997 to December 2009, and all Airprox Board reports involving gliders from July 2003 to December 2009. These sources contain no instance of a glider in cloud or emerging from cloud being in conflict with any other aircraft except another glider. For this reason, and from the nature of glider flying in short-lived cumulous clouds, I conclude cloud flying by glider pilots does not jeopardise the safety of other airspace users.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment.

comment	467	comment by: <i>colin weyman</i>
	I endorse all of the suggestions and comments put by the BGA on behalf of the British Gliding Members concerning 'NPA 2011-16' re: Cloud Flying.	
	Cumulus clouds are the glider pilots marker to where the rising air currents are. Imagine if all glider pilots were banned from flying in or near clouds. Pilots would be aimlessly bumbling around the sky trying to second guess where the lift was, rather than being in a known area, i.e. underneath a cumulus cloud.	
response	<i>Noted</i>	
	Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 for a more detailed answer.	

comment	484	comment by: <i>Pete Stratten</i>
	I strongly support the Sailplane Cloud Flying Proposals within this NPA, with the following additional comment;	
	1. EASA should reconsider the Restricted Cloud Flying Rating. The RSCFR proposal, which has been rejected by EASA, would provide a helpful stepping stone to SCFR qualification and, crucially, provide the theoretical knowledge required in an environment that most sailplane pilots will encounter.	
	2. 5 hours minimum training for the SCFR is excessive. Cross crediting should be considered.	
	Pete Stratten Windrushers Gliding Club UK	
response	<i>Partially accepted</i>	
	Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.	

comment	530	comment by: <i>P Williams</i>
	I am very pleased to see that EASA has taken a pragmatic and helpful attitude to the matter of sailplane flying in IMC. I feel, however, that you seem to think sailplane pilots fly a lot more in cloud, rather than close to clouds, than actually happens (at least in the UK) and have therefore proposed practical training far in excess of what most pilots actually need.	
	In the UK very few pilots deliberately enter cloud. If they do it is usually because they have been caught out when a wave gap closes, and their concern then is solely to descend safely to a point where they should be well above the terrain below. All this requires is the ability to turn gently onto a suitable heading and hold the aircraft level while controlling the rate of descent with the airbrakes	

and keeping an eye on their position as shown on a moving map GPS display. If control should be lost, the aircraft might either spin or enter a spiral dive. In both cases one would probably wait until the aircraft broke free of cloud, though in the case of a spiral dive the airbrakes would be opened to limit the speed. Once out of cloud the situation could easily be brought under control.

The main need to be able to fly in IMC is to climb close to clouds and to cloudbase. In the UK generally cloudbase rarely reaches 5000 ft, and often not even 4000ft, and in Scotland still less. In wave flying one is inevitably close to the front of the cloud during part of the climb - otherwise one couldn't climb at all. Flying near clouds obviously requires a good lookout and situational awareness, but no particular level of skill.

You seem to recognise the two types of requirement but your method of scoring inevitably leads to the more comprehensive option (Option1). Why must there be only one set of rules? Can there not be two levels of sailplane cloud flying rating (both option 1 and option 2)? With different instructional requirements. The requirement for 5 hours of dual instructional flying solely on instruments seems to me excessive, even for sailplane pilots who deliberately intend to fly in cloud - even they do not want to fly cross-country in cloud; they merely accept that circumstances may arise where it is necessary to enter cloud for a short time. (There are exceptions, but those pilots usually have an ATPL.) Many years ago (over 30 years) when I began to glide it was not uncommon for pilots to climb in cloud to get extra height. I don't know any pilot who does that now - maybe a few pilots do, but it must be very few. But all pilots fly up to cloudbase and near to the edge of wave clouds. It would be disastrous if every pilot who just wanted to fly near to clouds, or who might inadvertently get caught above cloud, had to undergo 5 hours special instruction. The cost and scale of the requirement is out of proportion and would cause a lot of UK pilots to give up gliding.

It is also vastly more stringent than is currently required in the UK, and there is no evidence that that has led to safety issues.

Please have another think about the matter. It is clear that EASA's intention is to be helpful, but I suspect you haven't quite realised exactly what necessarily goes on in gliding.

response

Partially accepted

Thank you for providing this comment.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional

rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

Also several other comments stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TMG available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours training on sailplanes as initially proposed would be difficult to achieve. Having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment

551

comment by: g BAILEY

Comments regarding NPA 2011-16

I am a British glider pilot based in Lancashire, with 1000+ hrs sailplane flying experience, predominantly in the UK.

Only occasionally do I fly within cloud, but often fly within the 'IFR' range of clouds, typically underneath when thermal or hill soaring, and to the side and above when soaring in mountain wave. Perhaps particularly in the NW of England, the glider flying that I can do would be largely destroyed if I was unable to fly near clouds in all directions.

I say it is vital that provision be made for sailplanes to continue flying in and around cloud, and therefore I strongly support the availability of the SCFR. I believe it would be most unreasonable, however, to impose a requirement for a fixed number of flying hours training, particularly for pilots already having experience of cloud flying. It would be a considerable expense, apart from practical difficulties of access to kit and instructors.

I would also urge that sailplane pilots be allowed to fly close to clouds without any special qualification demands. It takes very little extra skill to operate near clouds, just some prudence about when and where to do it. If something formal is insisted upon, please can the RSCFR be reconsidered, perhaps based purely on theory/good practise training, and a minimum of say 20hrs sailplane experience.

GH Bailey

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

553

comment by: Reginald Wooller

I am a gliding instructor with cloud flying experience.

I am strongly in favour of the proposed IFR rating for sailplane pilots but I offer the following comments:-

1 The minimum requirement for 5 hours instruction is not necessary (Page 19). Pilot skill levels and learning rates vary considerably and some will not require that length of training whereas others may well require significantly more time. The qualification check flights will establish if a pilot has reached the desired

	<p>skill level. 2 The proposed practical skill level calls for the pilot to recover from an advanced cloud escape manoeuvre onto a nominated heading of +/- 20 degrees (Page 192). This is unlikely to be achievable however, due to many compass types used in sailplanes and TMGs being subject to acceleration errors. The heading can only be determined with any accuracy when in stable level flight or clear of cloud.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p> <p>The proposed skill test does not require the pilot to achieve this nominated heading instantly. Instead, the test allows normal practice: first to recover to approximate straight flight, and then refine the heading with small adjustments. This is achievable with all compass types.</p>
comment	<p>570 comment by: <i>Steve Wareham</i></p> <p>I support the SCFR and think it should be available to LAPL(S) and SPL licence holders.</p> <p>5 hours dual training would seem to be excessive and I think a reduced number of hours such as 3 would be more realistic.</p> <p>Training in TMG's should be allowed for the SCFR.</p> <p>I would ask that EASA reconsiders the RSCFR option.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised were also identified by BGA.</p>
comment	<p>583 comment by: <i>Charles Tolman</i></p> <p>Many thanks for your hard work on these proposals. I have particular comments about the SCFR FCL-830. However first I would like to proffer some general comments as to why I consider that the gliding sport is an activity of crucial importance to other areas of life:</p> <p>i) All powered pilots should learn to fly gliders. I am in agreement with Major Zuffada of the Italian Air Force (see BGA magazine "Sailplane & Gliding" June/July2011 p30) that every powered pilot should have gliding training. Having noticed the different outcomes of the AirFrance AF447 crash near Brazil and the more successful Hudson river landing in America by a commercial pilot who is also a gliding instructor, I believe that the lack/presence (respectively) of awareness of flying conditions when gliding was a factor here in the decision making processes.</p>

	<p>ii) Younger glider pilots learn transferrable life skills. Many gliding clubs are offering cheaper flying for young flyers. At Lasham I run the launchpoint for our Saturday evening summer flying sessions. Learning to glide is always a positive experience for the youngsters, and it is wonderful to see how they mature through their training, learning skills of immeasurable benefit in their everyday technological life. (Gliding is a very good mix of technology use and appreciation of nature)</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

comment	<p>586 comment by: <i>trevor sexton</i></p> <p style="text-align: center;">EIR I support the EIR proposal..</p> <p>Query</p> <p>EIR What if on arriving at the destination airfield the weather is worse than forecast and alternate not available, the pilot needs to make an instrument approach.. To ATC the pilot is on an IFR flight and therefore they have no knowledge that the pilot cannot accept this approach. In this instance the pilot has no choice but to make the Approach.. ? how does he make this ? how does he tell ATC , does he declare a mayday/pan (these seems over the top). ? does he have to declare to the authorities maybe via a MOR that he's made an approach he's not cleared for..</p>
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response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The privileges of the holder of an en-route instrument rating (EIR) are to conduct flights under IFR or in IMC only in the en-route phase of the flight. This means that the holder of an EIR is not allowed to fly instrument departure, arrival or approach procedures.</p> <p>When filing a flight plan according to the operational rules the EIR pilot should include also planned IFR/VFR transition points. Via filed flight plan the ATCs in concern become aware about the flight and the rules by which the flight will be flown.</p> <p>The pilot should always monitor the weather conditions and turn back or divert to alternative aerodrome if the flight cannot be continued to the destination in safe way. If the EIR pilot becomes unable to complete a flight within the limitations of the rating he/she is expected to declare an emergency and after landing submit other necessary reports if required.</p> <p>The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk it was decided to amend the AMC to include two IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach. In addition, the Agency, supported by many stakeholders, strongly believes the EIR will have an</p>
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overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

comment 587 comment by: *trevor sexton*

ref EIR

would this impact the ATC controller since in marginal weather conditions.

1/ The controller has to separate IFR for IFR.

2/ Vector an aircraft to an Instrument approach.

3/ What about MSA

4/ An aircraft reaches an airways point, requests to leave controlled airspace by descent and then, a few minutes later turns up at a VRP asking for VFR entry

response *Noted*

Thank you for providing this comment.

The EIR pilot is not allowed to fly instrument arrival or departure procedures. Since the EIR pilot will fly according to VFR rules when departing and landing and according to IFR rules, when needed, during an en-route phase of the flight the ATC has to apply corresponding procedures and separations to the flight.

It is unclear from this comment what concerns you have regarding the minimum safe altitude (MSA).

Please see also the response to your comment No 586.

comment 589 comment by: *trevor sexton*

REF EIR

It been mentioned that an EIR pilot will not be allowed to fly a STAR or SID. ???

response *Noted*

Thank you for providing this comment.

The holder of an EIR should at no time accept an IFR clearance to fly a departure, arrival or approach procedure (see GM1 FCL.825).

Please see also the response to your comment No 586.

comment 590 comment by: *trevor sexton*

REF EIR

Pilot flies a STAR arrival , some point in the procedure he becomes VFR and then declares to ATC that he,s now VFR and wants to continue VFR.

How will ATC treat this...

response *Noted*

Thank you for providing this comment.

The holder of an EIR is not allowed to fly instrument arrival or approach procedures.

comment

591

comment by: *trevor sexton*

Ref EIR

The weather does,nt allow an EIR pilot to depart IFR due to cloud base below EIR pilot requirement.
However the pilot can depart VFR under the cloud then once outside of Controlled airspace changes to IFR.
How will this work...??

response

Noted

Thank you for providing this comment.

The holder of an EIR is not allowed to take off or fly departure in IFR.
Depending on the rules the pilot is flying, he/she needs to follow corresponding procedures and minima.

Please see the response to your comments No 586 and 587.

comment

592

comment by: *Desmond PEARCE*

The need for Sailplanes to be able to operate in cloud/IMC in UK airspace.

Example 1.

A typical summer day in Southern England may see a cloud base of 4000ft with 3/8 cumulus extending to 6000ft. A sailplane pilot on a cross country flight will be trying to stay above 2000ft otherwise progress will be slowed by the need to keep re-evaluating landing options. In order to maintain VMC the sailplane must be kept 1000ft vertically clear of cloud so a climb in a thermal would need to be broken off at 3000ft. Leaving aside the difficulty of compliance due to the lack of exact cloud base height data, this level of restriction would make it difficult to complete any but the least ambitious of cross country flights.

By contrast, the current situation allows the pilot to operate up to cloud base, thus doubling the operating height range. Extending the climb into the cloud further improves the options for the pilot as height is the equivalent of fuel for a sailplane.

Example 2.

A sailplane over Northern UK has climbed to 12000ft in wave through a gap in a layer of cloud that extends from 5000ft to 6000ft. The top of the cloud clearly shows the standing wave pattern and the pilot proceeds cross wind for 100km over 8/8 cloud maintaining between 10000ft and 12000ft. When near to the destination airfield a descent is made with full airbrake through the cloud and the sailplane clears cloud at 5000ft then continues down to it's destination.

Most of this flight has been made in good visibility and well clear of cloud. The exceptions were the climb through the gap where the clearance from cloud was less than 100m horizontally and the time in cloud during the descent which probably lasted only a few seconds.

Cloud flying by sailplane pilots in the UK represents a very small percentage of their total flying time. However, preventing them from doing so would remove an important link in the chain of techniques that come together to make a successful cross country flight. Field landings would be more likely as a result. Using the fuel analogy, it would be like requiring aeroplane pilots to take off

with one tank empty.

Training

Firstly we need to remember that most cloud flying in sailplanes consists of circular flight in a thermal that carries the sailplane up into a cumulus cloud. The turn is well established before entering cloud and when the lift ceases or sufficient height has been gained the pilot will straighten up and usually exit the cloud after a few seconds of straight flight. My guess is that most sailplane pilots in UK attempted this for the first time on their own, with only theoretical training. While this may sound irresponsible, the statistics don't seem to support a view that this is particularly dangerous.

Glider pilot training takes place from many different locations with quite different facilities. A large club may provide winching and aerotowing as well as motor gliders for training. However many clubs only use winch launching with unpowered aircraft. It would prove difficult to achieve the proposed 5 hours of instrument flying at this type of club (where average flights last less than 10 minutes including the circuit and approach) so pilots wishing to achieve a SCFR would be faced with the extra expense of doing this at another club. Are other clubs willing to take on this workload or is the intention that commercial schools should be providing this training? Even the proposed biannual check for each SCFR holder would take up a disproportionate amount of time and resources for many clubs where there is a tradition of instructors providing their time for free.

A more realistic training requirement could perhaps follow the traditions of glider pilot training where the instructor uses their professional judgement to determine when a pilot is ready for the next step; solo, cross country etc. So why not let the instructor decide when the pilot is ready to take the cloud flying test? Rather than having a requirement for a biannual check, would it be acceptable to rule that a passenger may not be carried in IFR flight unless the pilot has completed a certain amount of IRF flight in the last 24 months? This would follow the pattern for PPL aeroplane night flying.

I support the proposal for the introduction of a SCFR (Option 1) but suggest that 5 hours of dual flight instruction is an excessive requirement.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

More detailed requirements for the recency requirements have been added to the rule text. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. If the holder of a cloud flying rating does not comply with this requirement, he/she shall pass a proficiency check with an examiner or perform the missing flight time flying dual with an instructor in order to fulfil the requirement. Holders of a valid EIR or an IR(A) will be credited in full against the requirements.

comment	609	comment by: <i>S ALLEN</i>
<p>Frankly I find this CRT a nightmare to use and is obviously the work of a techie. However for what it is worth the proposals for sailplane licencing for blind flying are worth supporting as one of the better additions to the raft of regulations against GA pilots. The requirement for 5 hours training is not realistic and frankly in the real world is a matter for the CFI of the club to say whether a pilot has reached a competent standard. I expect most cloud flying pilots anyway will be commercial or professional pilots with the exception of those at wave sites where one often does have to climb up in front of/in cloud to get into the wave. I feel that the BGA's suggestion of leave it to the CFI or at the most make it 3 hours is worth supporting. Cloud flying is one of those activities, unlike many GA activities, where if the pilot is not competent the incompetence soon results in no glider and no pilot! Cloud flying requirements are most likely "self regulating" as far as training and competence are concerned! However yes the proposals are generally supported with the proviso that the time requirement of 5 hours for training is too heavy.</p>		
response	<i>Partially accepted</i>	
<p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>		
comment	617	comment by: <i>trevor sexton</i>
<p>training outside an ATO is a good idea... At least 10 hours of the required instrument flight instruction time shall be completed in an ATO whereas the remaining flight time may be completed under the supervision of an Instrument Rating Instructor (IRI(A)) or a Flight Instructor (FI(A)) holding the privileges to provide training for the EIR or IR.'</p>		
response	<i>Noted</i>	
<p>Thank you for providing this comment.</p>		
comment	619	comment by: <i>trevor sexton</i>
<p>The rules should allow for a straightforward conversion of existing ICAO-based third country IRs-</p>		
response	<i>Not accepted</i>	
<p>Thank you for providing this comment.</p> <p>The NPA in concern is not dealing with the conversion of third-country ratings but with crediting. The prior flying experience as PIC in IFR/IMC has been taken into account in the proposed EIR and competency-based IR requirements. A Part-FCL licence holder who also holds ICAO Annex 1 instrument rating issued by a third-country and a required amount of flying experience as PIC in IFR/IMC needs only to pass a skill test and demonstrate the adequate level of</p>		

theoretical knowledge during the skill test. In case of competency-based IR he/she also needs to demonstrate English language proficiency.

comment 620 comment by: *trevor sexton*

IFR privileges of the EIR can be adequately assessed by an FE(A) who holds an IRI(A) certificate and do not require specific assessment by an IRE(A).

IRE(A)s are relatively few in number and are unlikely to be sufficient to meet anticipated demand.

Hence, in addition to the proposed amendment to FCL.1005.IRE, we propose the following amendment to paragraph (a) of FCL.1005.FE:

(5) skill tests and proficiency checks for the EIR, provided that the examiner also meets the requirements of FCL.905.FI paragraph (g) and has completed at least 1 000 hours of flight time as a pilot on aeroplanes or TMGs, including at least 250 hours of flight instruction of which at least 50 hours shall be instrument flight instruction; Also a suitably qualified CRE(A) should be empowered to conduct proficiency checks for the renewal or revalidation of the EIR and propose the following amendment to paragraph (b) of FCL.1005.CRE: (3) revalidation and renewal of EIRs, provided that the CRE also holds a valid IRI(A) certificate and has completed at least 50 hours of instrument flight instruction time on aeroplanes.

response *Partially accepted*

Thank you for providing this comment.

The Agency and the Review Group have reviewed this proposal and have amended Subpart K 'Examiners' to enable FE(A), CRE(A) and TRE(A) to conduct revalidation and renewal for the EIR.

comment 621 comment by: *trevor sexton*

The EIR Validity, revalidation and renewal limitation of a 1 year validity period is disproportionate.

The EIR should be valid for 2 years.

response *Not accepted*

Thank you for providing this comment.

After receiving several similar comments the Agency reviewed and decided to amend the EIR revalidation requirements. The Agency would like to clarify that the 1-year validity period remains which is in line with the IR(A). However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.

comment 622 comment by: *trevor sexton*

Ref the IR pre-course assessment flights used by an ATO to assess credit and training needs. Such flights lack standardisation, are open to commercial pressures and abuse and serve little worthwhile purpose. The C-B IR is essentially competency-based by definition and no ATO will propose an applicant for a Skill Test unless that applicant has demonstrated adequate

	<p>preparedness. We therefore propose that the sentence 'To determine the amount of hours credited and to establish the training needs, the applicant shall complete a pre-course assessment flight at an ATO.' shall be deleted.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The pre-course assessment was discussed extensively with the Review Group experts and it was decided to keep the requirement as it is an important element of the proposed future process.</p>
comment	<p>660 comment by: <i>Luftfahrt-Bundesamt</i></p> <p>The LBA has no comments on NPA 2011-16.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>671 comment by: <i>SCOTTISH GLIDING CENTRE</i></p> <p>IFR flying in gliders has been overseen by the CAA in the United Kingdom for many years. This means that the BGA now has much experience in regulating all glider flying in the UK. The levels of safety have been proven to be just as high even through our system is controlled by our non regulated way of operations. The UK CAA has on many occasions said it sees no reason to regulate gliding in the UK. Over the last few decades the BGA has shown that the levels of safety are high and more regulation is not required or needed. The Scottish Gliding Centre does see that there has to be some regulation regarding IFR/Cloud Flying, but going down the over regulated path is neither needed or desirable. Cloud flying has always been part of the UK gliding movement and I repeat that the level of safety has always been exemplary. The Scottisg Gliding Centre supports this NPA and does support the Cloud Flying Rating with some reservations which are listed below. The SCFR is very important for safe glider flying in the UK. The SCFR is must be open to both LAPL(S) and SPL holders. A skills test obviously makes sense but a minimum of 5 hours dual training is in my opinion too much. The amount of training should be decided by the instructor who is flying with the candidate. Many glider pilots have previous experience from other forms of aviation may only need a skills test.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the technical issues you raised were also identified by BGA.</p>
comment	<p>673 comment by: <i>Pete Whitehead (Edensoaring)</i></p> <p>I am a 1500 hrs glider pilot, holding the 3 diamonds badge of the FAI, having</p>

started flying in gliders 39 yrs ago. I am an "assistant instructor", and in the process of converting to the "Full Instructor Rating". I am a founder member and Director of Edensoaring Ltd, a recently created gliding club in Cumbria. Our membership is expanding and we shall be employing professional staff for instructing and ground operations between April and October 2012. We have many visitors from other areas of the UK, and also visiting tourist beginners. **We are therefore part of the local tourist "activity based" economy. We are a Community Amateur Sports Club, like many other BGA clubs, and so have no personal financial gain involved. However the local area, a relatively economically depressed one, gains substantially from outside money flowing into its economy, as well as from the increased social and sporting activity provided.**

My own gliding activity has involved some flying close to or inside cloud to maximise my soaring achievement on many days in England, Wales, and Scotland. Such flying is not a means in itself, indeed it has been kept to a minimum in terms of time spent close to, or inside cloud. It has allowed flights longer in time, and in particular longer in distance, with a reduced chance of landing out in a field. This is typical of other soaring pilots in the UK, **who have a safe record going back over fifty years.**

My own "cloud flying" has included climbing inside cumulus clouds, climbing up in front of orographic cloud near hills and mountains, climbing and descending through layers of cloud in lee wave conditions.

It has also included much time flying in clear air for long periods between layers of lee wave cloud, **thus allowing very safe and long distances flown.**

I therefore support, in general terms, the proposed Sailplane Cloud Flying Rating. To lose the ability to legally fly close to or in cloud would seriously impede glider flying in the UK and seriously threaten the economic and sporting benefits which are associated with it. This effect would be felt, perhaps, in a greater way in the UK than in other parts of Europe, who are less affected by cloudy conditions. In particular it would be felt greater here in the North West of England than, even, in more Eastern and Southern of the UK areas because we have more cloud.

response *Noted*

Thank you for providing this comment.
The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

comment 674

comment by: *Colin Sword*

1. I fully support the implementation of the SCFR as this will maintain the safe environment currently enjoyed by British glider pilots. It is important that this is applicable to both the LAPL(S) and the SPL. I fly a lot in mountain wave conditions, and the ability to manage a safe decent through cloud when gaps close is vital to safety and the continuation of the enjoyable aspect of gliding.
2. I feel that the stated minimum requirement of 5 hours dual instruction is excessive in relation to this qualification. Pilots should be judged on their skill levels by their instructor before being put forward for a test, therefore some will require little training, others more.
3. As a Motor Glider instructor I think that a TMG is the ideal platform in which

to train glider pilots for the SCFR rating. I do not believe that the rating should be capable of being exercised on TMG's however, only sailplanes.

4. I believe that there was suggestion of a restricted SCFR allowing flight under IFR but clear of cloud. This would enhance the privileges of glider pilots, however I feel that as these pilots will be operating in restricted VFR conditions as they currently do, no further training would add to the skills necessary, however it would be advantageous to complete the theory aspects of the SCFR. If this restricted rating has not been included, then this decision should be reconsidered.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment 692

comment by: *Kate Byrne*

I support the idea of the sailplane cloud flying rating as a less worse option than preventing us flying in or up to clouds. As a UK-based glider pilot I fly in what is technically IMC almost every time I take off - not in cloud but closer than the VMC limits whenever I'm above 3000'. We have quite a lot of cloud in this country, so it's unavoidable. The proposed regulations surrounding the rating seem cumbersome - less is more in such things.

I welcome this attempt to bring some common sense to the regulations but I'm afraid I still can't help feeling that - apart from the benefit of keeping lots of people gainfully employed drawing up enormous reports like this - there is really no gain to man nor beast from all this regulation. You must realise the danger: introduce too many daft rules and you will promote a culture where the ordinary GA pilot loses respect for them. As a gliding instructor with many years experience I think this is a real danger. The BGA has always promoted safety and encouraged a culture where there are as few regulations as possible but we all follow them. With the senseless, expensive and oppressive rules that have emerged from EASA over the past few years this healthy culture is already being eroded. In getting into the habit (dare one say, the European habit) of ignoring the silly rules, the less experienced pilots may start ignoring the important ones too. This is dangerous. Sorry if this is off-topic for the current consultation but I feel it's important that warnings are placed on record.

response *Noted*

The Agency acknowledges your comment.

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome or that will create 'a culture where the ordinary GA pilot loses respect for them' as stated in your comment. Flying in clouds needs a certain amount of training, as was already under national rules, and 'see and avoid' is a principle on which VMC minima are established by ICAO for certain airspace categories. Ignoring rules as predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment	694	comment by: <i>D.W.Seed</i>
	I strongly support the view of the BGA in modifying the governance of flying in or near cloud in order to avoid unnecessary restriction of glider operations.	
response	<i>Noted</i>	
	Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.	
comment	718	comment by: <i>Andy Balkwill</i>
	<p>I am a glider pilot with over 900hours flying, I hold a Flight Instructor Rating and a UK PPL (SLMG). I undertake cloud flying on occasions and a find it a useful if not essential skill to have in the UK given the relatively low cloud based that we experience due to our climate. The ability to climb in cloud has frequently enabled me to reach my home aerodrome or another aerodrome rather than be faced with an uncertain field landing. The ability to fly in cloud fly (through obtaining the appropriate rating following training and a proficiency test) also makes decent through cloud safer when flying in mountain lee wave and cloud forms suddenly and unexpectedly below.</p> <p>As a result I support the Agency's proposals for a Sailplane Cloud Flying Rating.</p> <p>However I do have concerns regarding the minimum time specified for dual flight instruction - 5 hours seems excessive and there does not appear to be any evidential basis for this duration. I believe that the sole requirement should be competency demonstrated through the demonstration of appropriate theoretical knowledge and a proficiency test (this would be consistent with most other aspects of gliding where a pupil's progression is based on them demonstrating knowledge, skill and competency and not an arbitrary threshold of X hours or Y flights.</p> <p>From the training perspective, many gliding clubs use TMGs for training and I support the British Gliding Association's position that training for Cloud Flying should be possible in a TMG (e.g. with the use of hoods). The TMG that I fly (a T61) is not rated for cloud flying and I'm not aware of any TMG that is, so I don't see why the use of TMGs should not be possible for training while restricting them from actual cloud flying.</p>	
response	<i>Partially accepted</i>	
	Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/TMG) were also identified by BGA.	
comment	731	comment by: <i>David Zarb</i>
	With regard to this proposal, I wish to fully support the Sailplane Cloud Flying Rating (SCFR)	
response	<i>Noted</i>	
	Thank you for providing feedback.	

comment 735 comment by: *David Chambers*

General Comments

I very much support this NPA, which if implemented as proposed will be a major step forward in safety for PPL and CPL holders by creating a much more attainable and cost-effective route for Instrument Ratings.

FCL.008 are to be commended for making a proposal which, if implemented close to its present form, will make a major positive impact on flight safety, and increase the opportunities for training, general aviation and associated commercial activities throughout Europe.

response *Noted*

Thank you for providing this positive feedback.

comment 738 comment by: *Goudie Neil*

The use of TMGs to train for the Sailplane Cloud Flying Rating (SCFR) has not been clearly stated in this document; and in its present format means that this useful tool for training will be prohibited. This is counter intuitive and should be rectified in the final document. Thankyou.

response *Partially accepted*

Thank you for providing this comment.

Certain elements of the training (as already proposed in the NPA) can be trained on TMGs. As the instructor will have the same privileges regarding this rating, these exercises have to be performed under simulated IMC and not in clouds. This will be addressed in AMC FCL.830. However, the Agency insists that certain amount of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment 747 comment by: *Alastair Mackenzie*

Dear EASA,

I support the proposed introduction of the Sailplane Cloud Flying Rating for glider pilots so that we can continue to fly in close proximity to clouds and where necessary climb up through clouds or descend down through them when this is necessary.

With the relatively low cloud bases in the UK having to stay 1000ft below cloud if above 3000ft would severely hinder pilots ability to fly cross country tasks in the UK and greatly restrict the distance one can glide before having to stop and thermal again. The ability to fly along cloud streets close to cloud base in near constant lift gives the glider pilot the opportunity to cruise in straight lines and head upwind massively extending the amount of distance that can be flown on a cross country flight by dramatically increasing overall cross country speed.

The ability to climb up to cloud base frequently provides the ability to fly directly over a MATZ if necessary rather than having to fly around it.

There are occasions when one can potentially complete a cross country flight

and prevent a field landing by taking a cloud climb to cross large gaps in the convection caused by mid or high cloud layer spread out cutting off the sun. Gliding competitions are frequently won by those pilots with cloud flying experience who are capable of taking advantage of such situations whilst those without the necessary skills get either left behind or end up in a field far from home.

For those of us lucky enough to be able to experience the delights of soaring mountain lee waves often 20 or 30 miles away from the hills that create the phenomena, the ability to fly close to the leading edge of the wave is paramount in the initial climb above the clouds. Once well above cloud it is easy to continue the flight under VFR in VMC conditions in the gin clear air with endless visibility.

On some occasions it may become necessary to descend through cloud on safety grounds when gaps in the waves close up underneath you. Such incidents may occur if you are navigating by ground features only or if your GPS were to fail for some reason and there is a chance of infringing controlled airspace or even being blown out to sea. In such incidents most glider pilots will elect to descend through the thinnest possible cloud layer in the troughs between the waves. Thus minimising the time spent in cloud to prevent airframe icing, disorientation / loss of control and the very small risk of collision in cloud or just beneath it.

So to summarise the situation as I see it, gliding in the UK would be severely curtailed if pilots are prevented from flying in cloud or close to cloud as they have done for the past 50 years. The statistics quoted in the NPA showing that only 2 out of 37 fatal accidents in 10 years across Europe, cited proximity to cloud as a possible contributory factor, tells you all you need to know. Cloud flying in sailplanes is safe provided pilots are suitably trained and their gliders are adequately equipped to do so.

The introduction of the SCFR would provide recreational pilots like myself the opportunity to gain the necessary basic training required, provided that the time and monetary costs involved are kept to a bare minimum and that individual gliding clubs are able to provide the training at a local level. I fully support the continuation of cloud flying rights for pilots of gliders / sailplanes and the introduction of the SCFR should ensure that it can be allowed for future generations.

Alastair Mackenzie.
Glider Pilot with 30 years and 1000+ hours flying experience.
Gold C + 2 Diamond Legs.

response

Noted

Thank you for providing this positive feedback.

comment

753

comment by: *Julian Bayford*

I am responding as a UK glider pilot . We have been greatly concerned that our longstanding privilege of operating in IMC would be removed. This proposal largely allays those concerns and I therefore strongly support it.

response

Noted

Thank you for providing this feedback.

comment 757 comment by: *Steve Tape*

As a pure sailplane pilot in the United Kingdom **I FULLY SUPPORT the proposals of this edition of NPA 2011-16, in particular FCL.830 regarding the **Sailplane Cloud Flying Rating****

response *Noted*

Thank you for providing this feedback.

comment 772 comment by: *lloyd roberts*

I suport the NPA 2011-16 proposal.

Without the Sailplane Cloud Flying Rating (SCFR) established in law, glider pilots will be unnecessarily limited in cross country flying opportunities which will impverish the sport.

With improvements in training, navigation instrumentation and collision avoidance systems, there is now even less need to impose new rules.

It's important that we retain the privilege of flying close to and into cloud.

The British Gliding Association has commented more fully, I fully endorse their submission,

response *Noted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment 774 comment by: *Ian Kennedy*

Within the UK, the ability for Gliders and Sailplanes to fly at cloudbase, and in close proximity to clouds when wave soaring should continue "as is". There is no event based evidence to show the need for any change in the rule

response *Noted*

Thank you for providing this feedback.
The reason for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain

airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

775

comment by: *sean parramore*

having been a glider pilot for over 30 years and a gliding instructor, flying near to cloud when soaring or thermaling is an integral part of the sport. When in a thermal you are naturally drawn towards the underside of the cloud base. This is soaring.. If the rules change and restrict gliders within 1000 feet vertically of cloud this will kill the sport of gliding. The very essence of putting your skills to the test to soar to cloudbase is why we glide in the first place please do not invoke this rule for gliding. Allow glider pilots the freedom to be able to thermal up to the underside of cloudbase.

response

Noted

Thank you for providing this feedback. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR not to comply with this ICAO requirement.

comment

789

comment by: *Christopher Claxton*

Dear EASA

My name is Christopher Claxton. I fly a Discus BT 15 metre glider from the London Gliding Club at Dunstable UK. I have flown off and on during the last 25 years. Please may I comment as invited on NPA 2011-16?

Like many glider pilots I never fly in cloud. In fact my glider has no artificial horizon or turn & slip indicator so it would be unsafe to do so. However I am familiar with typical gliding conditions in the UK where the cloud base is not often higher than 3000 feet above ground level and often much lower. To place a restriction on glider pilots not flying closer than 1000 feet below cloud base when over 3000 feet above ground level would cramp our outstanding sport enormously. It would mean that we could not fly above 3000 feet altitude

unless the cloud base was higher than 4000 feet, which is rare. It would impose a practical barrier on cross country flying, which we love to do, because from 3000 feet our gliding range without finding and climbing in a thermal is only about 16 miles with a glide ratio of 40:1.

Furthermore it presents practical difficulties. How is a pilot legally to know that cloud base is higher than 4000 feet without going up there to find out and then opening the airbrakes to drop down to legal height?

As for qualifications to fly in Instrument Meteorological Conditions, I am unlikely in the circumstances to seek a License to do so, in which case it is for me hardly relevant and I must leave it to those who are more ambitious to comment. They will tell you unanimously however that 5 hours experience is too long.

Please could you leave gliding practice in the UK as it is, namely free to fly in uncontrolled airspace up to cloud base.

response *Noted*

Thank you for this comment.

The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

Please check the response provided to the British Gliding Association (BGA) comment No 121 since the issue raised by you (5 hours training) was also identified by the BGA.

comment 791

comment by: *MikeR*

Firstly I support an initiative which furthers safe flying across a diverse set of aviators, and understand the need to mix both classroom and practical tuition. I am however concerned about the proposal to enforce mandatory training to those who do not wish to undertake a particular aspect of aviation.

The vast majority of glider pilots have no desire to fly in cloud and will achieve their personal goals safely without ever entering cloud. To enforce additional mandatory training on these individuals has at best a minimal benefit of increasing awareness of the issues to be avoided. For those glider pilots who actively wish to enter cloud then the benefit of further training is obvious, however such training must be targetted at the type of flying they will do, entering and turning in cloud, recovery from unusual attitudes using instruments alone, and leaving cloud on an approximate heading.

The greatest risk that I face both as a tug pilot and glider instructor/pilot is collision with other aircraft whose pilots have their heads in the cockpit and are not maintaining a sufficient look out. Any proposal which advocates an increased use of instruments at the detriment of lookout around the margins of cloud is I believe counter productive to flight safety. Encouraging those inexperienced pilots to begin a flight under conditions that previously they would have avoided also seems rather questionable particularly when combined with the desire to fly from one congested ATZ to another around the margins of cloud.

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR not to comply with this ICAO requirement. Cloud flying rating however does not rule out the need of the pilot to still look out for other traffic. On the contrary, the training should give the pilot more means to cope with challenging situations.

comment

792

comment by: *Malcolm George*

I comment as private individual.

I have been a glider pilot for the past 30 years mostly in the UK, and also for period in northern Scotland. With the limited altitudes available in these climates, the possibility of flying near or in cloud is very important.

I am pleased that the possibility to fly in cloud (Option 1) is to be retained. And I agree that theoretical and practical training is required, followed by a skills test. However, the prescription of 5 hours of dual flying seems to be grossly excessive. Cloud flight in sailplanes normally only lasts a few minutes to gain the additional height available from the top of the thermal, therefore the additional concentration for instrument flying is only required for a few minutes. In addition if hours of dual flight have to be undertaken, in the northern climates it is likely that much of this would have to be undertaken in a simulated form, requiring either a motor glider or a large number of expensive aerotows.

Glider training in the UK has always had a syllabus followed by a skills test, but has very few prescriptive requirements. I would hope therefore that the 5 hours could be significantly reduced, to a figure not exceeding 2 hours.

I am disappointed that the Restricted rating is not to be introduced, as this would provide a stepping stone for the pilot with fewer hours. Without it there is a problem as 4000 feet is a reasonable cloud base in the UK, and if flight is restricted to 3000 feet, more outlandings will occur, with their inherent risks, but perhaps more important, flying will be constrained into a much more constrained and busier area. I believe that the negative aspects have not been fully accounted, nor the positive aspects given full credit.

In summary,

- 1) I support the adoption of Option 1, but the prescriptive training time needs to be reduced.
- 2) I suggest that there are benefits in Option 2, with perhaps some training syllabus, that EASA should consider.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 794 comment by: *Michael Fogarty*

I approve this action (NPA 2011-16.)
Michael Fogarty BGA Glider Licence No.11 /UK PPL/ FAA Multi Instrument License

response *Noted*

Thank you for providing this feedback.

comment 796 comment by: *Peter DEANE*

Page 2
Executive Summary

Comment: I strongly support the principle of a cloud flying rating for sailplane pilots

Page 11
III Overview of the changes
3. Sailplane cloud flying rating
3.2 Flight Instruction

Comment: I do not believe flight instruction should be specified in terms of number of hours ; rather that a cloud flying rating should be purely based on a skill test (see 3.3) which by definition will determine a pilot's capability to fly safely in cloud. Flight instruction may or may not have been included in a pilot's preparation for this skill test, but it should not in itself be a requirement.

Page 14
Options considered and major impacts identified
3. RIA 2 - Sailplane cloud flying rating

Comment: I support Option 1 as the best option in terms of overall safety benefits and minimum limitations on current sailplane flying practices

Pages 18 &19
B. Draft Opinion & Decision - I. Draft Opinion
6) Subpart I - Additional Ratings
FCL.830 Sailplane Cloud Flying Rating
(b) (2) (ii)

Comment: 5 Hours dual flight instruction is excessive and unnecessary. Cloud flying rating should be based purely on a skills test. If a compromise must be accepted, then 2 hours maximum is adequate. Reason is that sailplane pilots generally only require to fly in cloud for the purpose of gaining altitude in thermals or descending through cloud to a lower altitude - it is not generally part of en-route flying where a specific heading needs to be maintained.

Pages 190-191

Theoretical knowledge & flight instruction. AMC1 FCL.830 Sailplane cloud flying rating

Comment: In general, the theoretical knowledge requirements are too onerous for sailplane pilots. For example, the aircraft instrumentation and avionics currently required and used by the majority of sailplane pilots is quite limited in comparison with other aircraft types and it is not practical or necessary to change this situation for safe cloud flying in sailplanes.

Under section 2.1 the reference to "achieving and maintaining heading" and "nominated heading" is not directly relevant to sailplane flying which is not governed in general by the need to maintain a specific heading

Pages 191-192

Skill Test & Proficiency Check. AMC2 FCL.830

Comment: I believe these requirements are a little too onerous for the average sailplane pilot, as instrumentation carried in sailplanes (such as turn and slip) are relatively unsophisticated.

Pages 228-239

Regulatory Impact Assessment for the sailplane cloud flying rating

Comment : I support the argument in favour of Option 1, however my preference would be for a purely skills based test rather than any specified period of dual instruction (as per my previous comments). Should Option 0 be adopted I believe there are many sailplane pilots like myself who could decide to give up the sport because of the resulting negative effects on our freedom to operate.

response *Partially accepted*

Thank you for providing this comment.

BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

The theoretical knowledge course for the sailplane cloud flying rating does not have a minimum amount of hours required. The amount of training is depending on the student in concern and it is up to ATO or the instructor to determine the hours needed. Regarding your comments on the content of this theoretical knowledge instruction the Agency does not agree that the syllabus provided is too onerous. The Agency is aware that the equipment in sailplanes is limited. However, to perform a safe flight in clouds it needs some instrumentation and of course some theoretical knowledge about these systems. The Agency discussed the theory items again with the Review Group

experts and came to the conclusion to keep them unchanged.

Flight training requirements are written to take into account different airspaces and different aircrafts. For example the requirement for achieving and maintaining heading is kept since modern and complex airspace may require the pilot to escape from cloud on a nominated heading. This is supported also by all the experts involved in the drafting and review. The Agency decided to keep it unchanged.

As a last item you commented on the limits given for the skill test. The Agency reviewed this issue again together with sailplane cloud flying experts and came to the conclusion that the numbers given and the exercises included should stay unchanged as well.

comment

797

comment by: *Martyn DAVIES*

EASA – NPA 2011-16 - Cloud Flying

The British Gliding Association (BGA) has since 1947 been authorised by the Civil Aviation Authority (CAA) to determine the affairs of sailplanes within the United Kingdom (UK) including the CAA's Cloud flying dispensation.

Safe flying in cloud permits the use of cloud formations that often occur in the UK due to the relatively close proximity of the sea, together with the more normal conditions. The ability of the pilot to fly in cloud, increases the range of the sailplane which reduces the risk of field landings.

My gliding experience is 2,632 hrs and 7,702 flights over a period of 35 years. My cloud flying has been used for short periods, when faced with unexpected cloud formations. Entering into cloud requires a Radio call stating position and height plus further calls, when climbing or descending. My Cloud flying has not, at any time, required such extensive hours that fatigue is caused. An En-route Instrument Rating (EIR) training would not, therefore, be appropriate.

Sailplane Cloud Flying Rating – Page 190-191 & Sailplane Cloud Flying Rating – Page 191-192

EASA's requirement and the degree of training, as proposed by EASA, is out of proportion to the requirements for a sailplane pilot.

Cloud flying in the UK has been safe and successful for a great many years. Had this not been so, the CAA and the BGA would have withdrawn the long standing cloud flying dispensation.

Notwithstanding my opinions above, I welcome in principal, EASA's decision to support cloud flying for sailplanes.

The BGA supports EASA's proposal for Cloud Flying training, with the proviso that the training should be limited to 3 hours and that training should be undertaken by Touring Motor Gliders.

I endorse the BGA's proposals and I urge EASA to consider carefully, the BGA's submission to the 'Notice of Proposed Amendment' (NPA.)

response

Partially accepted

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/TMG) were also identified by BGA.

comment 800 comment by: *Bruce Cooper*

I wish to add my support to the proposal to allow gliders to continue to fly in and near clouds. In my view it is essential to ensure the safety of the pilots. In terms of qualifying for a rating I do not feel it will be necessary to spend more than 2-3 hours teaching the necessary exercises.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) is also identified by BGA.

comment 801 comment by: *Mark Vowles*

I must protest to the proposed changes to the current UK glider flying rules. I have been a member of the London Gliding Club for over 20 years and in all my experience I can see no valid reason for changes to the practises or any reason for extra training when flying near or in cloud, this seems to me be a beaurocratic nonsense which would not only be difficult to enforce but unjustified. How is 3 to 5 hours IMC training going to help glider pilots? They do not fly in cloud. The one's that do are generally very experienced or commercial pilots with an IMC rating.

This could be seen as a back door way of increasing commercial enterprise with sports flying community paying the price. The loss of a 1000ft could put glider pilots at risk, making rushed decisions; this could increase the number incidents from failed field landings where the lack of time would be a factor. By making these changes you could compromise the already good safety record of the UK glider pilot community.

response *Noted*

Thank you for providing this feedback.
The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud. The reason for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

Please check also the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 802 comment by: *Sinclair Smith*

I support the main thrust of the proposed Sailplane Cloud Flying Rating.

However, I believe that the 5 hour minimum of dual training is excessive.

Surely the amount of dual training required should be based upon the pilot's previous experience of instrument flying. A pilot with previous experience is likely to need fewer hours than an inexperienced pilot.

The BGA had proposed that, in addition to the SCFR, a Restricted SCFR be made available for flight under IFR but clear of cloud. This really is an essential requirement for glider pilots. Many of us will want to stay within sight of the ground but under IFR.

This Restricted SCFR would need no new flying skills for a licence holder, but would require the Theoretical Knowledge training from the SCFR.

I strongly request that EASA consider this Restricted SCFR option.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 805

comment by: *Clive stacey*

Response to NPA2011-16.

I am in total support of the BGA's opposition to the new proposals being suggested by some member organisations to EASA.

At my home club I have the dubious honour of being the current longest serving pre-solo pilot. I am enjoying every minuet I spend there, but still have much to learn and prove.

However I do know that gliders need clouds to exploit the rising air for lift. At our club when winch launching we could release from the cable at 2000 ft, if cloud base is at 2800 ft, then under the new rules proposed we would have to release at 1800 ft.

To my mind this would limit the training exercises we could attempt, shorten the flight time for those attempting any cross county tasks and in general terms restrict the purpose of any gliding flight.

We are taught to fly by attitude of the aircraft and not to rely solely on instruments, although they are there to clarify and assist. To add a formal qualification of flying by instruments would detract from the true art of pure flying and soaring flight.

This summer I had the opportunity to act as ground crew for one of our clubs instructors who was taking part in a competition at Grandson Lodge. The overall winner was decided on the last two days in deteriorating weather. The winner was the pilot who was able to stay close to the leading edge of a storm front and exploit the gathering clouds while staying safe and staying out of trouble.

In my novice experience the danger to the glider pilot, apart from his own errors, is not from the commercial airlines flying high overhead, or on approach

for landing or turning onto the first bearing after take off. Because these last two actions take place in their own regulated airspace. The real threat is from the private club flyer that overflies a glider zone, too low and across the launch site.

The current UK practice of declaring restricted airspace, defining safe operating heights both in minimum and maximum and providing all the required information on air maps for the benefit of all interested parties has been working perfectly well for the last 50 years. Why complicate it?

I therefore wish to make it clear that I am in full agreement with the BGA's position of supporting the Sailplane Cloud Flying Rating (SCFR) proposal in NPA 2011-16.

**Clive Stacey.
Essex and Suffolk Gliding Club.**

response *Noted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment 806

comment by: *John Giddins*

Dear Sir,
I am also a Full Category BGA approved gliding Instructor, a MIGR/CAA motor glider instructor and hold a CAA SEP/SLMG licence.
I have over 5000 hours flying gliders and over 2400 hours SLMG/SEP

Gliders. Cloud Flying

I have been instructing glider pilots since 1978 and flying gliders cross-country since 1975 I have instructed glider pilots on the skills of safely entering, climbing and existing clouds.

I have been successfully entering and climbing gliders in clouds, regularly on cross-country flights and during gliding competitions. I have never, during this period, experienced any problem with other traffic or gliders. All entries into cloud have followed the BGA Laws and Rules of broadcasting on the agreed radio frequency of 130.4 The BGA has regulated this training via its instructors and examiners I formally record my request for our present practises to continue, without any limitations or regulation being imposed on the BGA or its pilots or by EASA NPA 2011-16

Failure to meet this requirement will destroy gliding in the UK. Cloud flying is an integral part of flying gliders in the UK

Cloud Flying. Training for glider pilots

The current practice of training pilots in the skills of cloud flying has been working efficiently for over 50 years.

These skill can be given by a BGA Full Category instructor or SLMG/TMG MIGR motor instructor using either a suitable two seater glider or a motor glider.

I consider that 5 hours training is unacceptable. The motor glider training can be simulated by the student wearing a hood/goggles and in VFR as required.

I do not see the need to specify a minimum number of hours but recommend that the instructors sign off student as and when they have acquired the necessary skills and can demonstrate the ability to fly safely in clouds.

General

I found that I was unable to use your response software and had to again respond by e mail

response *Partially accepted*

Thank you for providing this comment. The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.

comment *810*

comment by: *Richard Hankey*

I fully back the BGA in their quest for the cloud flying proposals, It is vital for the sport of sailplane flying, that they are successful in their negotiations. If it is not implemented it will be a severe downfall for the gliding industry. I have been flying sailplanes for forty years and it would be a very serious outcome for all the many thousands of people who work in the industry, be they pilots manufacturers or associated one way or another with sailplanes.

response *Noted*

Thank you for providing this comment. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

comment *812*

comment by: *Bruce Marshall*

I am a UK sailplane pilot holding a FAI Gold Badge with two Diamonds, and my total experience is 1850 hours from 2700 starts over the last 50 years, mainly within the UK.

I wish to strongly support the position of the British Gliding Association, that the proposals for a Sailplane Cloud Flying Rating contained within NPA 2011-16 should be adopted. I feel most strongly that the ability to fly within and near cloud is fundamental to the sport of soaring, particularly within Europe, where the prevailing meteorological conditions frequently lead to low cloudbases. An inability to fly in such conditions would, in my opinion, rapidly lead to the demise of cross-country soaring.

response *Noted*

Thank you for providing this comment. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.

Please check also the response provided to the British Gliding Association (BGA) comment No 121 for more detailed answers on technical matters.

comment *813*

comment by: *HowardROPER*

I wish to record my support for the Sailplane Cloud Flying Rating and the BGAs recommendation that the requirement for 5 hours of dual flight instruction be removed (if a minimum training time is required then it should not exceed 3 hours), the recommendation that training in TMGs is essential for the SCFR but would be willing to see pilots prohibited from exercising the privileges of a SCFR in TMGs and the recommendation that the RSCFR option be reconsidered by

	EASA.
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>814 comment by: <i>glendouglas</i></p> <p>I see no reason for changing what we have already, when wave flying we fly close to the leading edge of the wave cloud. If pilots want to cloud fly they can be taught instrument flying "under a hood", however I understand there have been more accidents during training than actual cloud flying conditions</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 for more detailed answers on technical matters.</p>
comment	<p>815 comment by: <i>Laurence McKelvie</i></p> <p>I am a glider pilot and instructor with The Ulster Gliding Club in Northern Ireland. We are a Ridge Site and as such, often fly close to cloud base and occasionally enter cloud briefly.</p> <p>The proposals contained in the NPA are obviously of great concern and interest to me, therefore and I support your intentions to maintain cloud flying operations.</p> <p>I very much support the opinion and suggestions of the British Gliding Association and in particular, their recommendation that due consideration be given to the establishment of a RSCFR. This would have much beneficial affect on our particular club environment and in over 40 years of involvement with the club, I have experienced no cloud orientated, nor IFR problems whatever.</p> <p>I very much hope you will receive sufficient support to successfully implement your proposals, but again ask for your re-consideration on creating a RSCFR.</p> <p>Good luck and many thanks.</p> <p>Yours faithfully,</p> <p>Laurence J McKelvie</p>

response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p> <p>The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.</p>
comment	<p>816 comment by: <i>Mike EDWARDS</i></p> <p>Attachment #1</p> <p>See the attachment.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>817 comment by: <i>Patrick de Nonneville</i></p> <p>I support this NPA, and only have a few comments on details. I strongly oppose any dilution of the privileges attached to the new IR rating.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>823 comment by: <i>Graham Baker</i></p> <p>As a private pilot who has held a UK IMC rating for 16 years, and only recently gained an Instrument rating, I wholeheartedly support this proposal, and commend the Agency for addressing what has long since been a major anomaly in European pilot licensing.</p> <p>There is no doubt in my mind that both the safety and utility of my private operations over the last 16 years have been enhanced by having the capability to execute flights in IMC, but that utility could have been so much greater if</p>

that capability had been available in all classes of airspace and outside of the UK in addition.

I am a private pilot with a full time job, family and modest income. I gained my UK IMC rating after three weeks of part time study for the ground exam, followed by 16.5 hours of training over 5 days. By way of comparison, my IR qualification has taken three and a half years from start to finish, the flying training requiring that I took 7 weeks off work in order complete both the training and test. This is wholly disproportionate to the additional privileges gained, and is almost all due to process and inaccessibility, rather than the difficulty of achieving the required standard. EASA are to be congratulated, therefore, for developing a proposal which addresses this problem whilst maintaining the standard to be achieved.

I am sure there are some small points of improvement in the proposal which can be suggested, and I am leaving that to the experts, such as PPL/IR Europe. However, I would like it to be noted that the principles of the proposals stand to make a real contribution to the utility of GA across Europe, along with the corresponding increase in safety resulting from having many more pilots formally trained to handle flight in IMC (whether deliberate or inadvertent) safely and expeditiously. I am sure that there will be some pressure to 'water down' down the proposals, particularly where vested commercial interests may be perceived as being threatened. The Agency must resist any effort to dilute the spirit of the proposals, which is to provide a proportionate, accessible, progressive route for both private and commercial pilots to acquire instrument flying qualifications.

response *Noted*

Thank you for providing feedback.

comment *840*

comment by: *kenneth tutthill*

Dear Sir

I have set out below my responses to NPA 2011 – 16.

I have been a glider pilot in the U.K. for some 40years, and have a BGA Assistant Category Instructor Rating. My views on the proposal are as follows.

1. In my experience the majority of glider pilots in the U.K. do not fly in cloud, but I appreciate that the inability to do so will have safety implications and will severely limit the scope of our sport for certain of its participants. I therefore am in total agreement with the proposals for the SCFR.

2. I also appreciate that while the SCFR must not be a loophole by which TMG pilots without an instrument rating are able to fly in IFR, it is important that TMGs be used for SCFR training. I support an addition to FCL 830 stating that the privileges of the SCFR may not be exercised in a TMG.

3. I believe that most glider pilots have obtained the greatest satisfaction and pleasure in their sport during flights involving the use of the privilege to fly in IMC outside of cloud. Without being allowed to do this the majority of cross-country flights would not be possible, or pilots would be put at risk by being forced to fly within a low limited height band. In addition flights involving the lift from lee waves would be almost impossible. I think most glider pilots would agree that such flying is the most satisfying of all aspects of gliding. While I appreciate that wave flying may sometimes involve cloud penetration when descending, there is a massive difference between the skill needed to do this and that needed to "navigate" a glider in cloud. I am sure that only a small minority of glider pilots that indulge in wave flying have an instrument rating or

any training in cloud flying, but I do not believe there have been any safety problems over many years. I do not understand how the ability to fly using blind -flying instruments will increase the safety of pilots flying in proximity to clouds, but not within them. In other words the practical training associated with the SCFR will be totally irrelevant to those pilots who do not wish to enter cloud, but frequently fly in IMC outside of it. I therefore believe there is an overwhelming case for a restricted SCFR to be part of these proposals.

Yours sincerely
Kenneth Trevor Tutthill
Lancashire
U.K.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (TMG/restricted cloud flying rating) were also identified by BGA.

comment 843

comment by: *Mike Howey*

I am a glider pilot of some 20 years and a Full Cat instructor with the BGA. It is important in the UK for glider pilots to be able to fly both close to and in clouds. Often cloud base is so low that without being able to go closer than 1000 feet means that cross country flying is impossible. Also it is a good skill to be able to thermal through cloud to wave clouds and in some instances gain height to travel the required distance to home to complete a task or flight.

I fully support the notion that glider pilots should have the opportunity to learn and utilise the option for flying in and close to clouds.

response *Noted*

Thank you for providing this comment.
The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment 851

comment by: *Paul Beckwith*

I would like to make some general comments please.

I am coming from the perspective of someone who has both JAR and FAA PPL's and an FAA IR, and fly an N registered aircraft here. I have flown with the FAA IR privilege in Europe for 4 years now, totalling many hundreds of hours of flight (and well over 100 hours in IMC conditions real or simulated). All my training was done in Europe, by FAA and JAR instructors, and I sat all my flight tests here as well. It is important to note, that while I have an FAA IR, all my Instrument flying has been done in Europe. Where there are things that I needed to know that are peculiar to Instrument flight in Europe and were not covered by the FAA syllabus, I made sure to be trained in them by my instructors here

If EASA is insistent on the approach of forcing pilots like me to resit theory and flight tests, then in general, I am in broad agreement with the approach outlined. I appreciate that EASA will not force me to sat all the TK exams and will give me credit for my extensive flight experience.

Now I would like to make some specific comments:

1. I agree with your approach, the new IR should be valid on all aircraft types. Any extra material needed for High Performance or Turbine aircraft can be well covered in conversion and training courses. For example when learning to fly my current aircraft, a TBM700, I did a one week theory course, and another 5 days of flight training. This more than sufficed to provide me with the necessary knowledge.
2. I understand the idea that you want holders of eg FAA IR's to learn additional material that is specific to European conditions. I understand you intend to limit this to Air Law, Meteo, Flight Performance and Human Performance. I have reviewed the LO's that will be covered in the new IR(A). There are many issues that you wish us to restudy that are NOT peculiar to Europe. You should only require us to learn issues that are specific to European operations. There is NOTHING in Flight Performance and Human Factors that is specific to Europe (an ear works the same in the US as it does here!) and these two sections should not be required to be restudied. With respect to Meteo and Air Law only those items that are specifically European should be included. EG European Meteo services, European laws.
3. I would propose that the testing of this knowledge for existing ICAO IR holders should be done by the flight examiner in an oral format at the time of the Flight Test

Thank you!

response

Partially accepted

Thank you for providing this comment.

A pilot residing or established in the EU flying either an aircraft registered in a third country or registered in one of the Member State needs to hold a Part-FCL licence and to comply with the European rules. This principle was introduced by Articles 4 and 7 of the Basic Regulation [Regulation (EC) No 216/2008] and it was agreed/supported by all Member States when the Basic Regulation was established.

The prior flying experience as PIC in IFR/IMC has been taken into account in the proposed EIR and competency-based IR requirements. The Agency has also reviewed the required theoretical examinations and decreased the number of them for Part-FCL licence holders who also hold ICAO Annex 1 instrument

rating issued by third-country. The holder of such licence and rating who also has a required amount of flying experience does not have to pass written IR theoretical examinations but to demonstrate the theoretical knowledge during the skill test.

comment 854 comment by: Philip Hall

In general I support the proposal and would like to see a smooth transition as soon as possible

response *Noted*

Thank you for providing this positive feedback.

comment 855 comment by: John Shaw

Dear EASA,

I support the proposed introduction of the Sailplane Cloud Flying Rating (SCFR) for glider pilots so that we can continue to fly in close proximity to clouds and climb up through clouds or descend down through them when this is necessary.

The relatively low cloud bases in the UK; to have to stay 1000ft below cloud if above 3000ft would severely hinder Glider pilot's ability to fly cross country tasks in the UK and greatly restrict the distance one can glide before having to stop and thermal again. The ability to fly along cloud streets close to cloud base in near constant lift gives the Glider pilot the opportunity to cruise in straight lines and head upwind extending the amount of distance that can be flown on a cross country flight by dramatically increasing overall cross country speed.

The ability to climb up to cloud base frequently provides the ability to fly directly over a MATZ if necessary rather than having to fly around it.

There are occasions when one can potentially complete a cross country flight and prevent a field landing by taking a cloud climb to cross large gaps in the convection caused by mid or high cloud layer spread out cutting off the sun. Gliding competitions are frequently won by those pilots with cloud flying experience who are capable of taking advantage of such situations whilst those without the necessary skills get either left behind or end up in a field far from home.

For those of us lucky enough to be able to experience the delights of soaring mountain lee waves often 20 or 30 miles away from the hills that create the phenomena, the ability to fly close to the leading edge of the wave is paramount in the initial climb above the clouds. Once well above cloud it is easy to continue the flight under VFR in VMC conditions in clear air with full unobstructed visibility.

On some occasions it may become necessary to descend through cloud on safety grounds when gaps in the waves close up underneath you. Such incidents may occur if you are navigating by ground features only or if your GPS were to fail for some reason and there is a chance of infringing controlled airspace or even being blown out to sea. In such incidents most glider pilots will elect to descend through the thinnest possible cloud layer in the troughs between the waves. Thus minimising the time spent in cloud to prevent

airframe icing, disorientation / loss of control and the very small risk of collision in cloud or just beneath it.

In summary, gliding in the UK would be severely curtailed if Glider pilots were to be prevented from flying in cloud or close to cloud as they have done for the past 50 years. The statistics quoted in the NPA showing that only 2 out of 37 fatal accidents in 10 years across Europe, cited proximity to cloud as a possible contributory factor, tells you all you need to know. Cloud flying in sailplanes is safe provided pilots are suitably trained and their gliders are adequately equipped to do so.

The introduction of the SCFR would provide recreational pilots like myself the opportunity to gain the necessary basic training required, provided that the time and monetary costs involved are kept to a bare minimum and that individual gliding clubs are able to provide the training at a local level. I fully support the continuation of cloud flying rights for pilots of gliders / sailplanes and the introduction of the SCFR should ensure that it can be allowed for future generations.

John Shaw
Glider Pilot
Burn Gliding Club

response *Noted*

Thank you for providing feedback.

comment *864*

comment by: *JOHN CALVERT*

As a glider pilot I support the proposed SCFR for LAPL(S) and SPL holders, as it would ensure safe flying.

With regard to the Dual Flight Training Requirement the minimum training time of 5 hour would appear excessive, half this time would probably be more appropriate. But it is essential that sufficient training is given to attain the necessary standard.

It would seem reasonable that training for SCFR can be carried out fully or partially in TMGs. However this should probably not entitle TMGs to fly under SCFR at other times.

Sailplanes flying clear of cloud under VFR (and IFR) appear safe and the present situation should be allowed to continue. However it would be a sensible option to include additional training derived from SCFR to fly clear of cloud as at present.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment *865*

comment by: *Ben Harker*

response	<p>I would like to register my support for the proposed Sail Plane Flying Rating in this document.</p> <p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>866 comment by: <i>Cessna Aircraft Company</i></p> <p>Cessna Aircraft Company has no comment on this issue at this time.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment.</p>
comment	<p>870 comment by: <i>roger</i></p> <p>As a sailplane pilot, flying in the U.K. I agree that the SFCR is the only option, to protect the future of gliding in the U.K. as we know it now. And therefore support EASA proposal NPA2011-16 . Roger Green.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>878 comment by: <i>Andy Sanderson</i></p> <p>I fully support the British Gliding Association's response to the NPA 2011-16 "Qualifications for flying in IMC" document, with regards to gliding. Providing that the prior training and currency requirements are realistic to gliding operations, the rating will help to assure safety and a level of competency in cloud and IMC that can only benefit the sport. I have flown in cloud in the UK for many years, and intend to achieve the rating (I would trust that grandfather rights would pertain to any training hours requirements and that a competency check would be all that is required), and if possible to incorporate cloud and IMC gliding training into my instructional activities, something which has up to now been impossible because of the uncertainty of the legal position regarding such training. My previous comments regarding proposed changes from EASA to gliding operations have not been uniformly complimentary, but this time, subject to the BGA comments, EASA has got it right - well done.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.</p> <p>The possible crediting of earlier ratings will be done via conversion reports which will be submitted to the Agency by the competent authority of the Member State in concern.</p>
comment	<p>898 comment by: <i>Ulrich Baum</i></p>

As a private pilot I would like to thank the Agency for this proposal which is a great step forward to making instrument ratings accessible to a larger number of GA pilots, thus increasing GA safety.

response *Noted*

Thank you for providing this positive feedback.

comment 909 comment by: *BRIAN DARTON*

HAVING READ THROUGH THE ENTIRE DOCUMENT, I WOULD FULLY SUPPORT THE COMMENTS PROVIDED BY THE BRITISH GLIDING ASSOCIATION. ESPECIALLY THAT REFERRING TO A 'RESTRICTED SAILPLANE CLOUD FLYING RATING'. MOST BRITISH SAILPLANE PILOTS FLY CLOSE TO CLOUD WHILST GOING CROSS COUNTRY. FEW ENTER CLOUD. WE HAVE DONE THIS QUITE SAFELY FOR MANY YEARS USING ESTABLISHED BGA GUIDLINES.

THE REQUIREMENT FOR 5 HRS DUAL TRAINING IS UNLIKELY (ON COST ALONE) TO HAVE ANY EFFECT ON SAFETY AS FEW WILL AVAIL THEMSELVES OF IT. IT WILL BE SEEN AS LEGISLATING FOR A PROBLEM THAT DOES NOT EXIST.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 913 comment by: *philDOLLING*

I have been a glider pilot since the age of 13, flying solo from the age of 19 and an instructor for the past 15 years. For me and the whole of the gliding community it is important to maintain the highest possible safety standards in gliding and I am happy to say that the BGA have been overseeing and controlling this since before I was flying. Under their control the levels of safety both in the air and on the ground have progressively improved, the levels of fatal and non-fatal accidents decreasing over a period of time. This improvement has been brought about by many aspects of their work including structured instructional programmes, careful liaison with other airfield users to adopt safe operating procedures, monitoring and safety awareness campaigns. I think it is fair to say, therefore, that the BGA are a real asset to the continued safe operating of Gliding in the UK. I therefore have no problems in endorsing the actions and decisions of the BGA and whole heartedly support them in their campaign with EASA to construct the NPA 2011-16. The points in this legislation, namely, the ability of Glider pilots to be able to fly under IMC and within cloud with the correct qualifications it imperative to preserve, not only, the future of gliding but also the safety of the sport. As highlighted in the document, having to fly clear of cloud would in itself create increased risks for glider pilots. My view therefore is that it is wiser to properly train a pilot to fly in IMC conditions and within cloud

I therefore welcome and support the NPA 2011-16 and the proposed Sailplane Cloud Flying Rating.

I would like to offer 3 responses:

1. Effect on existing Licence holders
 - a. The SCFR is necessary for the continued safe operation of gliders in the UK, it is vital that this should be made available for holders of LAPL(S) and SPL
2. Training
 - a. It is important to be able to train in TMG's in order to get quality and consistent training. It is not always possible to get the conditions in a sailplane to facilitate training and having the ability to do this in a TMG would be beneficial.
 - b. Training time, this should be flexible and based on success factors, not time constraint – this way a more experienced pilot is able to attain the right standard without the need for excessive training, whereas a pilot unable to climb the learning curve will be able to get the necessary training
3. Restricted SCFR
 - a. This is where the flight is under IFR but clear of cloud; this is imperative for pilots that do not necessarily want to penetrate cloud. It would not require new flying skills but need a full knowledge of the theoretical training of the full SCFR.

Summary

1. I support the proposal for the SCFR – it is essential to be applicable for holders of LAPL(S) and SPL.
2. I would like to see the lifting of the rule insisting this is primarily done in Sailplanes
3. The 5 hours minimum is lifted, being replaced by a skill based test when the pilot is ready – the training and test category would be controlled by the BGA
4. A category of Restricted SCFR be introduced to protect those pilots below 30 hours and the ones not wishing to penetrate cloud.

Phil Dolling

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised were also identified by BGA.

comment 928

comment by: *Fédération Française Aéronautique*

The French "Fédération Française Aéronautique (FFA)" represents 600 French powered flying associations (aero-clubs) and 41,000 private pilots.
All the FFA comments are related to aeroplanes.

FFA strongly supports the idea of this NPA to facilitate qualification for flying IMC particularly for PPL.

Additionally, and after the Workshop FM008 held in Cologne in September 2011, French FFA would like to emphasize the two following points related to this NPA :

- Language proficiency : French FFA strongly disagrees with the requirement of an English language proficiency applicable to all instrument rated pilots. The English language proficiency should not be required for pilots holding a PPL licence with an instrument rating when flying within their national airspace only.

	<ul style="list-style-type: none"> • <u>Medical</u> : French FFA don't approve the following statement included in the present Part MED already published : <ul style="list-style-type: none"> ○ "In the case of class2 medical certificate (that is to say for PPL(A)), when an instrument rating is to be added to the licence held, <u>hearing shall be tested</u> with pure tone audiometer at the initial examination and, at subsequent revalidation or renewal examination, every five years until the age 40 and every two years thereafter". ○ FFA believes that it's <u>no more necessary</u> in IFR than in VFR.
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency and the Review Group experts discussed the English language issue. As a result the Agency decided to keep the English language requirement for the IR holders as it is in the FCL.055 but not to require that from EIR holders since the EIR is a non-ICAO EU-only rating.</p> <p>The hearing test requirement for PPL/IR holders is written in the ICAO Annex 1.</p>
comment	<p>929 comment by: <i>Mike Phillip</i></p> <p>I wish to support the 'sailplane cloud flying rating', believing that it is an important issue for the new sailplane licence holders. But it seems impractical and onerous to carry out five 5 hours dual flight instruction. A lower figure being more practical and perfectly adequate to maintain safety levels.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>938 comment by: <i>Christophe MUTRICY</i></p> <p>I'm answering as a French glider pilot established in Great Britain.</p> <p>I support this NPA.</p> <p>The ability to go in cloud for sailplane was a bit surprising for me at first. But after talking to experienced pilots and practising it myself, cloud flying give important operational advantage by giving me the ability to finish my thermalling at a higher altitude and so reach my airfield or cross an unsoarable area. This reduces the amount of time spent at low altitude or the number of field landing. I found the rules and operational regulations of the BGA easy to understand and apply and I think they are efficient at preventing conflict.</p> <p>I would also have supported an NPA which would have recommended options 1 and 2 at the same time. For pilots who haven't yet done all the training, it would already provide additional height.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

940

comment by: *Stewart WALDIE*

I support the proposals put forward in this document, they seem very fair. It stresses very well that reducing operating heights of gliders would simply increase the number of land-outs and associated dangers.

I have two concerns;

1) Five hours instructed cloud flying experience could be a difficult thing to achieve in a glider. Gliders partaking in instruction will usually be operating close to the airfield (within glide range) and therefore in busy airspace. Lookout is very important and given the configuration of the majority of training gliders I'd be worried about either the use of vision masks or the use of "training-busy" clouds close to the airfield.

2) If the principle purpose here it to improve safety when flying close-to or within clouds and given that the danger is visual impairment I feel that consideration of anti-collision warning systems is missing from this document.

response

Partially accepted

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.

The Agency is at the moment involved in the General Aviation 'see and avoid' study. The study will also include possible anti-collision warning systems for the future.

comment

942

comment by: *Paul Marriott*

Sir,

As a glider pilot of many years experience I feel that the ability to fly close to cloud is fundamental to the safe operation of gliding in the UK and Europe. Without this facility any cross country flying would be hazardous, to say the least. Average cloud bases during the better part of the soaring season in the UK are somewhere between 3 and 5 thousand feet, at 2 thousand feet the careful glider pilot would be selecting a landable field, and, accepting the inherent dangers associated with such landings, any restriction of the operating height bands below cloud would inevitably increase the possibilities of field landing accidents.

Gliding in the UK has progressed thus far with an excellent record of safe flying close to, and in cloud, with the training regime put in place by the BGA. Why try and fix something that is not broken?

Sincerely,
Paul Marriott

response

Noted

Thank you for providing feedback.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

945

comment by: *Ian Reekie*

LAPL(S) and SPL

A Sailplane Cloud Flying Rating (SCFR) is essential for safe cross-country sailplane flying in the UK. Cloud base in the UK is often highly variable and relatively low. This often necessitates operation near or within cloud to minimise risks associated with field landings.

Dual Flight Training Requirements

The proposed dual flight training requirement of 5 hours seems excessive and is probably more in line with the training and skills required for piloting a powered aircraft in cloud rather than a sailplane. A sailplane generally requires only brief periods in cloud. Typically, short IFR climbs to gain height followed by VFR flight to reach the next cloud, or short IFR level descents through cloud.

In the UK the BGA has an excellent safety record for sailplane cloud flying. This has been achieved whilst also ensuring that the necessary training is both accessible and affordable to a wide range of pilots. This accessibility has historically ensured that a wide range of sailplane pilots have the necessary skills to control their aircraft in IFR should weather conditions suddenly change.

Restricted Sailplane Cloud Flying Rating (RSCFR)

I am concerned that this document does not provide for an RSCFR (flight under IFR clear of cloud) in addition to the SCFR. Due to poor weather in the UK, sailplane flights often involve some short periods under IFR but clear of cloud. This increases the sailplane's gliding range and reduces the chances of unnecessary field landings. A RSCFR would ensure that this practice could continue for pilots that do not wish the extra training and expense proposed for an SCFR.

response

Partially accepted

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 946 comment by: *Tony Walker*

I am strongly in favour of retaining the right for glider pilots to fly within or near to cloud since this is an integral part of the use of the free energy within the atmosphere and one which greatly enhances the sport.

response *Noted*

Thank you for providing feedback.

comment 948 comment by: *Derek Tagg*

I would like to add my support as a current UK sailplane pilot and instructor to the proposal for the introduction of a Sailplane Cloud Flying Rating.

I think it essential that the rules allow the use of TMGs in training and testing for the proposed rating. I would also suggest specification of a minimum number of hours is unnecessary and that a skills test would be sufficient.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.

comment 952 comment by: *Matthew Sheahan*

Among the various reasons for continuing to permit cloud flying for sailplanes, the issue of safety in the reduction of the possibility of outlandings is one of the most compelling. The ability to cloud fly can significantly extend the range of a sailplane and make it possible to reach or return to the intended airfield. The proposed Sailplane Cloud Flying Rating as detailed in the BGA's recent proposal, along with several other issues, is both sensible and desirable and has my full support as a glider pilot of 20 years.

response *Noted*

Thank you for providing your comment.

comment 959 comment by: *Andrew Watson*

Response to

Notice of Proposed Amendment NPA 2011-16

"Qualifications for flying in Instrument Meteorological Conditions"

1. Author Credentials

The author is a glider pilot with 1000 hours' flight time. He holds a BGA Full Category Instructor rating, an FAA Commercial Pilot (Glider) rating and an FAA Certified Flight Instructor (Glider) rating. He has flown gliders extensively in the UK, USA, Spain, Greece, South Africa, New Zealand & Australia.

2. Response

2.1 I welcome this NPA and strongly support the introduction of a Sailplane Cloud Flying Rating (SCFR). If the sport of gliding in the UK is to survive in its present form, it is imperative that glider pilots can continue to fly in IMC in Class G airspace above 3000 ft AMSL. This NPA is a very welcome step in this direction.

2.2 Without the SCFR, almost all UK glider pilots would be forbidden from flying in Class G airspace between 3,000 and 4,000 ft AMSL on days when cloud-base is in that altitude range. Because of the UK's maritime climate, this would apply on many soarable days. On days when cloud-base is higher, even pilots who do not fly in cloud would be forbidden from using the upper 1,000 ft of the height band they currently employ, severely limiting their cross-country gliding range. As the NPA notes, the lack of an SCFR would therefore reduce flight safety, or even prevent many glider pilots flying cross-country altogether.

2.3 The NPA also identifies another option - a Restricted Sailplane Cloud Flying Rating ("Option 2") permitting glider flight in IMC clear of cloud. While I strongly support the introduction of the SCFR, the SCFR-R and full SCFR are not mutually exclusive, and there is considerable merit in introducing both. Experience in the UK shows that glider flight in IMC but clear of cloud and well clear of obstructions in Class G airspace is safe, practical and does not interfere with other airspace users. The pilot who is capable of safely flying close to cloud at 2,900 ft AMSL (and hence in VMC) is equally capable of doing so at 3,100 ft AMSL, despite technically being in IMC. The introduction of a Restricted Sailplane Cloud Flying Rating IN ADDITION to the full SCFR would bring many of the latter's benefits with minimal training and regulatory impact, and should be enacted as quickly as possible.

2.4 The NPA proposes a statutory minimum of 5 hours' dual flight instruction for the SCFR. This arbitrary minimum is too high, and would prevent many capable recreational glider pilots from obtaining an SCFR. Instructors should instead be trusted to administer whatever amount of dual instruction is needed by each individual student to achieve proficiency. Experience shows that many pilots require as little as one hour's dual instruction to become skilled in glider cloud-flying. Imposing higher minima would prevent many skilled glider pilots from obtaining an SCFR, with all the adverse safety implications noted in the NPA.

2.5 The NPA proposes that a Flight Examiner must have administered 10 hours of flight instruction for an SCFR "or other instrument rating" before (s)he may administer SCFR skill tests and proficiency checks. Since few glider Flight Examiners have an instrument instructor rating for any other type of aircraft, they would only be able to satisfy this requirement by administering SCFR training. The 10 hour minimum is prohibitively high, and would result in few glider-only flight examiners qualifying to administer these tests and checks. The resulting shortage of SCFR examiners would prevent many skilled glider pilots from obtaining or maintaining an SCFR, with all the adverse safety implications noted in the NPA.

3. Mistaken assumptions in the Regulatory Impact Assessment (Chapter II, p228)

See comments on section 6.2 (p235), section 6.4 (p236) and section 7, (p237), filed separately.

In my opinion the positive impact of the SCFR-R would be at least as great as that of the full SCFR.

4. Summary

4.1 I fully support the SCFR, and consider it vital that it be available to LAPL(S) and SPL holders.

4.2 The proposed statutory minimum 5 hours' dual flight instruction for the SCFR cannot be justified - it should be removed. If a minimum must be legislated, 1 hour is sufficient.

4.3 The proposed statutory minimum 10 hours' flight instruction by candidate SCFR flight examiners is also excessive, and would lead to an examiner shortage in the UK.

4.4 The proposed SCFR-R would have at least as great a positive impact as the full SCFR, and based on UK experience, would not present the regulatory problems the Agency fears. It should be introduced alongside the full SCFR. Both are necessary.

Andrew Watson
awatson@cantab.net
+44 7710 469624
21st December 2011

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

The flight instruction experience in cloud flying required from the FE(S) was further discussed with the Review Group experts and the requirement was reduced to 5 hours. The experience can also be from EIR or IR(A) instruction.

comment 972

comment by: *Colin Simpson*

I am a glider pilot based in the UK. I also fly in Europe. I would like to make some general comments as a private individual regarding NPA 2011-16.

I strongly support the proposals for glider cloud flying within the NPA. Cloud flying is extremely important for the sport in the UK.

Under the strong regulation of the BGA, cloud flying and gliding in general has maintained an exemplary safety record.

I support the idea of a Sailplane Cloud Flying Rating (SCFR) but suggest that

	<p>the 5 hour requirement for dual training be significantly reduced, if indeed it is deemed necessary at all.</p> <p>Thank you for giving me the opportunity to comment</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>974 comment by: <i>Mark Fielding BGC</i></p> <p>Attachment #2</p> <p>Please find attached file.</p> <p>Regards,</p> <p>Mark</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>978 comment by: <i>mike YOUNG</i></p> <p>I am an airline pilot for British Airways flying the Boeing 777 on longhaul routes. My route into commercial aviation was through the sport of gliding, which I started at the age of 15. I now have approximately 14000 hours on single and multi engined aircraft and 4500 hours on gliders (sailplanes). I am still an active glider pilot and probably one of the most experienced cloud flying sailplane pilots in the UK/World.</p> <p>For gliding to continue to exist in the UK it is essential that gliders are able to continue to fly in cloud and in IMC but clear of cloud above 3000'. Without this freedom, on most days in the UK, gliding would be restricted to soaring within range of the departure aerodrome. The chance of an unplanned off field landing (outlanding) would be far greater due to the restricted range of the sailplane operating below 3000'. Since, cross country soaring is a major part of gliding in the UK, it would have a severe impact on the sport. Which in turn would also have social and economic implications.</p> <p>The increased risk of outlanding and higher number of aircraft in a significantly reduced volume of airspace would have a negative impact on safety.</p> <p>I therefore support EASAs proposal for a sailplane cloud flying rating SCFR.</p> <p>However, I think that the requirement for 5 hours dual training are unnecessarily excessive. In my experience most pilots with 30 hours or more of experience are able to achieve a satisfactory level of competence within 2 hours of quality training in a suitably equipped glider. This would still equate to 48000' of climbing in cloud with an average climb rate of 400'/min!</p>

Please do not hesitate to contact me if you would like further information.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment *1011* comment by: *Darren Wills*

I am a glider pilot based in Devon flying in the UK and I support the Sailplane Cloud Flying Rating as proposed in NPA 2011-16 so we can continue to pursue our wonderful and challenging sport to its extremes. Restricting flying in and around cloud will have a severely detrimental effect on all glider pilots and gliding in general.
Darren Wills.

response *Noted*

Thank you for providing feedback.

comment *1019* comment by: *Chris Davis*

As a gliding pilot with 25 years experience I would like to support the proposals for the Sailplane cloud flying rating. Done properly and under the right conditions cloud flying is safe and adds significantly to the scope of flying open to glider pilots when flying both in thermal and wave conditions.

response *Noted*

Thank you for providing feedback.

comment *1030* comment by: *Paul Docherty*

I am from the UK and would like to strongly support the continuation of cloud flying in the UK. This has always been part of the tradition of gliding in the UK and it is essential that yet another regulatory restriction is not made to make gliding more difficult. Cloud flying in the UK by glider pilots has long been regulated by the BGA and it has an excellent safety record. It is essential that the SCFR is part of this proposal as it proceeds. This rating must be made available to both LAPL and SPL holders.

I feel very strongly that a 5-hour training requirement is excessive and it would be far preferable to have a competency based training programme that allows instructors to judge the competency of individual pilots alongside a much less tough hours requirement. 5 hours is of course easy for many commercial or professional pilots but is difficult for amateur pilots to achieve.

I very much support the use of TMGs in training but recognise that it is inappropriate for their use to be made a right of the SCFR.

Gliding and other air sports are under increasing pressure from commercially orientated regulation. EASA and the EU generally should take this opportunity

	<p>to make sure that they influence safety in a positive way without adding further restriction to the long held traditional rights of amateur pilots.</p> <p>I hope my views are taken into account.</p> <p>Dr Paul Docherty</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.</p>
comment	<p>1051 comment by: <i>David Jesty</i></p> <p>I vehemently support the SCFR proposal.</p> <p>Without this proposal there is a high likely-hood of jeopardising safety by forcing gliders away from their known habitats of under Cumulus clouds into the areas preferred by GA.</p> <p>Without this proposal the viability of the sport of gliding will be severely undermined.</p> <p>Also, without this proposal there would be a disproportionate impact on gliding in the UK with its relatively low cloud base.</p> <p>To be fully effective the SCFR proposal must be available to LAPL(S) and SPL holders.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing feedback. Cloud flying rating will be available for LAPL(S) and SPL holders.</p>
comment	<p>1052 comment by: <i>John Maddison</i></p> <p>As an active glider pilot I support the proposal for this NPA and can only see it adding to the safe operation of gliders.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1069 comment by: <i>Anthony McDERMOTT</i></p> <p>I wish to declare my support for the Sailplane Cloud Flying Rating (SCFR) for glider pilots to allow us to continue to fly in close proximity to clouds and, when necessary, climb up through clouds or descend down through them to assist our ability to remain aloft.</p> <p>As a glider pilot just beginning his cross-country career, I believe the introduction of the SCFR would provide glider pilots with the opportunity to gain the necessary basic training required to venture safely across cross-country.</p>

British Gliding Association (BGA) clubs are well regulated and these gliding clubs are able to provide the appropriate training at a local level. The introduction of the SCFR, which I fully support, will allow the continuation of cloud flying rights for pilots of gliders and sailplanes and thus ensure that it can be allowed for future generations of aspiring cross-country glider pilots.

BGA pilots gliding in the UK have frequently to contend with relatively low cloud bases. To remain 1000ft below cloud, if above 3000ft, would significantly restrict glider pilots ability to fly cross country tasks and severely constrain the distance we can glide before having to stop and thermal again. In addition, the ability to fly along cloud streets, close to cloud base, in near constant lift allows the glider pilot the opportunity to cruise in straight lines and head upwind. This greatly extends the amount of distance that can be flown on a cross-country flight through increasing the overall cross-country speed.

I have only experienced the pleasures of gliding in mountain lee waves a few times yet understand how vital it is to have the option to fly close to the leading edge of the wave, as it is crucial to the initial climb above the clouds. Once well above cloud the clear skies and tremendous visibility make it relatively easy to continue the flight under VFR in VMC conditions. However, a further consideration in allowing glider pilots to glide on SCFR rules is on flying safety grounds when gliding in 'wave'. Sometimes there may be a need to descend through cloud when gaps in the waves close up underneath the glider and you suffer, for instance, a GPS failure. Another possibility when navigating by ground features is that you lose sight of the ground. Either could lead to an infringement of controlled airspace or you could even be blown out to sea. In these situations, there is little option for the glider pilot than to descend through the thinnest possible cloud layer in the troughs between the waves to re-establish their position relative to the ground.

In conclusion, gliding in the UK would be severely hampered if pilots are not allowed to glide under SCFR conditions. Our flying conditions often require us to fly close to cloud and sometimes in cloud and the well regulated clubs of the BGA have been safely training glider pilots to do this for many decades, as I believe the accident statistics demonstrate. Cloud flying in gliders in the UK is safe as our pilots are suitably trained and their gliders are adequately equipped to allow them to do this. A failure to implement SCFR would be a major blow to the prospects of continuing our cross-country tradition in the UK, with a resulting knock on effect to the popularity of this sport.

Anthony McDermott
Bronze level pilot
35 hours solo
500 flights

response

Noted

Thank you for providing feedback.

comment

1077

comment by: *Dr Justin Carter*

Various explanations can be cited for the gradual decline in the General Aviation sector over the last 30 years. The numbers of licensed pilots, aircraft and aerodromes have all fallen progressively. What should be an important sector, often source for professional pilot training, aero-engineering and aero-design sectors is shrinking rapidly. One of the reasons is the rising relative cost of the

sector (reducing activity by cost) and the other is the over-burdensome regulation. Regulations and requirements for FCL for pilots in IMC conditions are onerous, the result being that for most private pilots, an IR is unacheiveable (I am one such pilot). The result is a big discrepancy in rates of IR qualification between the USA and Europe. There is no credible safety reason for such overburdensome regulation of IR training requirements in Europe and somemodification of the process to simplify it and make it more achievable will drive up training, qulaification and skills in the pilot population. More training is always a good thing. Simplifying and making PPL IR flight more achievable doesnt cause a safety issue (look at the successfully implementation of the UK IMCR as an example). I fully support the proposed changes. As JAA PPL holder with UK IMCR and Nlght ratings, it will allow me to achieve the IR and further develop my training and the safety of my flying.

response *Noted*

Thank you for providing feedback.

comment *1080*

comment by: *Chris Gadsby*

I am a glider pilot in the UK flying at the Darlton GLiding Club.

I would like to register my support for the proposals.

I agree with the proposition that preventing flying near cloud at all will decrease the safety of gliding operations by increasing the likely hood of landing out due to the resticted height bands that would be available. Most general club operations are not flown in high performance gliders but in two seater trainers with 30:1 or less performance. Although all glider pilots are trained for field landings they do increase the work load on the pilot and more time spent looking for fields is less time looking out of the cockpit.

I would have supported the option for the restricted rating for flying near to, but clear of cloud as this is the most frequent situation we will encounter - few "club" glider pilots will chose to fly in cloud, but many will wish to fly close to the base of Cu or close to wave clouds in order to maximise lift. However given this is not being considered the current proposal is the next best thing.

I am not sure it is necessary to require 5 hours training as a mandatory number; Most gliding training is done on a skills assessment and not on a time measurement basis. Where there are limits these are usually based on flights or intervals - for example currency is defined not as number of hours flown but as time since last flight (28 days). We are used to this approach to training. In addition - for a club using winch launch getting that number of hours for all club members will be difficult when a standard circuit may be only 5 or 6 minutes. I would favour a more flexible approach to the assessment process.

response *Partially accepted*

Thank you for providing this comment.

BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a

maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment 1085 comment by: Danish Powered Flying Union
Danish Powered Flying Union fully support AOPA Denmark's comments.

response Noted
Thank you for providing feedback.
Please see the responses provided to the AOPA Denmark comments.

comment 1102 comment by: Garry LEWIS
As a Sailplane Pilot early in my Gliding career I welcome the proposals for the SCFR as a natural stepping stone to the development of my skills whilst preserving my options to extend my flying range and days on which I will be able to fly. More flying leads to more experience and in the longer term a safer pilot and safer skies.

response Noted
Thank you for providing this comment.

comment 1108 comment by: Bob Bromwich
This stake holder is a very active gliderpilot with 3500 flying hours over 30 years gliding.
I am writing to support "option 1, SCFR- FULL" for sailplane cloud flying ratings.

I hope that EASA understands the importance of the rating, as clearly described in the British Gliding Association comments previously made on the comment response tool, and that EASA will follow the advice provided by the BGA - because it has been very carefully considered to be the best option by real pilots who, because they have (via the many pilots in the BGA), a very large experience of safe flight near/in clouds, can really advise from a position of knowledge and authority.

A Sailplane Cloud Flying Rating is needed because gliders need to fly near cloud, as well as in cloud, when there are suitable clouds for gliding. Note that this does not mean that gliders often cruise in a straight line through non - convective stratus cloud, as a powered aircraft in IMC might do !

Why do gliders need to fly near and in cloud ?:

Because it is near and in convective clouds, where there are found the natural vertical air motions to support the glider. Clouds are formed by the rising air of thermals, and a glider flying in a thermal is then *naturally* drawn up to being close to the cloud at the top of the thermal !

response Noted

Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment

1113

comment by: *Peter Cunnison*

Having read the BGA's response to the proposed SCRF I am fully in agreement with their response.

Namely that the BGA

1. Strongly supports the SCRF and its availability to LAPL(S) and SPL holders.
2. Their view that 5 hours dual flight instruction should be reduced to 3 hours.
3. Training for the SCRF should be allowed in TMG's.
4. The recommendation that the Restricted SCRF is re-considered by EASA

response

Noted

Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment

1116

comment by: *Peter M. Henningsen*

I'm a private pilot.

I use my aircraft for business travel in Northern Europe.

I think this suggestion in general is very good and I'm looking forward to be able to train for the EIR rating.

Until now I have been limited to VFR and an UK IMC rating, because I'm VCL restricted on my medical. Approximately 10% of the male population has this slight colour defect which result in a VCL restriction not allowing night flights.

Since I use my aircraft for business it would be a great gain to be able to tackle also some worse weather conditions. Especially it would be nice to be able to file IFR on borderline VFR days.

I have never understood why I and similar restricted pilots, are not able to gain an IFR rating, with the night restriction still in place. I don't want to fly commercially I just want to be safer in my personal travel.

I fully support this new proposal, because this will allow me to gain an EIR rating, but I think the IR should also be made available for VCL restricted pilots.

response

Noted

Thank you for providing feedback.

comment

1136

comment by: *Andrew Barber*

As a UK based holder of a JAR PPL(A) with UK IMCR rating who uses a PPL for point-to-point business travel as well as leisure flying, I very much welcome these proposals which will add safety and functionality to my PPL flying.

I urge EASA to ensure that the implementation of these proposals does not dilute the good work that has been done. In particular, please ensure that the following are retained:

- TK content kept to no more than that already published in the NPA, less if

	<p>safety allows</p> <ul style="list-style-type: none">- at least 90% of TK training may be done by distance learning- Full hours credit for instrument flying completed before commencing EIR / CBIR training <p>Please ensure that the UK IMCR may continue to be both renewed and issued by the UK CAA for UK FIR use only. This is a proven life-saver in our unpredictable maritime climate. Please also add night IFR privileges to EIR holders with a night qualification</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The theoretical knowledge content of EIR and competency-based IR has been kept almost as it was in the NPA. Only small editorial changes have been made. Approved distance learning courses may be offered for the EIR and competency-based IR. The minimum amount of classroom teaching shall not be less than 10 % of the total duration of the course (see ORA.ATO.305). The prior flying experience as PIC in IFR/IMC has been taken into account in the proposed EIR and competency-based IR requirements. A Part-FCL licence holder who also holds ICAO Annex 1 instrument rating issued by third-country and a required amount of flying experience as PIC in IFR/IMC needs only to pass a skill test and demonstrate the adequate level of theoretical knowledge during the skill test. In case of competency-based IR he/she also needs to demonstrate English language proficiency.</p> <p>The existing national ratings such as UK IMCR may be credited towards Part-FCL ratings during the conversion process. This process is the responsibility of the Member States in consultation with the Agency. The Agency has extended the privileges of an EIR holder to conduct flights by night under IFR or in IMC in the en-route phase of the flight in case a night rating in accordance with FCL.810 is also held.</p>
comment	<p>1140 comment by: Tom Harding</p> <p>Sir, I am a professional pilot and hold a current Instrument Rating. Once or twice each year whilst gliding I enter cloud usually in order to gain sufficient height to prevent a field landing on the "final Glide" to home base. Many of my gliding colleagues who also fly in cloud are well experienced and safe pilots who act with professionalism. I would like you to note my objection to any restrictions to glider pilots being prevented from flying in IMC conditions outside controlled airspace. Yours Tom Harding</p>
response	<p><i>Noted</i></p> <p>Thank you for providing a comment. The new regulation introduces a sailplane cloud flying rating with which sailplane pilots are allowed to fly close and also in the cloud.</p>
comment	<p>1141 comment by: Andrew Cunningham</p> <p>I am commenting as a glider pilot and instructor. I have 44 years experience of</p>

gliding in the UK (and many other countries). I have frequently flown in cloud while soaring in gliders and I consider myself competent to do so. I agree with the opinion expressed by the British Gliding Association, that the introduction of a cloud-flying rating for sailplane pilots is a good thing. However, the proposed minimum training requirement of five hours dual instruction would be unnecessary and unfair for pilots with sufficient experience, like myself. The rating should be skills-test based, preferably with no minimum dual training time. Like the BGA, I would accept a reduced minimum, say three hours, but with reluctance.

I am strongly in favour of the addition of a restricted rating to allow sailplane pilots to fly, as they routinely do at the moment, up to cloud-base but not to enter the cloud. This privilege is essential for the continuation of safe cross-country flying in the UK, where high cloud-bases, unlike in continental Europe, are relatively rare.

I strongly agree with the BGA that training for the ratings should be allowed, and encouraged, to be carried out in TMGs. These aircraft will not fly IFR but are ideal for the training role.

In both cases, full and restricted cloud flying ratings, I am in favour of the theoretical knowledge testing requirements, which can only improve pilot skill and safety.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment *1145*

comment by: *Michael Jenks*

I am a professional pilot with 35 years experience and also a glider pilot. Two thirds of my experience has been on wide bodied airliners and the remainder on military helicopters, turboprops and fast jets, including as a QFI and IRI.

I regularly fly IMC and in cloud in sailplanes. The UK weather is such that it is rare to be able to carry out cross country flight safely without flying within 1000' of cloud. Much of my flying includes flight in wave, which in my flying area would normally be impossible to contact without flying within 1000' of cloud.

I therefore consider it essential that gliders are able to fly in IMC and in cloud. I also think that the present UK rules regarding gliders are sensible and pose no extra risk. I consider it vital that gliders continue to be able to fly in IMC and cloud.

In the absence of this option in the NPA I support Option 1 (Full sailplane cloud flying rating), but with some reservations. I also note that if VMC for gliders were to be defined as clear of cloud and in sight of the surface up to transition altitude, rather than 3000' AMSL, then a large proportion of glider flights would remain in VMC.

I believe that the proposed training requirements are impractical and excessive. A 2000' aerotow at the cost of approximately £30 would only enable about 10 minutes of training. In the worst case, the cost of 5hr instruction would be £900 in launch fees alone, putting the proposed rating out of financial reach for many club members, especially the younger ones who need to be encouraged. I

would therefore suggest that a proportion of the training requirement may be carried out in suitable fixed base simulators and touring motor gliders. I consider 2 1/2 hrs training would be sufficient, of which all but 30min could be carried out in a touring motor glider and/or a fixed base simulator..

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.

comment

1163

comment by: *Martin Heneghan -glider pilot*

The raison d'être when flying a glider (for the majority of pilots in the UK) is that the challenge is to find rising air currents under cumulus clouds. In order to make cross country progress, climbs to cloudbase increase the potential glide distance and reduce the risk of forced landings.

The VFR rules make sense when flying power aircraft where the fairly regular intention is to fly from A to B in a straight line and to see and be seen in VMC conditions. Gliding is a sporting challenge and as such there is a real need to fly near to clouds not away from them.

Yes I agree that should pilots wish to fly inside clouds then it makes sense to be properly trained and have appropriate instruments. Thus I would say an IMC rating in order to fly in cloud would be acceptable and a compromise to allow gliders to do as they have done for the last 80+ years and fly to cloudbase when conditions are suitable.

In my 30+ years of flying I have not purposely flown in cloud but I do like to get to cloudbase and then glide to the next area of lift.

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

1218

comment by: *G C*

	<p>I wish to object to this rule change and would like you to take note of the BGA's proposal.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.</p>
comment	<p>1220 comment by: <i>Christopher Partington</i></p> <p>I am writing in support of the SCFR as I believe the ability to fly in close proximity to clouds is essential for most soaring flight in the UK.</p> <p>Because of the relatively low cloud bases experienced in this country, when flying cross country it is important to be able to climb close to cloud base, especially on weak days, in order to increase the gliding range and enable the next thermal to be contacted. If this was not possible, it would significantly reduce the ability to fly distance and would greatly increase the risk of landing out. Sometimes (especially in the North of England) the only lift useable for cross country flight is near the cloud.</p> <p>When flying in wave conditions, the lift is normally close to the clouds and much of this type of soaring would be impossible, especially in our damp climate, if it were not possible to fly horizontally close to the lenticular clouds.</p> <p>Again, while flying high in wave, it is not uncommon for clouds to form rapidly below (even sometimes on a previously clear day) due to the nature of the meteorological conditions in which this form of lift exists. Owing to the time taken to descend there are times when the later part of the descent is necessarily carried out through the cloud. However, these descents are usually carried out in straight and stable flight for a relatively short time (and obviously into a known area, free of airspace and high ground).</p> <p>Therefore, I believe it to be imperative that we maintain the ability to fly close to and in cloud. If the SCFR is the means to enable that, then I support it.</p> <p>Roger Partington BEng MRINA</p> <p>700+ Hours Gliding Gold + 1 Diamond 900+ Hours Power</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1223 comment by: <i>PaulW</i></p> <p>Glider flight very close to, and within cloud is a very important part of glider flying.</p> <p>I support the proposed Sailplane Cloud Flying Rating, and I support the British Gliding Associations representation on my behalf.</p> <p>Paul Woodcock</p>

response	<p>Glider Pilot. NPPL (SLMG) Pilot.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.</p>
comment	<p>1227 comment by: <i>Ken Woods</i></p> <p>I have read the document paying particular attention to the sections relating to Sailplanes and TMGs and would like to support the proposal for Qualifications for flying in Instrument Meteorological Conditions.</p> <p>The current BGA practices have proved very effective in regulating IMC for Sailplans and TMGs and are in a broad sense what has been proposed. It is vital that the current practices are maintained to provide a safe flying environment for glider pilots. The SCFR therefore constitutes an excellent framework to maintain these practices.</p> <p>There are some adjustments that could be made to the current proposals:</p> <ol style="list-style-type: none"> 1. The proposal for 5 hours of training appears rather rigid bearing in mind the current BGA practice of training and assessment that requires a pilot to reach a standard rather than a fixed number of hours training. If a time period must be specified then I feel it should be significantly reduced from 5 hours. 2. The introduction of a Restricted SCFR would appear to be a good subcategory SFCR to allow pilots to fly in close proximity of cloud without entering it. This would allow newer pilots to gain valuable cross country experience and prepare them better for the full SFCR. At the moment the proposal provides for a SCFR with the Restricted SCFR being discarded but I think introducing both would be a good idea. 3. The ability to use TMGs to train for the SCFR is essential to allow for more consistent and structured training rather than waiting for suitable thermal conditions. The concerns expressed by the UK CAA and others about using the privileges of the SCFR in TMGs could be mitigated by the declaration of a suitable training area (I suggest 40km radius) being specified prior to take off. The use of SCFR would otherwise be prohibited for TMGs.
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>1231 comment by: <i>Michael Williams</i></p> <p><u>Cloud Flying - SCFR.</u></p> <p>The BGA in the UK publishes Rules and Regulations that Glider Pilots adhere to. As part of a UK Glider Pilots training, examinations on these rules take place.</p>

In the UK, currently there is no requirement for a Glider Pilot Instrument, *but NPA 2011-16 as an additional rating must be demonstrated to be proportionate in terms of cost, training availability (simulators and "real" flight), any enhanced safety benefits, plus continuing airspace accessibility.*

However, as Flight crew Licencing for glider pilots in the UK is approaching, then this change should be supported, subject to the previous paragraph.

My own flying experience does require me on occasions to penetrate cloud, either climbing in a thermal and then into cumulus, or more usually, while climbing / descending in wave, flying within, or close to cloud. In both cases, cloud flying is outside of CAS, and hence enhanced enroute navigation and compliance with ATC instructions has never been an issue. Hence the SCFR may seem to be a sensible rating based on the airspace classes that gliders are allowed to penetrate.

In the past 4 months, 3 flights have required me to penetrate cloud while wave soaring. The ability to fly in or close to cloud is an essential part of my flying.

I attempted to attach 3 photographs of a recent wave flight to demonstrate proximity to cloud, but the CRT would not accept the JPG's.

response Noted

Thank you for providing feedback.

comment 1278

comment by: Paul Mc G

Crikey this is long and complex for a relatively simple to define area, even for EASA, 239 pages! Sorry for a general rather than detailed comment but this is generally supportive.

The opinions expressed as to the need for these revisions makes some sense and in this EASA is to be supported.

It is interesting that it seems that EASA has worked with some degree of success with various EU gliding associations and with other interested aircraft groups, including self build and fly organisations to produce an almost functional but still far from perfect set of operational procedures.

It seems that EASA has decided that some of the human rights of the sporting and recreational piloting community should be maintained in spite of improper and inordinate actions by commercial operators attempting to prevent access to airspace which they consider their own property instead of it belonging to all and as long as EASA can maintain and improve safety then the rights of all airspace users must be maintained with as few restrictions as possible. Hopefully the present plans go some way in this direction as clarity is as usual not a strong point.

I agreed the concepts of glider pilot licensing, I approve the use of radio as this is a safety aid in all light aircraft and gliders. I also approve the requirements for various anti collision equipment if such can be properly used! i.e. pilot training is important!

Since cloud flying is more important to glider pilots than others I will concentrate on this. If the intent is to formalise best practice then the present

plan is quite good but there appear to be extensions and omissions which are neither clear in intent and extent? Will gliding clubs be considered ATOs for training and licensing purposes? No other plan would work would it??

There are some well intentioned plans to increase IR awareness and training at reduced cost, as if such will ever happen but increasing IR awareness and providing a path for improvement and hence safety is a good cause. However, although this is a huge improvement over some earlier documents and shows obvious concern within EASA and better consultation with stakeholders than other proposals, some risk assessments are odd as are definitions and some tidying up is called for although in general this is not a bad general proposal and with only a little more polishing could be adopted as long as that polishing was to increase freedom of the general user and place more restriction on commercial operators who have had their way for far too long without due regard to others and I say this as a supporter of business but business must not override all other rights.

For most sporting glider pilots, cloud flying will be important in skilling and hence safer flying and a proposal such as this which formalised such and appropriate training is to be applauded.

However, the definitions of those locations where cloud flying is agreed is not specifically identified in this document or am I misreading? I also am unsure as to whether glider pilots would be allowed to operate under restricted IMC / IR rules under the guidance of ground controllers in restricted airspace, as such was suggested by the BGA was it not? It seems to no longer be under consideration although such was in earlier plans? Will this be included with various motor glider ratings? If so then what would be the effect of flying a motor glider as a glider as it would represent a different situation to flying a motor glider under power? Or am I misreading again? For glider pilots what constitutes an ATO, as many training organisations will not be able to accomplish the training but the gliding clubs will - this is not clear and it is unclear as to how retraining on lapsed rights should be assessed and accomplished.

I consider 830 excellent in approach and if such can be implemented this would improve safety for all, although the devil is as usual in the detail!

However appendix 6 as in many attempts to formalise educational requirements is not necessarily as effective as it may seem and may need some improvements.

I apologise for brevity and poor style but this response had to be presented appropriately and at relatively short notice for such a long and important document and I hope that I have been reasonable in assessment and in supporting the general tenets of this EASA document, whilst making enquiry where necessary.

response

Noted

Thank you for providing feedback. Since the comment is written mainly at general level, the Agency is able to give detailed response only on certain items. The comment also included questions whose answers can be found in Part-ARA (Authority Requirements) and Part-ORA (Organisation Requirements).

With regard to ATOs:

Gliding clubs are able to apply for ATO (Approved Training Organisation)

certificate in order to give training for sailplane licences and/or ratings. The club has to fulfil the requirements set in Part-ORA for non-complex ATOs.

With regard to licensing:

According to Part-ARA the licences and ratings shall be issued by the competent authority. Member States are able to designate more than one competent authority. In that case the tasks and the responsibilities of different entities shall be clearly defined.

With regard to locations:

Cloud flying locations and airspace definitions will be determined by the Member States.

With regard to restricted SCFR:

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

With regard to TMGs:

The privileges of a cloud flying rating will not be allowed to be exercised on a TMG.

With regard to recency requirements:

More detailed requirements for the recency have been added to the rule text. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs) at least 1 hour of flight time as PIC or 5 flights exercising the cloud flying privileges during the last 24 months. If the holder of a cloud flying rating does not comply with this requirement, he/she shall pass a proficiency check with an examiner or perform the missing flight time flying dual with an instructor in order to fulfil the requirement. Holders of a valid EIR or an IR(A) will be credited in full against the requirements.

comment

1280

comment by: *John Dransfield*

Glider soaring flight making use of thermals or mountain wave requires flight close to cloud, usually without any intention of entering.

Inadvertant entry or loss of visual reference is rare, as are accidents from this cause.

Most aeroplane accidents due to lack of visual reference are caused by pilots

attempting to continue flight into deteriorating weather. This does not happen in gliding operations as there is usually no lift in marginal weather conditions. The imposition of the restrictive VMC limitations on glider flights above 3000ft unless the pilot holds an instrument rating would do little to improve safety and result in unnecessary training and administration. The majority of glider pilots in the UK have no wish to enter cloud, but under these proposals would need to acquire an instrument rating to continue what they have been doing safely since the inception of gliding as a sport. The simple way of resolving this problem is to allow gliders to extend the criteria for VMC minima below 3000ft to any height, clear of cloud and in sight of the surface.

response *Noted*

Thank you for providing feedback.

comment

1288

comment by: *AOPA France*

AOPA France notes that many proposals for mandatory requirements in the NPA have been prefaced by the word 'should' rather than 'shall'. Although it is accepted that this is a consequence of EASA document terminology standards, the final document must be restructured to indicate more clearly which proposals are mandatory and which are recommended.

response *Noted*

Thank you for providing feedback.

comment

1324

comment by: *Peter BUSHILL*

The cloud base in the UK is rarely much above 4000' and often much lower, even on 'good' gliding days.

Thermal based cross country soaring relies largely on being able to gain sufficient height in the current thermal to be able to reach the next thermal. Most pilots give themselves plan a safe operating band (min and max height **above ground**) for a particular day, the minimum is normally 2000' or more (a search for safe landable areas is commenced by about 1500'). If gliders were to be limited 3000' under these 'normal' conditions then cross country flying would be either difficult or worse, unsafe, as safety margins were pushed. There is just not enough margin for the average pilot to locate and centre in the next thermal.

The other type of thermal flying: using continuous cloud 'streets' is an even worse problem as the lift is usually relatively close to the clouds.

There appears to be an assumption in the document that all pilots do 'cloud flying'. I do not believe that this is the case, I know relatively few pilots who do this and I would certainly not deliberately lose sight of the ground. The most important condition as far as I am concerned is to be allowed to approach a cloud above 3000'.

response *Noted*

Thank you for providing feedback.

comment

1326

comment by: *Mike BROOKS*

In the UK gliding has traditionally benefitted from a lower level of regulation than other forms of recreational aviation, whilst still maintaining an excellent safety record. This position has been repeatedly endorsed by the UK's CAA, and represents an exemplar of what can be achieved with self regulation.

This has benefitted the citizen through lower costs and improved access to gliding, which is demonstrated by the relatively large number of glider pilots active in the UK.

This traditional approach is being replaced by a pan european framework which does little to improve safety in the UK, yet is seen as necessary to standardise regulation across all member states.

Therefore whatever regulation is introduced in the UK will increase the costs to the citizen, who has to support the increase from his own reserves, and unlike commercial aviation, cannot be amortised, or offset against taxes.

There is therefore a balance to be made between the demands for safety, and the demand for tighter regulation, and EASA should consider the experience of all member states in determining what represents the best practice.

Specifically, in respect of this consultation, the introduction of a Sailplane Cloud Flying Rating (SCFR) is a necessity in the UK where cloudbases are lower than some parts of mainland Europe, as climbing to cloudbase and above is sometimes the only way to avoid field landings, with all the attendant dangers.

That said, the introduction of a Restricted SCFR for climbing to cloudbase above 3000 feet (as long as the aircraft remains clear of cloud and in sight of the ground, as available below 3000 feet) would go some way to addressing the safety requirement, yet without the excessive burden of training, aircraft equipping, and renewal that the full rating would require. This approach would maintain current freedoms in the UK.

In this light I support the introduction of a SCFR in order to maintain freedoms currently enjoyed, but with the following caveats

- 1) It is important to ensure that the training, issuing and renewal of an SCFR are not excessively expensive. For example, the requirement for 5 hours dual training in a glider (TMGs being excluded from the privileges of the SCFR) is excessive, and I ask EASA to re-consider this requirement
- 2) The use of TMGs for SCFR training be specifically allowed under any new regulation, in order to reduce costs to the citizen.
- 3) For the majority of cross country flying could be addressed by a Restricted SCFR to allow VFR only equipped gliders to climb to cloudbase above 3000 feet. I therefore ask EASA to reconsider its position on this matter.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment 1343 comment by: *Ian MYLES*

I would like to add my support for the proposal of the SCFR. It seems a responsible way to allow the continuation of flying near and flying in cloud to continue as very necessary and safe way to maintain the ability to fly reasonable distances cross country.

A concern would be the imposition of a minimum period of flying prior to gaining the SCFR. Pilots with differing ability, experience and aptitude would become competent, as with going solo, with different numbers of training flights. The passing of the flying test would prove competency whether the pilot undertook 1 hour or 10 hours of instruction.

Another concern is after going solo, would the imposition of VFR apply to all pilots until they had completed 30 hours PIC? If it does that would restrict the flying of new solo pilots to such an extent that they would find it much more difficult to achieve their 30 hours.

Ian Myles

Bronze C, Silver height and duration.

response *Noted*

Thank you for providing feedback.

BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

Cloud flying privileges can be exercised only after obtaining the rating. However, this will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment 1360 comment by: *Martyn Wells*

Would like to state i am very much in favour of SCFR in NPA 2011-16 to enable the use of our limited soaring potential in the UK. I fully support the BGA and it's response on this matter.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment 1374 comment by: *DGAC FRANCE*

COMMENTS DGAC France

NPA 2011-16 Qualifications for flying in instrument meteorological conditions

EXPLANATORY NOTE

III - 1 En-route instrument rating (EIR)

DGAC- France raises the question of the nature of the flight involved by this new rating (IFR or VFR). Unless error on our part, it is not explicitly explained in the NPA. We consider that a dedicated flight plan code should be considered. The dual operating conditions implied by the EIR are so specific that the ATC has to be fully aware of this type of flights. It should be interesting to measure the impact of such a new regulation in the different countries of the UE, considering the fact that the organization of the ATC is different from one country to another one.

III - 2 Competency-based modular courses for the IR (A)

DGAC-France fully supports the creation of a new route to the IR (A) dedicated to private pilots. We consider that the easing and alleviation of the access of the IR for private pilots is an important issue for us, in all its components, including English requirement (see below).

However, we consider that the readability and clarity of the whole proposal could be improved, especially within the CRD period. It could be the occasion to improve the draft as the proposal is unclear, even when read thoroughly by experts. It is necessary to redraft if in a way that could allow the stakeholders to understand and give pertinent opinion.

Two options have been contemplated by the Agency:

1. To limit privileges to certain aeroplanes types or classes (e.g. all aeroplanes except high performance aeroplanes);
2. Not to restrict the privileges for a PPL or CPL holder who followed a competency-based modular (CBM route).

The statement of the Agency is to opt for the second option i.e. not to impose any limitation of privileges for the IR holder. DGAC does not support this approach and is in favour of a limitation to some identified aeroplanes categories, and notably excluding high performance aircrafts.

We would appreciate clarification upon the approach adopted by the Agency, that is to say, on the second option. For example, it is not even clear that the new CBM-IR could not be used with CS25 aeroplanes!

Another clarification would be on the alleged Competency Based approach adopted for the training. We consider that a real "Competency Based Training" concept should be fully documented (see ICAO Pans-Trg), which is not the case here.

As regard to the risk analysis:

Considering the scope of this new rating, the rating may be endorsed on a PPL or CPL.

A risk analysis was provided by the Agency for the PPL only ; however, it

appears that no such study is proposed for the CPL case. We consider that it is necessary to get such data analysis prior to decide upon the possibility to record the CBM IR on a CPL.

In absence of this study we consider that the CBM IR should be limited to PPL holders and restricted to non HPA airplanes.

The attention of the Agency is drawn on the fact that the Part FCL, just adopted, determined in its requirements the appropriate level to perform instrument flights. Unless it would be considered that this level has been over evaluated, it must be the level required for CPL holders (i.e no restriction of privileges).

As regard to the organisation of CBM IR training (ATO and flight instructor)

In case of flight training carried out by an IR flight instructor not employed by the ATO, it should be clearly stated that the ATO has to bear the final responsibility of the training. This responsibility of training oversight should go beyond the "pre-course assessment" referred to in appendix 6 A 2, and the relations between the IRI and the ATO should be clarified. We consider that it is finally up to the ATO head of training to sign the statement of satisfactory completion of training.

As regard to "language proficiency" requirement for IR holders :

DGAC-France noticed that the issue of the requirement of English is not addressed in the NPA. We consider that this issue should be addressed as full part of the requirements for private pilots.

We find no justification with the requirement of a private CBM IR holder to pass the FCL 055(e) examination in English : a number of private pilots may exercise only in their national airspace, where ATC communications are available in their national language, without creating a safety issue.

Requiring FCL 055(e) only for private pilots flying in airspaces where English language is used would be totally compliant with ICAO standards. ICAO has not identified a particular safety issue on this subject.

We consider that requiring FCL 055(e) for all IR private pilots would tend to align requirements for private IR with those for professional IR and that this would be exactly opposed to the purpose of this NPA, which is to alleviate the IR requirements for certain pilotes. This might lead DGAC not to sustain the adoption of the NPA.

III - 3 Sailplane cloud flying rating

DGAC France is not a priori against the creation of this new rating but in the absence of experience in that matter is not in a position to express any formal position.

We are aware that some countries practice this activity and they seem to be able to control risks and difficulties of implementation.

We would be keen on learning about the experience that these countries put forward to support this project. We are very interested in measuring the impact

on safety, considering the fact that this activity would likely increase the risk of collision, loss of control, physiological disorders, flight into unauthorized airspace.

It would be appropriate to consider the appropriate means (flight instruments, procedures...) that could be developed to mitigate the potential risks associated with such IR operations. This study, established in consultation with ATOs and ATC, would take into account the airspace congestion and the need to manage proficiency checks.

DRAFT

FCL 055 d)

Insert a provision to exclude the requirement of language proficiency in the case of the CBM IR or allow a CBM IR private pilot to exercise only in its national airspace, where ATC communications are available in its national language, without the english requirement

FCL 825 C° 2° i) ii)

The link between the ATO and the instructor providing the instrument flight instruction should be established in all times. Thus, we would like to have clarifications on the nature of the remaining time under the supervision of the IRI or FI [i.e. can these 5 hours be considered as maturing time ?]

FCL 825 c) 2) i) ii)

The link between the ATO and the instructor providing the instrument flight instruction should be established. Clarification upon the sentence "remaining flight time may be completed under supervision ..." (see FCL 825 (c))

response

Noted

Thank you for providing this feedback.

With regard to EIR:

The privileges of the holder of an en-route instrument rating (EIR) are to conduct flights under IFR or in IMC only in the en-route phase of the flight. This means that the holder of an EIR is not allowed to fly an instrument departure, arrival or any approach procedures. When filing a Y or Z flight plan according to the operational rules the EIR pilot should include also planned IFR/VFR transition points in item 18. Via filed flight plan the ATCs in concern become aware of the flight and the rules by which the flight will be performed.

With regard to competency-based IR:

The Agency in consultation with the Review Group experts has decided not to limit the EIR or IR and therefore both ratings will be accessible to all class and type ratings as proposed. Please be advised that some type ratings already require an IR prior to commencing the type rating course.

With regard to the competency-based training concept and risk analysis for CPL holders the Agency acknowledges your comment and agrees that some of the main principles of a 'pure' competency-based licence or rating (as introduced for the MPL) have not been introduced here. The wording 'competency-based' was chosen as the principle is that the ATO will finally decide on the amount of training needed based on a pre-entry assessment which will identify the competencies and skills an applicant has already gained. Knowing that it is too early for a purely competency-based IR and having in mind that the ICAO

SARPs have to be fulfilled this rating will not be amended to fulfil all the criteria of a competency-based rating. This might happen in the future with an FCL task to be initiated in 2014 aiming at a review of all licences and ratings in order to address the principles of competency-based training.

With regard to the relationship between ATO and an instructor outside ATO:
The pre-entry assessment should establish the basis for the subsequent training at the ATO, and in addition if the pilot is not progressing as expected more training should be provided by the ATO. The Agency developed a new AMC requiring the applicant upon arrival at the ATO to present a training record signed by the instructor stipulating aircraft type used, total instrument flight instruction time and exercises completed. The Agency believes that any finding which shows that a candidate is below standard when having received instruction outside an ATO will be communicated via the existing link between the ATO and the competent authority. In conclusion these items and the final skill test should ensure that an appropriate quality standard is achieved. The ATO has the responsibility only for the part of the training delivered by the ATO. Due to pre-entry assessment the training with an instructor outside the ATO has to be completed prior to flight training at the ATO and the ATO is not directly involved in this initial step.

With regard to English language proficiency:
The Agency and the Review Group experts discussed the English language issue. As a result the Agency decided to keep the English language requirement for the IR holders as it is already included in FCL.055 introduced with Part-FCL based on a long-lasting development process and consultation phase. The proposed route not to require the EIR holders to comply with FCL.055 will be kept.

Regarding sailplane cloud flying rating it should be stated that several Member States have quite some experience with cloud flying activities. Experts from these MS were involved in the drafting and review phase. The Agency amended some of the requirements but believes that the proposal as it is now reflects the state of the art and will create a harmonised and safe level of training and checking.

comment

1378

comment by: *colin ELLIS*

I am a glider pilot and my comments are to voice my support of the British Gliding Association's recommendations on this matter.

I support the EASA proposal for glider flying in and close to cloud within NPA 2011-16 and in particular that the SCFR rating be available to both LAPL(S) & SPL holders.

response

Noted

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment

1389

comment by: *Basil Fairston*

The proposed sailplane cloud flying rating is essential to ensure the safe continuation of the sport of gliding, particularly in those countries not

benefitting from high cloud bases. Without the ability to legally fly up to cloudbase their will be many more occasions when a landing in a farmers field is necessary and this is one of the higher risk parts of gliding.

response *Noted*

Thank you for providing feedback.

comment

1395

comment by: *EFLEVA*

The European Federation of Light Experimental and Vintage Aircraft (EFLEVA) welcomes the EASA initiative to increase the accessibility of Instrument Qualifications for holders of PPLs. We believe that this initiative will improve the safety record of privately operated aircraft. The existing Instrument Rating is disproportionately disposed towards professional qualifications and this leads to unacceptable training costs for many private pilots. The proposed modular route to EIR and IR(A) needs to be proportionate for PPL holders.

response *Noted*

Thank you for providing feedback.

comment

1402

comment by: *Greg Faris*

Attachment [#3](#)

Comment from private user : *U.S. nationality, resident in France for over 25 years due to my professional situation. Private pilot (PPL/JAA) earned in France 2001, US license based on my JAA license 2004, Instrument Rating (FAA/IR) 2009; 300 flight hours, single, high performance and complex, night rating (France) prior to US instrument rating.*

I find it positive that the impetus focuses on the theoretical portion of the test, and the practical test for IR cert remains the same. This is indeed the crux of the matter.

EIR is a double-edged sword. If used as intended, as a stage (module) toward a full IR and a safety aid in the face of unexpected deteriorating weather conditions, then it could argued to be pertinent and helpful to safety, but in other cases it could become an authorization to bore on into a "point of no return" scenario, without the competency to complete an instrument approach when it becomes necessary.

Language appears repeatedly: "Existing requirements were too demanding for PPL holders". The real question is whether they are too demanding, but whether they are unrealistic or far in excess of what is required for safe operation. A rule that is properly dimensioned for safe operations cannot be challenged because some find it "too demanding". However it is worth noting that the type of operations that private pilots engage in has a lower coefficient of risk to public safety than commercial or airline operations, making some aspects of the current requirements disproportionate with regard to risk, rather than "overly demanding" with regard to pilots, who should be expected to fully qualify with whatever knowledge and practical standards are deemed appropriate for a given type of operation.

I fully concur with the assessment that the UK IMC rating cannot be transferred ipso facto, considering the questionable competence-to-privilege balance of the UK IMC rating. On the contrary, in introducing better balanced requirements for private pilots to obtain a full IR, the aim should also be expressed to eliminate the "IMC" rating, as not meeting qualifying standards.

Perhaps off-topic or beyond scope of this proposal is the importance of specifying autopilot use during IR training. Flight by sole reference to the aircraft instruments under manual control is incomplete in today's world, where even small planes are increasingly equipped with automated systems capable of executing most segments of an IFR flight automatically. Inclusion of these devices in IR training is sporadic and poorly defined in current rules for basic IR. One approach is to say "I do all my IR training and recurrent training without using an autopilot, but when I fly IFR by myself I use it much of the time to improve accuracy and reduce workload. Thus I hold myself to a higher standard in training, yet employ safety-enhancing practices in real-world operations". This approach has its merits, yet leaves the certificated operator without specific training for the automation devices he is using, and which are becoming much more sophisticated. Without operational training, and failure mode training related to these devices, they can present their own risks. Similarly, over-reliance on such devices during IR training will leave the applicant with degraded ability to manage the aircraft on instruments in the event of a failure of the automation system. Integration is also improving between autopilots and flat-panel displays in private aircraft, leading to new challenges in airplane management in the event of main system failure. The partial panel standby instruments in such aircraft are often very summary, and airplane management in transitioning from a huge information flow to a very sparse display of essentials is becoming an essential training issue.

Safety impact of Instrument Rating:

Unfortunately, the table listing the number of general aviation accidents from 2006-2008 by pilot license type is difficult to interpret, as we are presented absolute numbers but not what *proportion* of pilot certificates are involved in these flights. It would be reasonable to assume that far more non Instrument Rated PPL's are flying these small airplanes than ATPLs, therefore the higher absolute number of accidents does not necessarily represent a statistic relevant to their level of training.

6.2 Environmental Impact

It is not clear that an increased proportion of IFR flights will have the effect of reducing emissions due to more direct routings. On the contrary, flights using departure and arrival procedures and airways are almost always longer than VFR flights, which are usually direct. GPS direct routings are increasing, but still concern a minority of flights in Europe. On the other hand, it is worth noting that IFR flights are typically operated at higher altitudes than VFR, which has a significant positive impact on the noise footprint along the flight track. En-route noise from small airplanes allowed to operate at higher altitudes (because they are in the IFR system) are greatly reduced. It is worth noting that CO, CO² and NO² emissions from small airplanes, given the relative efficiency of their powerplants and the accumulated hours flown is really an insignificant value in Europe, and even the small amount of TEL still present in aviation gasoline is of no genuine environmental significance, though efforts are being made and should continue to eliminate it.

It is not completely clear in the proposed amendment how the question of third-country qualifications (e.g. FAA-IR) is managed. This question is further complicated by its implication in rules of aircraft ownership. In some European countries, it is not possible for a non-national to register an aircraft on the national register. As an American in France, any aircraft I own, I must register on the "N" registry. While I find it perfectly logical that the regulatory authority should require me to demonstrate proficiency in Instrument operations before allowing me to operate IFR in their airspace, I still must be able to do this legally in whatever aircraft I can legally own and operate. It is onerous to require someone in this situation to hold two separate instrument ratings, with

recertification and recurrent training requirements. Instead, I believe we should be seeking a level of harmonization which would allow interchangeability, perhaps with primary focus on the specific regulations in the country where the person resides, owns an aircraft, or does most of their flying.
In conclusion, I am very satisfied to see this thorny issue being addressed at last, and the proposal overall looks like real progress. I believe there is an opportunity here to improve our overall safety record through enhancement of training, whilst increasing the utility of our aviation resources.
I am grateful to have the opportunity to offer my comment, and it is my hope that it my small contribution may prove useful.

response *Noted*

Thank you for providing this comment.

comment

1404

comment by: *rod ward*

I support very stringly the Sailplane Cloud Flying Rating (SCFR) proposal in NPA 2011-16.

Cloud flying, and flying near cloud have been allowed in the UK in gliders since Gliding began. It is essential to local Weather Conditions, and in a country where the cloud base is lower than in most European countries.

response *Noted*

Thank you for providing feedback.

comment

1411

comment by: *Gordon Moir*

I very much support the intent of the NPA in its entirety.

response *Noted*

Thank you for providing feedback.

comment

1420

comment by: *Martin Ling*

As a UK based glider pilot and instructor with no involvement in power flying, my comments focus on the proposals as they relate to sailplane flying in cloud and IMC, relative to the current UK status quo.

I am satisfied that the overall proposition in this area is very much preferable to the other options considered, and I therefore support the amendment as proposed. Neither of the other options would have been found acceptable to the UK gliding community.

There are however some aspects in which I think the proposal could be improved further.

In particular, I find it disappointing that an additional option was not identified during the regulatory impact assessment for the sailplane cloud flying rating: that of offering both full and restricted SCFRs in parallel. As far as I can see, this option would have scored equally with the full SCFR option. It would also have offered a significantly better solution for the training and development of

glider pilots, allowing them to qualify for the restricted SCFR early in their solo careers and move on to the full SCFR when required at a later date.

Flying closer to cloud than VMC minima is only fractionally more difficult than flying in fully clear conditions. Indeed for glider pilots is often actually easier, since lift is generally found close to clouds. Flying inside cloud however is a wholly different and more difficult skill. It is therefore not appropriate that the two should be lumped into a single rating.

Many quite newly solo glider pilots may have no wish to begin cloud flying yet, though still wish to be able to operate close to cloud, since this permits more effective soaring. Being forced to observe strict VMC minima on cloud clearance will add complication and workload to the already difficult task of finding and using lift. In my view it is inappropriate, from a safety perspective, that it should be these less experienced pilots who are forced to handle this additional workload. However, with the proposed 30-hour minimum to qualify for the full SFCR, plus the burdens of that training, it is exactly this demographic who will be faced with these problems. The extensive experience in the UK, of allowing low-hours glider pilots to operate close to cloud, suggests that there is no safety case for them to be restricted from doing so provided that appropriate instruction is given (as was proposed for the restricted SCFR).

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. This vertical distance from clouds is introduced in order to avoid mid-air collisions (see and avoid principle) and therefore an important element for ensuring safe operations in airspace categories with mixed traffic. A Part-FCL rating cannot provide a privilege which would allow certain airspace users not to comply with the ICAO VFR requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment *1428*

comment by: *Ingram GAVAN*

In general I believe that this NPA should be supported with respect to the provisions relating to the Sailplane Cloud Flying Rating and offer the following comments in line with the views already expressed by the British Gliding Association:-

1. LAPLS) & SPL

The SCFR is to be recognised as important for safe gliding in the UK. The NPA indicates that it will be available to LAPL(S) and SPL holders. Retention of this privilege is essential in the interests of the sport of gliding in the UK.

2. Dual Flight Training Requirement

Assuming a skills test is put in place, the qualification would be competence based and this is to be welcomed as a practical approach. However, the requirement for a specific minimum time of dual instruction of 5 hrs is superfluous and inappropriate. A test of competence should remain exactly that and should, based on my experience, be independent of any time constraint, minimum or maximum. I note that the BGA has suggested a compromise of a minimum of 3hrs dual instruction and I would, reluctantly, support that alternative.

3. TMG's

I note and support the reservations expressed by the BGA with regard to the application of the proposed rating to use in TMG's. Given that TMG's do provide a practical and convenient vehicle for the provision of various aspects of glider flying training, it seems perverse to prohibit their use in relation to the proposed SCFR, albeit that it would be acceptable for the rating not to be exercised in respect of TMG's.

I support the suggestion that the following be added to FCL.830

"(d) The privileges of the Sailplane Cloud Flying Rating may not be exercised in a TMG"

4. Restricted SCFR

It had been proposed by the BGA that, in addition to the SCFR, a restricted SCFR be made available for flight under IFR but clear of cloud. This RSCFR would not require new flying skills for a licence holder although it would demand the acquisition of theoretical knowledge training compatible with the SCFR and would therefore improve the safety environment without an undue regulatory burden on such a restricted privilege. Despite the absence of such a provision within the NPA, I hope that reconsideration of this suggestion may be possible at some future date.

Summary

Whilst generally supportive of the provisions of the NPA with respect to the flying of Sailplanes, I trust that the reservations expressed above will be noted as a serious contribution to the consultation process.

I.M. Gavan

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

comment

1468

comment by: *Julian Hodgson*

I am a glider pilot of 14 year experience and a member of the UK's oldest gliding club, the London Gliding Club - a club that is located and operates safely within controlled airspace.

I support EASA's proposed Sailplane Cloud Flying Rating SCFR.

I support the British Gliding Association's proposal that a restricted SCFR be

	<p>made available as an option in addition to the full SCFR - this is particularly relevant to a club that is located within controlled airspace.</p> <p>If the cloud flying privileges glider pilots currently enjoy in the UK end, it will have a detrimental effect on the enjoyment of the sport and its safety.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1475 comment by: <i>Alan HALL</i></p> <p>I regard this NPA with very mixed feelings. On the one hand I welcome these first steps towards a modular and especially competence-based IR, although it does not go nearly far enough in that direction, and together with the mandating of lengthy ATO-based training smacks of commercial vested interest acting against the evidence-based experience of the FAA system.</p> <p>On the other hand, as regards sailplane operations and the UK IMCR, I greatly regret the loss of the freedoms enjoyed under the tried and tested UK regulatory system. These have been sacrificed as part of a complex political and bureaucratic process, rather than to enhance aviation safety.</p> <p>However I am aware that the NPA itself is not the cause, but rather is intended to mitigate the consequences of prior legislation, and for that reason I do, with misgivings, support it as making the best of a bad job.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for this NPA. The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence or rating during the conversion process. This process is the responsibility of the Member States in consultation with EASA. In this case the Agency will support UK CAA in finding a solution to the issue.</p>
comment	<p>1501 comment by: <i>Steve Brownlow</i></p> <p>I have been a professional pilot for 30 years and enjoyed the sport of gliding for slightly longer. I fully support the proposal to allow gliders to fly in cloud within NPA 2011-16. Cloud flying is a very important part of gliding as unstable air is often used to stay aloft for long periods of time and cover fantastic distances. To lose the ability and authority to cloud fly would strangle many aspects of the sport particularly in UK and Europe where we don't have the advantages of very high cloud bases and predictably fine weather that our southern hemisphere competitors have.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1506 comment by: <i>Tom Beck</i></p>

Dear Sir,

I would like to register my support for the EASA proposal for glider cloud flying within NPA 2011-16.

I would ask that the RSCFR option is reconsidered. That the 5 hour dual requirement for dual flight instruction be removed and that the rating be available for SPL and LAPL(S) holders and finally that I consider TMG training to be essential for SCFR.

Yours sincerely

Tom Beck.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by the BGA.

comment *1507*

comment by: *John SMITH*

I am wholeheartedly in favour of the BGA's support for the proposed regulations. Any sensible measure to enhance safety and increase awareness among aviators as to what they may expect of other pilots is welcome.

Within the psyche of many pilots are two opposing forces, those being the desire to explore around the boundaries of one's experience and proven abilities and assess the viability of attempting to extend them; and strenuously to remain within the lawful parameters as asserted in one's own licence or ratings. These considerations often lead to a strong desire to add to one's ratings, in itself a welcome recognition of success and personal achievement

The proposal to regularise the practice of glider pilots' activities in and around cloud and to ensure that recognised and documented training shall be made available for the purpose, can do nothing but good for the aviation world in general. Not only will glider pilots be more confident of their own abilities and their individual and group status, but powered pilots should be more confident when they become aware of a glider in their vicinity, that the glider pilot can be trusted to know what he or she is doing, and not to do something stupid.

response *Noted*

Thank you for providing this comment.

comment *1508*

comment by: *James BRIMFIELD*

Ref NPA 2011-16

I am a current flying member of the London Gliding Club and wish to respond as follows :

SAILPLANE CLOUD FLYING RATING (SCFR)

OPTION 1 (Page 231)

I support this proposal to introduce an SCFR, with the reservation that I feel a minimum flying training time of 5 hours would be excessive for some of those glider pilots who already have cloud flying experience.

RESTRICTED SAILPLANE CLOUD FLYING RATING (SCFR-R)

OPTION 2

I understand that this is not currently under consideration but I strongly request that it is introduced as outlined on page 231. From my own observations, I know that most glider pilots flying cross country, climb to cloud base, where permitted and then break off the climb and continue enroute. I am sure that most glider pilots would be quite content to have this option, much as they have now, rather than going for a full cloud flying rating.

I would most grateful if you would kindly consider my response.

response *Partially accepted*

Thank you for providing this comment and your support for option 1. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1509

comment by: *Lasham Gliding Society*

RESPONSE OF LASHAM GLIDING SOCIETY TO THE SAILPLANE CLOUD FLYING RATING (SCFR) PROPOSAL IN NPA 2011-16

This response is made on behalf of Lasham Gliding Society, the largest gliding club in the UK and certainly one of the biggest in the world.

Lasham's position is that:

- The UK's particular meteorological conditions produce cloudbases that are significantly lower than those pertaining elsewhere in Continental Europe,
- Cloud flying, even in a restricted form, is an essential element to making the sport of gliding viable in the UK,
- Should the cloud-flying privilege be removed, Lasham in particular would lose a significant proportion of its members,
- The Society would become economically unviable, which would lead to significant unemployment in the immediate area.
- As a result, Lasham very strongly supports the retention of the privilege of flying into and close to cloud in the UK.

1. LASHAM GLIDING SOCIETY IS THE LARGEST GLIDING CLUB IN THE UK AND ONE OF THE BIGGEST IN THE WORLD

Lasham Gliding Society has 630 members and, for gliders alone, undertakes approximately 24,000 launches per year. Approximately 220 aircraft are based at Lasham. In addition there are a significant number of powered aircraft and motor-glider movements giving a total of around 75,000 movements per annum. The Society owns Lasham airfield and has several commercial tenants. As a result, the combination of these and the Society's personnel means that over 300 people are employed on the site.

Lasham Gliding Society has developed training regimes that have created many British world champions and helped to establish the UK as a leading gliding

nation as rated by the Fédération Aéronautique Internationale (FAI).

The Society also provides specially adapted aircraft and training for disabled pilots.

2. THE UK'S METEOROLOGICAL CONDITIONS PRODUCE CLOUDBASES THAT ARE SIGNIFICANTLY LOWER THAN THOSE PERTAINING ELSEWHERE IN CONTINENTAL EUROPE

Although gliding is an activity that takes place throughout the year, the winter months are dominated by training activities. The period April to September generally produces the convection activity that makes cross-country flying possible, this being the objective for the majority of Lasham-based pilots. Depending on the meteorological conditions, the thermals produced by the convection are typically marked by cumulus clouds. The UK's meteorological conditions are of a maritime nature. This means that cloudbases are typically lower than those in Continental Europe.

The graph below was generated for the period August through October 2010 for the location of Odiham RAF airfield, which is adjacent to Lasham. It can be seen that for the majority of days when cloudbases were suitable for cross-country gliding flight, the cloudbase was approximately between 3,000 to 4,000 feet.



By contrast, the equivalent chart for the same period for Poitiers in France shows that cloudbases were between approximately 3,000 and 7,000 feet. Poitiers is situated at 423 feet AMSL

Other analyses generate similar conclusions. This difference in cloudbase is critical in any assessment of whether cloud flying, with appropriate training, is particularly necessary in the UK. We submit that it is, for the reasons briefly explained in the following sections.

3. CLOUD FLYING, EVEN IN A RESTRICTED FORM, IS AN ESSENTIAL ELEMENT TO MAKING THE SPORT VIABLE IN THE UK

Provided that VMC criteria are met, in the UK glider pilots fly up to cloudbase in order to obtain sufficient height to progress cross-country flight whilst, at the same time, maintaining an adequate margin of distance from the ground. As a general rule, during a cross-country flight, at a height of 1000 feet above ground level, a glider pilot will have committed to landing either at an airfield or in a selected field.

If flying up to cloudbase is no longer permitted above 3,000 feet, the chart below shows the significantly reduced operating band which would be available to glider pilots. In the UK, this would almost certainly make cross-country flying a risky and impractical undertaking – given the typical cloudbases that pertain.

Lasham, in particular, is situated at 618 feet AMSL. For gliders with altimeters set to Lasham's QFE, their maximum height in flight would be approximately 2,400 feet, they would select fields as a precaution to landing out at 1500 feet and they would commit to landing at 1,000 feet. This means that, in practice, there would be around 1,000 feet of height available for progressing cross-country flight without the distraction of potentially landing out.

This would make the sport unviable from Lasham in particular. The same conclusion would apply to most other UK sites.

4. SHOULD THE PRIVILEGE BE REMOVED, LASHAM WOULD LOSE A SIGNIFICANT PROPORTION OF ITS MEMBERS

The great majority of Lasham's members undertake cross-country flight in gliders. Indeed, a significant portion of glider-pilot training and refresher courses are associated with maintaining a sufficiently high level of competence and currency to make this activity possible in a safe fashion.

Were this mode of flight to become impractical, Lasham's cross-country pilot members would almost certainly abandon the sport. The large number that also own or share ownership of a glider would also put their aircraft up for sale.

It is important to stress that the whole point of gliding for the majority of glider pilots is to undertake cross-country flight.

5. THE SOCIETY WOULD BECOME ECONOMICALLY UNVIABLE, WHICH WOULD LEAD TO SIGNIFICANT UNEMPLOYMENT IN THE IMMEDIATE AREA

With the loss of a significant proportion of its membership, Lasham gliding Society would cease to be viable.

A first consequence would be that a large proportion of the flying and administrative staff would face unemployment.

Lasham airfield occupies a large area of around 500 acres (202 hectares). On this are situated various tenants, one of which services commercial jet aircraft and another of which produces parts for commercial aircraft manufacturers such as Airbus. Lasham Gliding Society owns the entire airfield. With the gliding club becoming unviable, the airfield would almost certainly be sold, its likely fate being a housing estate. That would mean that the above business tenants would have to leave the area. The result would be the loss of around 300 jobs in the immediate area.

6. LASHAM VERY STRONGLY SUPPORTS THE RETENTION OF THE PRIVILEGE OF FLYING INTO AND CLOSE TO CLOUD IN THE UK

In conclusion, for all the reasons stated briefly above, Lasham strongly supports the Sailplane Cloud Flying Rating (SCFR) proposal in NPA 2011-16. The training for this should not be unreasonably excessive. We believe that three hours of dual instruction would be adequate.

In addition, Lasham strongly supports a restricted SCFR, which would restrict cloud flying up to the base of but not within cloud. For this, there would clearly be a significantly reduced need for in-flight training.

response *Partially accepted*

Thank you for providing this comment and your support for the SCFR.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1511

comment by: Leonard CROSS

As a instructor of 30years at The London Gliding Club at Dunstable UK,we have always taught our pilots not to enter cloud so they can maintain a See and Be Seen approach to their flying. Very few pilots enter cloud, those that do are usualy commercial pilots who have the IMC rating already. These pilots would not need the 5 hours of instruction that you are suggesting. A glider entering cloud would be circling to stay within the thermal lift and not flying on a heading as a powered aircraft would. When exiting a cloud the glider would staighthen up to plus or minus 30deg of their desired track. Flying between thermals has to be in the most efficient direction not the shortest, so flying on a heading is raely needed. Gliders get their energy from the thermals that start close to the ground quite small, but as they rise they increase their width and strength until the reach the cloud base. The top 1000ft of the lift under the cloud is important to us as it can give us a extra 5 to 10 miles range helping to avoid a potential damaging out landings in fields.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment *1512*

comment by: *Mark FISHER*

I wish to register my support for the

EASA NPA 2011-16 – PROPOSALS FOR IMC FLIGHT

In my view:

Gliding in the UK has taken place in and near cloud for decades and accident statistics support the assertion that this is a safe practice.

The BGA take a strong and knowledgeable control of gliding activity in the UK. The proposals in the above document are entirely sensible and are supported by the BGA and the gliding community in the UK. Flying in and near cloud can be done safely by gliders, and those who do so are only too happy to comply with the proposed training and licensing/rating requirements to enable them to continue to do so safely.

I am a PPL and NPPL holder and a UK based glider pilot.

response *Noted*

Thank you for providing positive feedback.

comment *1513*

comment by: *Simon Langtry*

In response to NPA 2011-16 (the EASA Cloud flying proposals). I am against any regulation that prevents glider pilots flying close to cloud.

response *Noted*

Thank you for providing feedback.

comment	1514	comment by: <i>Robin May</i>
	I support the proposed Sailplane Cloud Flying Rating.	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	1515	comment by: <i>Andy Vidion</i>
	<p>Most glider flying takes place in IMC and many glider pilots never fly in cloud. A restricted rating for flight within 1,000 feet of cloud would seem a practical way forward. Certainly if it makes the aviation environment safer. Cloud flying is carried out by some experienced cross-country pilots and might be necessary when descending from a wave flight, so an additional rating to continue this could be appropriate.</p> <p>The proposed theoretical training looks about right for the cloud flying rating and any restricted rating for flying within 1,000 feet of cloud.</p> <p>The practical training doesn't look quite so appropriate for the cloud flying rating because some pilots are likely to require more than five hours training whereas others will require less or even none.</p> <p>So there is sufficient need for a rating for pilots intending to fly in cloud and for a restricted rating for pilots who only intend to fly within 1,000 feet of cloud - but not in it. Theoretical training for both ratings is probably justified.</p> <p>Andy Vidion Full Category BGA Instructor, Norfolk Gliding Club, Tibenham</p>	
response	<i>Partially accepted</i>	
	<p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>	
comment	1516	comment by: <i>A R Newbery</i>
	<p>I am an active and experienced glider pilot in the UK and regularly fly my glider on cross- country flights. In general I support the measured proposed in NPA2011-16.</p> <p>In the UK we have flown gliders close to cloud and in cloud for many years with a high level of safety. This privilege is vital to our sport and without it gliding would be seriously limited. It should be available as a rating on all forms of sailplane licences (LAPL and SPL). However, cloud flying does require skill. The measures in NPA2011-16 for SCFR are appropriate for flying within cloud although the requirement for 5 hours training is excessive and would be very difficult to achieve in an unpowered 2 seat sailplane. Many motor gliders have very different handling characteristics and training in such aircraft may not be particularly relevant.</p> <p>Many glider pilots are only interested in flying close to cloud rather than within cloud. I believe that a restricted SCFR is needed to allow flight in such conditions. This type of flying does not require special flying skills but it would be reasonable to expect the pilot to complete the theoretical knowledge training that is planned for the SCFR.</p> <p>Dr Anthony Newbery</p>	

response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment and your support for option 1. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(S)/SPL/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>1517 comment by: <i>MikeBIGGS</i></p> <p>I am an active member of the London Gliding Club based in Dunstable and I support this sailplane cloud flying rating proposal.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1518 comment by: <i>Steve Gaze</i></p> <p>I wish to support the EASA proposal for a Sailplane Cloud Flying Rating, preferably with the changes suggested by the British Gliding Association.</p> <p>I think it is essential for gliding in the UK that we retain our cloud flying privileges.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.</p>
comment	<p>1519 comment by: <i>David Smith</i></p> <p>I am a private sailplane pilot who enjoys cross country flying</p> <p>The rationale for Option 1 envisages encouraging cloud flying to achieve a greater "operational area", five hours training will mean that more pilots will use that qualification and together with the training time will add to the risk of collisions .</p> <p>On any summer day in the UK there will be 1000 gliders flying, there is no see and avoid in cloud and will result in more collisions. Whereas at present most stay clear of cloud for the entire flight more pilots WILL use the qualification if it is introduced.</p> <p>I support Option 2 where pilot stay clear of cloud and undertake extra training, this will not unduly affect pilots and will not add to the risk of more sailplanes cloud flying</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/option 2 — restricted cloud flying rating) were also identified by BGA.</p>

comment	1520	comment by: Del
	This is to confirm my support for the EASA proposal for gliders being allowed to fly in and close to cloud within the scope of NPA 2011-16.	
response	Noted	
	Thank you for providing feedback.	

comment	1521	comment by: Erkki Soinne
	<p>The comments are based on being a cloud flying instructor and flight examiner of national cloud flying skill tests and 25 years experience of cloud flying with turn and bank instruments.</p>	
	<p>Page 19</p> <p>In Finland it is also allowed to use a Touring Motor Glider for cloud flying training. Experience has shown that especially at the beginning of the training it is a more efficient way of instruction. We suggest that the use of a TMG for cloud flying training is added in the text.</p>	
	<p>In Finland the renewal of the cloud flying rating does not require a skill test but one hour of cloud flying experience during the last 24 month period. The experience shows that the accident statistics has been good with no cloud flying accidents due to lack of skill. For this reason we consider the skill test superfluous causing unnecessary costs and paperwork.</p>	
	<p>Page 191</p> <p>In the practical skill test it is not logical from the flight safety point to have two different minimum skill levels depending on the glider instrumentation. Artificial horizon offers a more direct control of the glider and consequently this would allow the pilot to make larger excursions from the nominal flight path without risking the flight safety. We suggest that only one minimum level is established in the regulation.</p>	
	<p>In straight flight a heading requirement of +-20 degrees is reasonable.</p>	
	<p>The specified requirement in straight flight on speed of +- 20 kts IAS means +- 35 kmh IAS which feels so large that the pilot does not have control of the aircraft and poses a safety risk. The current limit in Finland is +-20 kmh IAS which is still so large that all pilots do much better in skill tests. We suggest that a more stringent speed limit is of +- 13 kts (20 kmh) IAS is set.</p>	
	<p>In turning flight the requirement on rate of turn is specified as between ½ & full scale. This is much more than the current Finnish requirement of "small deviations in rate of turn". If the rate of turn varies between ½ & full scale the pilot does not have control over the aircraft and poses a safety risk. All pilots do much better in skill tests. We suggest that a more stringent limit of "small deviations in rate of turn or bank" is set.</p>	
	<p>The specified requirement in turning flight on speed of +- 20 kts IAS means +- 35 kmh IAS which feels so large that the pilot does not have control of the aircraft and poses a safety risk. The current limit in Finland is +-20 kmh IAS which is still so large that all pilots do much better in skill tests. We suggest that a more stringent speed limit of +- 13 kts (20 kmh) IAS is set.</p>	

The requirement on position fixing with a GPS instrument feels superfluous. There is no need to stay at a certain point with a glider as it cannot be guaranteed to maintain a specified flight level. Also GPS instruments are not as a rule available in training gliders and would impose an additional cost. At present in Finland there is no such requirement. From flight safety point it is sufficient to be able to leave a cloud in straight flight in a chosen heading. At present there is minimum skill requirement in Finland of orientation into a specified heading within +/-30 degrees. We suggest this requirement instead of the position fixing.

Page 192

It is unclear what is meant in the AMC by basic cloud escape manoeuvre / unusual attitude and advanced cloud escape manoeuvre on nominated heading. At present in Finland the skill test includes beginning stall in straight flight, beginning stall in turning flight, beginning spin and unusual flight attitudes and controlling the glider back to straight flight from all these flight conditions. We suggest that the text should be made more clear and cannot give more detailed comments before understanding what is meant.

Page 231

We support Option 1 cloud flying rate (**SCFR-full**). In a number of European countries cloud flying is not permitted but in quite a number it is. Cloud flying is a way of gaining experience in instrument flying in an inexpensive manner. Thus it provides many people an introduction that can lead to a professional pilot career. So it contains an important function in attracting people to aviation. It also provides a leisure activity that many pilots value very high and should be retained as an option. With an EASA cloud rating pilots all over from Europe are welcome to the European countries for cloud flying that have air space for this activity for equal benefit of EU citizens.

response

Partially accepted

Thank you for providing feedback.

Certain elements of the training can be trained on TMGs. As the instructor will have the same privileges regarding this rating, these exercises have to be flown under simulated IMC and not in clouds. This will be addressed in AMC FCL.830.

The Agency has added more detailed requirements for the recency requirements to the rule text. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. If the holder of a cloud flying rating does not comply with this requirement, the holder shall pass a proficiency check with an examiner or perform the missing flight time flying dual with an instructor in order to fulfil the requirement. Holders of a valid EIR or an IR(A) will be credited in full against the requirements.

With regard to different skill test minima, the Agency would like to clarify that a single minimum skill level is indeed appropriate when both main and standby instruments are artificial horizons/attitude indicators. It used to be normal, however, for airliners to be fitted with turn needles as the principle standby instruments: then, wider limits would be specified for this flying. Such wider limits are appropriate for glider turn needle use. The use of two different levels of skill test is also common practice in several Member States.

With regard to the proposed skill test speed limits, the Agency partially accepts your proposal and has reduced the limit to 15 kt (27km/h).

With regard to your comment on making turns, the Agency accepts your proposal and has amended the text accordingly. The turbulent conditions of a thermal mean that the rate of turn variations can be normal, with no implications on the control exercised by the pilot. The text now states '... small deviations in rate of turn with a maximum deviation between ½ and full scale' when the turn & slip instrument is used.

With regard to GPS position fixing, the Agency would like to highlight that there are many volumes of European airspace where position fixing is essential. Within gliding, GPS equipment is both ubiquitous and cheap. Requiring that pilots are trained in its use is not an onerous requirement.

With regard to your request for 'more detailed skill test items', an AMC 'Flight Examiner Handbook' to Appendix 9 is currently being developed in a separate rulemaking task and should clarify the issue you raised.

comment	1522	comment by: <i>David Salmon</i>
	I am in favour of the proposal for the Sailplane Cloud Flying Rating contained in NPA 2011-16.	
response	<i>Noted</i>	
	Thank you for providing feedback.	

comment	1523	comment by: <i>Tom Farquhar</i>
	Ref. BGC/SO/TF	
		2, Dunlin Drive South Beach Blyth Northumberland NE24 3SH
	22 nd December 2011	
	EASA Europe	
	Dear Sirs	
	Cloud Flying	
	I am a licenced glider pilot with no current IMC qualifications, and should like to submit my views in response to the EASA NPA 2011-16 Proposals for IMC Flight.	
	I have been aware for some time of the fact that a number of gliders often take an "elastic" view of the distances in the degree they are to stay clear of cloud under VFR.	
	I would welcome any change in the cloud flying rules to encourage a greater number of pilots to increase their cloud flying abilities and qualifications.	

As such I support the SCFR and its proposal to be available to glider pilots.

The requirement for 5 hours of dual flight training is a little excessive and bearing in mind the pilots will spend much of this time unable to seek and maintain lift whilst under instruction that may entail shrouded eyes, this would result in a far greater number of flights than some pilots may care to pay for.

I also consider the BGA proposal of 3 hours to be excessive, and would have preferred a 2 hour stipulation.

I would strongly endorse any proposal to be able to carry out this training in a touring motor glider, for the reasons stated above.

I appreciate if TMG's are actually allowed to cloud fly under the new SCFR , pilots may not be encouraged to take the full IFR rating and would not endorse this.

Yours faithfully,
Tom Farquhar

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 1524

comment by: *Andrew Davis*

Page 11:

I support the proposed introduction of the Sailplane Cloud Flying Rating for SPL and LAPL(S) holders in order to allow IMC flight in cloud in sailplanes to continue in the UK and to become available throughout the EU where airspace permits. I support this on both safety grounds as discussed in the NPA and in the interests of maximising operational flexibility.

I support the concept of a skills based test before a pilot is granted cloud flying privileges. However the requirement for 5 hours dual instruction for all pilots is excessive given that many UK glider pilots are already very experienced at cloud flying and very competent in doing so. Furthermore many glider pilots also have instrument flying experience from other forms of aviation (e.g. in addition to 5000 + hours of gliding I am a 20000+ hour airline pilot with instrument rating). If the individual can pass the skills test with his existing experience and skill why have a requirement for 5 hours of unnecessary training? A training requirement tailored to the needs and experience of the individual pilot and/or grandfather rights should be considered.

Page 15:

In my opinion, there should also be a Restricted Sailplane Cloud Flying rating to facilitate flight in IMC but not actually in cloud. This would be appropriate for pilots who do not wish to or cannot commit to the expense and training commitment required to qualify for the SCFR and indeed might not even have cloud flying instrumentation in their sailplanes. However a Restricted SCFR would facilitate both wave and thermal soaring where appropriate both

for needs of safety and operational flexibility the sailplane pilot often needs to fly close to cloud horizontally and/or vertically but not actually in it. There much evidence to support the contention that enabling gliders to operate in a deeper vertical working band greatly reduces the dangers of glider on glider mid air collision and the incidence of glider field landing accidents.

Thank you for the opportunity to comment on this NPA.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(S)/SPL/5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1525

comment by: *Mark STEWART*

Response to:- **NPA 2011-16 Qualifications for flying in Instrument Meteorological Conditions**

My name is Mark Stewart and I'm a glider pilot residing in the UK and flying primarily in Northern Ireland at the Ulster Gliding Club. I occasionally fly in England and Scotland at various sites. I have been gliding for over four years. I am also the holder of a UK NPPL completed this year. I am writing to add my strong support to the proposal to have a new pan European Sailplane Cloud Flying Rating. I believe this new rating and the proposed requirements to gaining it will have a significant benefit regarding pilot knowledge and skills and will ultimately enhance the already excellent UK gliding cloud flying safety record.

As a UK glider pilot flying in Northern Ireland it is especially important that the existing privileges of cloud flying and flying clear of cloud in IMC are retained. As a result I am very disappointed a Restricted Sailplane Cloud Flying Rating as suggested by the BGA was not included in these proposals. My understanding is that this would have allowed flight in IMC but clear of cloud, which is by far what the vast majority of ordinary UK glider pilots require as a privilege. Flying in cloud is not very common.

The UK in general and Ireland especially suffer very low cloud bases compared to our central European neighbours. Flying only VMC would greatly limit our sport on the best weather days and prevent us from flying at all for most of the year. To put it bluntly, an Irish glider pilot constricted to flying in VMC only would be forced to consider retiring from the sport entirely. This situation would be very sad considering that we are merely asking for the continuation of privileges we already enjoy and practice routinely with an excellent safety record.

response *Noted*

Thank you for providing this comment and your support for the SCFR. With regard to your comment on the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment 1526

comment by: *AOPA netherlands*

Attachment [#4](#)

See the attachment.

response *Partially accepted*

Thank you for providing these comments. The Agency has reviewed your document and has provided responses to each item below:

1. The Agency confirms the EIR has been extended to the CPL(A).
 2. The Agency shares your view behind the proposed EIR. For practical reasons the Agency is unable to retitle the proposed rating and will keep it as EIR.
 3. Thank you for your support for the EIR.
 4. Thank you for providing this comment.
 5. The Agency agrees with your comment and has amended the proposal to reflect this.
 6. Correct.
 7. The Agency would like to highlight that any prior military IR experience needs to be credited via credit report. This process is the responsibility of the Member State.
 8. Thank you for the support for the sailplane cloud flying rating. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR not to comply with these ICAO requirements. Therefore, a sailplane towing pilot will require either an EIR or IR(A) to operate in IMC conditions.
 9. Thank you for providing this comment.
 10. With regard to language requirements, the EIR holder has no FCL language requirement; however, the competency-based IR(A) holder will be required to comply with FCL.055.

UK IMC may be converted into a Part-FCL rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.
- The Agency does not foresee that towing close to the clouds is required during the sailplane cloud flying training. However, during normal operations a towing pilot will require either an EIR or IR to conduct flights within 1 000 ft of clouds above 3 000 ft.
11. The Agency agrees with your comment and has amended the proposal to allow an EIR holder to fly IFR at night if he/she also holds a valid night rating.
 12. The Agency partially agrees with your comment and has reduced the requirement to at least 2 hours of multi-engine instrument flight instruction at an ATO. In addition, after receiving several comments from other stakeholders, the Agency decided to include a specific multi-engine EIR course.
 13. Thank you. This has now been amended.
 14. The Agency has decided to keep the validity period as proposed to stay in

line with the full IR(A). However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.

15. The Agency agrees, after receiving several other similar comments, and has amended the proposal to exclude TMG from the sailplane cloud flying privileges.

16. Not accepted. The pre-entry assessment should establish the basis for the subsequent training at the ATO, and in addition if the pilot is not progressing as expected more training should be given by the ATO. In general this applies to the overall training. The Agency also developed a new AMC requiring the applicant upon arrival at the ATO to present a training record signed by the instructor stipulating aircraft type used, total instrument flight instruction time and exercises completed.

The Agency believes that any below standard instruction outside an ATO will be communicated via the existing link between the ATO and the competent authority. In conclusion these items and the final skill test should ensure that an appropriate quality standard is achieved. As a result the Agency will keep the pre-entry assessment requirement as proposed.

17. The Agency agrees with your comment and, after receiving several similar comments, decided to amend the text accordingly. Oral examination of theoretical knowledge can be done during the skills test and the experience requirement has been changed to 50 hours of flight time under IFR as PIC on aeroplanes.

18. Please refer to item 16 as the response given covers the issue you raise here.

19. The Agency agrees with your view. This is already reflected in the proposal.

20. Not accepted. The Agency considers 'instrument flight pattern' an essential element of the basic instrument flight training and has decided to keep it as proposed.

21. Not accepted. The Agency would like to highlight that it is important to expose an EIR student to such an environment. The instructor/ATO should endeavour to find such an environment to ensure the student gains relevant experience. Therefore, the text will be kept as proposed.

22. Not accepted. The Agency agrees, that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.

23. Please refer to item 10 as the issue you raised is also covered by this response.

comment 1527

comment by: LGC

I am writing in response to NPA 2011-16, Restricted Sailplane Cloud Flying Rating.

	<p>I have only recently started training as a glider pilot. The main reason for my interest in this particular sport is accomplishing cross country flying. As far as I understand from the NPA, the cross country flying will be restricted by the new proposal. I would like to vote against the proposed Restricted Sailplane Cloud Flying Rating. For me, it is important that we retain the privilege of flying close to or into cloud, in order for enthusiasm about Gliding to be retained.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and we acknowledge your vote against the restricted cloud flying rating. With the proposed full cloud flying rating you will be able to fly close or into clouds.</p>
comment	<p>1528 comment by: <i>Peter FRANCE</i></p> <p>From- Peter France, being a Member of the South Wales Gliding Club , an instructor and tow pilot with some 2500 hours experience. I wish to endorse the current proposals for qualification to fly gliders in Instrument Meteorological Conditions, which I think would contribute to flight safety. I would like also to endorse the views of the British Gliding Association relating to this proposal.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for the full cloud flying rating.</p>
comment	<p>1529 comment by: <i>Graham Nixon</i></p> <p>I wish to register some comments regarding the above NPA 2011-16 and in particular with regard to Sailplane Cloud Flying rating . i have attempted to register these through your online method without success so would be grateful if you would duly note officially the comments below. Confirmation of receipt would appreciated by emailing to graham.nixon9@btinternet.com In essence the proposals to permit sailplane cloud flying with the appropriate rating will be vital to ensure continued safe flying in this environment for sailplanes. The requirement however to have a minimum 5 hours on Dual Flight Training I do believe is excessive. Training methods are such that a pass would not be issued unless sufficient competence is shown and with this background 5 hours does seem excessive. 3 hours seems a more reasonable time. the ability to fly near or in cloud for the sport of sailplanes is essential. Current records indicate a history of safe flying. it is hoped that a practical compromise can be reached so that safe flying within the environment covered by these proposals can be achieved without placing to erroneous regulations. NPA 2011-16 goes along way to achieving this. Yours faithfully Graham Nixon</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) were also</p>

identified by BGA. The Agency would like to highlight that the full cloud flying rating will permit flight near or in the cloud.

comment 1530

comment by: *Harrison*

1. I support the proposal for a Sailplane Cloud Flying Rating as it will add the safety and enjoyment of our sport.
2. I am not aware of any accidents or collisions in the UK due to cloud flying.
3. I fully support the proposals from the BGA for a restricted SCFR as the majority of pilots only wish to fly up to cloud base to greatly extend our gliding range for long cross country flights.
4. The ability to safely fly up to cloud base will maintain the feasibility and viability of our sport. If we are not able to do this then more pilots will leave the sport and clubs will close with lose of employment and outdoor sport and amenities. Many young people find inspiration and motivation in our sport and we cannot afford to lose this rare opportunity.
5. 5 hours training with a two year refresher seems an excessive burden. The restricted SCFR would be a good compromise with say a one hour annual lecture refresher by the CFI on the protocols and dangers of flying near cloud base.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and as all the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1531

comment by: *Roy Partington*

[NPA2011-16.pdf](#) [Cloud/instrument flying for glider pilots.](#)

I apologise for not being able to use the EASA CRT website correctly but time is pressing and this seems the only way to make a comment before the deadline (today).

I feel the SCFR is to be strongly recommended as gliding in the UK would be seriously hampered without it.

It is often necessary to fly close to cloud when soaring in wave or flying cross country in thermals. (I was trained in basic skills in the rear seat of a tandem glider with the view outside obscured with white fabric.)

Several times I have been high in wave and had to descend rapidly as the cloud gaps below closed (it requires a very small drop in temperature for this to happen). It may be that the final part of the descent has to be in cloud for a brief period in an area with known terrain clearance and well outside controlled airspace.

It seems to me that it is vitally important that glider pilots in the UK should be allowed to continue to fly in or close to cloud and if the SCFR is needed to accomplish this, then I wholeheartedly support it.

	<p>Roy Partington.</p> <p>1300+ hours gliding. Former CFI Ex MGIR 1400+ hours power. IMC. Ex AFI</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for the full cloud flying rating. This rating will ensure that sailplane flights are permitted near or in the cloud.</p>

comment	<p>1532 comment by: <i>Firecrest</i></p> <p>Section 18 As currently worded it is unclear whether the instructional courses for the EIR and Modular IR should be 40/15/18 hours or whether the flight time by instruments should be 40/15/13 hours. Where flight time by instruments is specified it should be stated as "sole reference" to instruments to prevent completion of the courses without ever having flown in actual/simulated IMC. Suggested changes below: (a) The flight instruction for the single-engine competency-based modular IR(A) shall include at least 40 hours of instrument flight instruction by reference to instruments</p> <p>(a) The flight instruction for the single-engine competency-based modular IR(A) shall include at least 40 hours of instrument flight instruction, <u>of which 30 hours should be flight by sole reference to instruments</u></p> <p>(i) The instrument flight instruction for a single-engine EIR shall include at least 15 hours of flight time by reference to instruments.....</p> <p>(i) The instrument flight instruction for a single-engine EIR shall include at least 15 hours <u>of instrument flight instruction, of which 10 hours should be flight by sole reference to instruments</u></p> <p>(ii) The instrument flight instruction for a multi-engine EIR shall include at least 18 hours of flight time by reference to instruments.....</p> <p>(ii) The instrument flight instruction for a multi-engine EIR shall include at least 18 hours <u>of instrument flight instruction, of which 13 hours should be flight by sole reference to instruments</u></p> <p>General</p> <p>Although I am not an IRE or IRI, I am qualified to both teach and examine for the UK IMC Rating. If the UK IMC cannot be allowed as a National Rating then I, and many others like me, will be deprived of our livelihood.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Part-FCL already has the following definitions: 'Instrument flight time' means the time during which a pilot is controlling an</p>

aircraft in flight solely by reference to instruments,
'Instrument ground time' means the time during which a pilot is receiving instruction in simulated instrument flight, in flight simulation training devices (FSTD) and
'Instrument time' means instrument flight time or instrument ground time.

The Agency has reviewed and harmonized the use of terms. 'Instrument flight instruction' and 'Instrument time under instruction' mean that the student is piloting the aircraft by sole reference to instruments based on those definitions.

The existing national ratings such as UK IMCR may be converted into Part-FCL ratings during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment

1533

comment by: *Frank Roles*

Dear Sirs,

I am a sailplane owner / pilot based in the UK.

I have read your document :

EASA NPA 2011-16 - PROPOSALS FOR IMC FLIGHT

and would like to make the following comments:

1. General.

I consider these proposals to be very positive in principle, and of great importance for safe, effective operation of gliders in the UK where cloudbases tend to be lower than within continental Europe. I would also respectfully suggest some refinements (below) to your proposals, based on many years of practical experience flying sailplanes.

2. FCL 830 (b) (1) - page 18

The requirement to have 30 hours PIC of a sailplane after issuance of license does not appear logical, as it takes no account of currency prevailing on the day that the license is issued.. Minimum 30 PIC of sailplane within last 24 months may be better.

3. FCL 830 (b) (2) (ii) -'fixed duration of dual flight instruction' - page 19

The proposal at next para (3) for a skill test is commendable and this should be more than adequate for sailplane soaring in IMC.

However, this means that the proposal for a fixed duration of dual flight instruction prior to the test is unnecessarily prescriptive. Various pilots will achieve the desired level of skill with different amount of instruction. The ability to pass the test should be the only mandate, otherwise it would incur unfair and unnecessary expense.

4. FCI 830 Skill Test (Practical - exercises) page 192

The inclusion of "basic cloud escape manoeuvre / unusual attitude" would be of great benefit / safety to pilots flying sailplanes within cloud (not just IMC) and without visual references. Highly commended.

However, the "advanced escape cloud manoeuvre on a nominated heading" appears an unnecessary further addition, given that "achieving and maintaining heading" has already been demonstrated.

5. Issue Analysis and Risk Assessment (2.1) - "The operational range of sailplanes" - page 229 , 230.

I strongly endorse the case made here by your proposals which recognizes the

improvement to safety of flying sailplanes - in terms of the greatly enhanced range, and vertical separation, that is enabled by flying in IMC. In particular, the increase range enables reaching suitable land out areas that may not be reachable for sailplanes confined to below 3000 ft., which would apply more here in the UK.

I hope the above provides useful feedback to your request for feedback in refining your constructive proposal EASA NPA 2011.

Regards

Frank Roles

response *Partially accepted*

Thank you for providing this comment.

The requirement for 30 hours as PIC in sailplanes or powered sailplanes after issue of the licence means that the applicant for sailplane cloud flying rating (SCFR) cannot include solo flight time but only that PIC time which he/she has accumulated after issue of his/her sailplane licence. In addition, he/she needs to fulfil the recency requirements to operate sailplanes (see FCL.230.S).

Several other comments stated also that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

Regarding skill test, the combination of escape manoeuvre leading to a nominated heading is seen as an important skill that must be demonstrated by a pilot under test.

comment 1534

comment by: *Helen EVANS*

1. I am writing to give my response to EASA NPA 2011-16 (Qualifications for flying in IMC).

2. I must start by saying that I do not believe there is a safety case for any EASA regulation of UK gliding whatsoever; the sport in this country has a long history of successful self-regulation and a demonstrable and current track record of continuous safety improvement (eg, the British Gliding Association's Winch Launch Safety Initiative).

3. What's more, unnecessary and/or overly burdensome regulation, given the well-known Law of Unintended Consequences, can in fact create more dangers than the risk that it is intended to address. I believe that that would be the case if glider pilots were to be prevented by EASA rules from flying in and "near" cloud. However, since the forthcoming regulation is clearly unavoidable, I offer the following detailed response.

4. I support the proposal in the NPA for the creation of the SCFR, available to both LAPL (S) and SPL holders; I welcome the principle of its being earned by

passing a test; and I believe it should be enacted as an integral part of any regulation resulting from this NPA.

5. Since the proposal is for a competency-based qualification, presumably I would fail the test if I didn't prove my competence, so fixing a minimum training period of five hours seems a bit bizarre. Some pilots will be able to prove their ability after much less time; others may require more. The additional cost, and the burden on the training fleet and the instructor cadre, of a five-hour minimum training period seems disproportionate.

6. I would prefer no minimum training time to be assigned – it seems to me to serve no practical safety-related purpose.

7. I can see that as a regulatory authority you would worry that SCFR holders might abuse that privilege by flying Touring Motor Gliders in cloud; however, given the climate-related issues affecting UK glider pilots in particular (we live in a damp island country, with low cloudbases compared to mainland Member States), getting access to enough two-seat pure sailplanes to undertake the kind of training hours for the SCFR that you're talking about, alongside all the other training demands on the UK fleet, could be highly problematic.

8. The UK gliding movement addresses this problem in general training by the selective use of Touring Motor Gliders in certain roles (eg, circuit practice, field landing training, navigational exercises, etc); I believe Touring Motor Gliders should be used for SCFR training also and that the NPA and subsequent regulation should be amended to permit that.

9. I wish you Merry Christmas, Joyeux Noel and Froehliche Weihnachten. I am now going to switch off the computer and spend some time with my family!

Yours sincerely

Helen EVANS

Leisure pilot (Gliders/Sailplanes)
Commentator position: personal view

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1535

comment by: *S G Gaunt*

Dear Sir,
I attempted to make the below response via the CRT, but the session appeared to hang when saving the comment ... Please find below a copy of the text I was attempting to save as a General Comment on the CRT web service.

Response ;

I have been made aware of the potential (harm) to gliding of EASA regulation in relation to IMC flight and also to this particular document (NPA 2011-16) in its attempt to consider the impact on gliding and the proposal for a Sailplane Cloud

Flying Rating (SCFR). I have also been made aware to the British Gliding Association (BGA) response to this document and to their specific four (4) point response.

I should also declare an interest as a current Glider Pilot (Cross Country) with an obvious interest in maintaining freedom of movement for Gliding and Glider Pilots.

I would immediately declare my support for the BGA response and believe them to be the appropriate authority in the UK for discussion around air regulation, it's incorporation and effect on Gliding. I believe the BGA has proved itself over a number of years to be the proper authority for such discussion, respected across the gliding community both inside and outside of the UK.

I am generally in favour of the SCFR, believing it to be a mechanism to allow gliding flight to continue broadly in line with current (gliding) activity in the UK. I do have concerns over the implementation of training and currency, my specific concern being on the burden and cost placed on the pilot to prove proficiency to the appropriate person and/or body. I believe the BGA has entered a response to this, I would suggest that the responsibility for proficiency be largely devolved to the local club level with such a frame work monitored by BGA inspection.

Gliding as a form of flight relies on the pilot being able to maximise the potential (energy) that the day has to offer. There are really only two forms of energy available to a soaring pilot, height and speed. Anything that impinges on the pilots ability to maximise either of these places restrictions on the pilot and their ability pursue continued flight. It might even be considered that restrictions on a glider pilot to maximise gains in height could lead to transit across airspace or ground features at undesirable height or possibly lead to more dubious decisions in flight path.

I am of course conscious of the rules governing air space and separation and realise that with an increase in air traffic such things must be reviewed periodically. However, I believe gliding a popular form of sports flying, accessible to a wide cross section of society, providing unique challenges and rewards not replicated in other forms of flight, for both goal / competitive orientated pilots and social / fun fliers alike. As such gliding should be provided due consideration when reviewing, amending or adding regulation to air rules, such that it not be adversely effected.

Regards,

Sean Gaunt.

response

Noted

Thank you for providing this comment and your support for the sailplane cloud flying rating. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment

1536

comment by: BGA

Attachment [#5](#)

See the attachment.

response *Partially accepted*

Thank you for providing this comment.

BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment 1537

comment by: *Stephen Powell*

I support the Sailplane Cloud Flying Rating option 1 for both the LAPL(S) and the SPL because of the safety reasons outlined in NPA 2011-16.

Stephen Powell (Glider Pilot)

response *Accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (LAPL(S)/SPL) was also raised by them.

comment 1538

comment by: *Chris Starkey*

This is a response to NPA 2011-16 regarding the proposed EASA regulations on cloud flying.

I spent some time attempting to use the Comment Response Tool, without success. I run 64 Bit Windows 7, and Internet Explorer 9. Whenever I attempted to save a comment, half a progress bar would appear on the right half of the split screen window saying "Please wait operation in progress", the comment section would grey out, but the operation would never complete.

I completed a survey on the usability of the tool only a week ago, when I gave it a clean bill of health - my answers would be somewhat different now.

Please accept this email as my comments.

Best Regards,

Chris Starkey

As a glider pilot my response is confined to the sections related to the SCFR. While my preference would be to maintain the status quo whereby the BGA regulate cloud flying in sailplanes in the UK, I understand that having a formal SCFR brings advantages, and broadly support the proposal in NPA 2011-16. If the UK gliding community were to lose our present cloud flying privileges in the UK, then the days on which the weather was suitable for cross country flying would be greatly reduced, with a major impact on the viability of the sport.

Ref Page 11 - section 3.4 Validity...

A 24 month renewal period seems onerous. I would view 5 years as adequate.

Ref Page 190

The requirement of a minimum number of hours of training for the new SCFR seems unnecessary. In particular 5 hours flying training is far in excess of what is needed for the majority of sailplane pilots.

I have been gliding since 1978, have about 3000 hours experience in sailplanes, and have flown competitively representing the UK in the World Championships in 2003, and in the European Championships in 2011. I received cloud flying instruction which comprised less than an hour of sailplane flying time "under the hood" (though rather more ground instruction). At no time in my gliding career have I had a problem when flying in cloud, a privilege which I have exercised typically a few times each year.

I also hold a (lapsed) PPL helicopters, and based on the instrument appreciation flying that was part of the PPL syllabus I would judge the workload there to be significantly higher, involving engine management, communication with Air Traffic Control, and generally higher handling skills. I am concerned that the minimum hours requirement is being driven by experience in the power world.

The BGA has regulated cloud flying in the UK, on a competency basis, not a minimum hours basis for over 60 years. I would urge that the test should be one of competency, not a rubber stamp of some minimum number of hours, which by its nature will be too few for some, and too many for others.

Ref Page 229 Section 2.1

The description of the issues for sailplanes seems fair and balanced. There have been a fair number of occasions in my gliding career where I would have been unable to safely continue on a cross country task without the ability to fly inside cloud.

However, the nature of the British weather, and lack of opportunities for safe out landings in some areas (particularly close to airspace), and at some times of the year, mean there are a far greater number of occasions when it would have been unsafe to depart on, or proceed on, a cross country, without the ability to fly up to cloud base above 3000ft AMSL.

Ref Page 231 Section 4 Identification of options

I am puzzled that the proposal appears to view Option 1 and Option 2 as mutually exclusive. I would like to see a general privilege to fly IMC but clear of cloud in appropriate airspace as part of the normal Sailplane Flying license, and an additional rating as outlined in Option 1 covering flight in cloud.

Ref Page 234 Section 6.1 Safety Impact

I think the increase in safety risk of Option 0 is underestimated. In practice in the UK there would be many more days each year on which it would no longer be safe to undertake cross country flight.

I think the benefit of Option 2 is underestimated.

Ref Page 235 Economic Impact

Paragraph 4 states that the Agency estimates less than 10% impact across Europe, but provides no data on which this is based. I have flown extensively in France, Austria, Poland, Spain and Lithuania. My personal experience would indicate that Option 0 would have a lesser impact in these countries as cloud bases are typically higher than in the UK, but nonetheless that the impact would be severe.

response

Partially accepted

Thank you for providing this comment and your support for the sailplane cloud flying rating.

The Agency does not agree with your proposal to increase the recency period from 24 months to 5 years, as the 24-month period is a standard time frame used for several other types of ratings.

In addition, please check the response provided to the British Gliding

Association (BGA) comment No 121 as the issues you raised (5 hours training/option 2 — restricted cloud flying rating) were also identified by it.

comment 1539 comment by: *Richard Walker*

As a glider pilot I wish to support the Sailplane Cloud Flying Rating (SCFR) Proposal.

response *Noted*

Thank you for your support for the sailplane cloud flying rating.

comment 1540 comment by: *Jonathan Abbess*

In brief:

- I agree with, and support NPA 2011-16.
 - Option 2 SCFR-R a Restricted Sailplane Cloud Flying Rating looks like the way forward for most glider pilots.
 - Option 1 the "full" rating is likely to be obtained and maintained by a relatively few pilots.
 - Training should be to a standard and not "hours" based.

Reasons:

As a PPL holder, glider pilot, and CFI of a gliding club I am broadly in agreement with the proposals within NPA 2011-16. However with respect to the "Sailplane and Cloud Flying rating" (Section A.III.3) I am very concerned that the training and testing proposals seem to be designed for a power pilot and not for gliding. The majority of glider pilots who NEVER fly in cloud and remain in sight of the surface do wish to fly near cloud (nearer that 1000 feet vertically). The NPA considers "sailplane flight" (Section C.II.2) in VMC and IMC climbing in cloud, but the reality is that the glider pilot can benefit from climbing to cloudbase without going into it. The NPA quotes 3000ft VMC or 5000ft IFR cases but (continuing the NPA example) neglects the 4000ft cloud base possibility with a 30km range, which is the one that most glider pilots would prefer to use. For this reason the Option 2 (Section C.II.4) for the SCFR-R seems the most appropriate for the majority, whilst pilots wishing to climb in cloud may elect to qualify for the SCFR (Full).

From a training perspective, for clubs without access to a TMG, dual time in real or simulated IMC conditions is going to be difficult to achieve in terms of "hours" (given that a typical winter flight is six or seven minutes total duration). I strongly believe that training should be to a standard, and not in terms of "hours".

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the BGA comment No 121 as all the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 1541 comment by: *Julian Hitchcock*

Please don't ruin our gliding with over regulation & don't burden UK pilots with any more than the current BGA requirements. -

I.e. On frequency with a working Radio 130.4, wearing a serviceable parachute,

flying with a serviceable full blind panel, free of cloud when entering from below & vertical separation of more than 500ft QNH of any other traffic, Maintain frequent radio calls throughout giving current height & position, co-operate with other pilots in the immediate locality and comply with airspace restrictions.

Two excellent English sayings to summarise my views are "don't throw the baby out with the bath water" or "if it's not broken don't fix it" !

The UK weather is modest at the best of times, without the ability to cloud climb then on many days it won't be possible to fly a serious cross country and sometimes safety is a major factor, without the ability to take a cloud climb on what might be the last thermal of the day to above final glide to nearest airport, will almost certainly result in a field landing and most certainly be more hazardous than a cloud climb.(Insurance claims history, I'm sure will be a testament to this fact, I'm not aware of any accident & claims as a result of cloud climbs but plenty due to field landings) !

Thank you for your kind consideration

Julian Hitchcock Full Category Gliding instructor, BGA MGIR & CAA SLMG FI

Southdown Gliding Club

response *Noted*

Thank you for providing this comment.
The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome as stated in your comment. As a gliding instructor you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which VMC minima are established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment *1543*

comment by: *London Gliding Club*

I am writing to protest about NPA 2011-16 – proposals regarding cloud flying in the UK. As you know, cloud flying has been permitted to glider pilots who have been properly trained to do so safely. This is confirmed by our excellent safety record in this part of our sport of gliding here in the UK, going back over many, many years.

In the same way that pilots are checked and tested by instructors in all aspects of gliding airmanship and emergency procedures, so cloud flying ability is tested and kept in good form by the pilots who practice it. Even in the UK competitions there is a superb safety record with regard to cloud flying.

Please do not try to mend or dispose of something that is not at all broken. There is no need for further regulations in the UK.

response *Noted*

Thank you for providing this comment.
The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which VMC minima are established by ICAO

for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

1544

comment by: *K Holdsworth*

I wish to register that I fully support the British Gliding Associations conclusions on this matter.

response

Noted

Thank you for providing this comment.

comment

1545

comment by: *Francis Parkinson*

I wish to object to the proposal to ban flying near clouds by glider pilots in the UK. At the present time although few UK glider pilots fly actually in cloud (i.e. out of sight of the ground or horizon), due to the typically low cloud base (often about 3000') to glide safely it is necessary to climb to typically 100' below cloud base to gain sufficient height to fly safely to another thermal, climb in that thermal etc. When wave flying it is usually necessary to fly along the front of a lenticular cloud, not in it but often within less than 1000' of it in order to be in lift.

Note that for safety reasons less experienced pilots are recommended to start looking for a safe place to do a field landing at 2000' agl, and ground level is often up to 800', this effectively means that to if glider pilots have to remain 1000' feet of cloud then in order to fly cross country they will have to run a much higher risk of field landings (i.e. forced landings) than is currently the case. Forced landings can be dangerous: there are many field landing accidents every year in the UK. On the other hand I am unaware of any accidents in recent years due to gliders flying legally within 1000' of cloud but not out of sight of the ground or horizon. Thus the proposal will make flying gliders in the UK significantly more dangerous, for negligible benefit.

[The proposal may also result in more people flying hang gliders and paragliders instead of sailplanes: resulting in more accidents as these aircraft are more accident prone.]

It is infeasible for most glider pilots (who fly for pleasure) to gain a full 'blind flying' instrument rating: the cost and training burden are too high. They do not need one anyway because they do not fly actually in cloud, merely near cloud.

I therefore wish to support the proposal that a Sailplane Cloud Flying Rating is created, or preferably a 'Restricted SCFR' (RSCFR) as proposed by the BGA and others. The EASA should reconsider this option. The RSCFR is what glider pilots really need, the vast majority of glider pilots do not fly actually in cloud (i.e. out of sight of the ground (or horizon if above cloud)).

I wish to support the proposal that this should be based on a skills test, the proposed requirement for 5 hours minimum dual training is pointless, and will be expensive and difficult to achieve, and it is doubtful if enough instructors are available to give this amount of training, as the large number of experienced pilots at present fly only for perhaps one hour of check flights / year to

	<p>demonstrate that they are still capable, the proposal that they do an additional 5 hours dual implied the sudden availability of six times as many instructor hours, which is unrealistic, particularly as the instructors themselves will all presumably need to acquire the new rating first.</p> <p>To achieve the SCRF training it is essential that the training can legally be delivered by existing gliding instructors in motor gliders (TMGs), how else can people train?</p> <p>The above comments apply to other nations where flying near clouds is currently legal.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the BGA comment No 121 as all the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) were also identified by BGA.</p>
comment	<p>1546 comment by: <i>General Aviation Awareness Council, UK</i></p> <p>"I agree with the concept of a Sailplane Cloud Flying Rating (SCFR). I have some reservations about the testing and standards set out, but no doubt time will tell as to how effective and appropriate these are.</p> <p>I am disappointed that at present there appears to be no proposal also for what has been discussed as I understand it – a restricted rating, allowing flight (as happens now) close to cloud and therefore IMC, but not in cloud and hence normal non-instrument flying skills."</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the BGA comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1547 comment by: <i>Richard Walker</i></p> <p>As a Glider pilot who has been cloud flying for the past 45 years and instructing for 15 years, I wish to support the Sailplane Cloud Flying Rating Proposal</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for the sailplane cloud flying rating.</p>
comment	<p>1548 comment by: <i>chrisJENKS</i></p> <p>I would like to register my SUPPORT for the SCFR proposal in NPA 2011-16. I strongly believe that this is the best way forward, and that it will cause less impact on our enjoyment of our sport, without compromising safety, which is our paramount directive.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment and your support for the sailplane cloud flying rating.

comment

1549

comment by: *Rupert Robertson*

I am writing to you as an experienced glider pilot with >1000 hours who owns an LS6 glider, (registration 721), having been a member of the London Gliding Club since the 1980's.

We have tried to gain access your CRT site and suspect that it's not working today, or not at least on our computer, hence writing you this email.

I have read your NPA 2011-16 proposal and considered it carefully as all of us in the gliding movement are keen on maintaining and indeed increasing standards of safety.

In brief whilst we might welcome the adoption of some training for new pilots yet to qualify I do strongly feel that a mandatory 1000' restriction from cloud base is not necessary nor appropriate. I do, however, support the BGA's proposal for a more modest level of training where there would be two ratings, one for a glider pilot to fly up to cloud base (RCFR) and a second rating for a glider pilot to be fly in cloud, (SCFR), as the two are quite different.

A blanket restriction of 1000' from cloud would virtually disable our sport in its current form and also increase the number of glider outlandings in the process. It's worth emphasising that glider out landings have a far higher accident rate than flying within the vicinity of cloud under the present system.

I hope that this is helpful and that you will take both my and other glider pilots views into consideration.

response

Not accepted

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1550

comment by: *Ken Moules*

I am a sailplane pilot with more that 1000hrs and some instructing. I also hold a JAR PPL (SEP and TMG).

I strongly support the proposed SCFR and think that the restricted version has merit too.

The theoretical knowledge looks entirely appropriate and should contribute towards further improved awareness and hence safety.

The practical instruction for minimum 5hrs seems high. Some pilots can be trained to solo (round the circuit) in less and I would expect the more able to learn instrument techniques in and hours or so. 5hrs in a pure sailplane will take many many launches and favourable conditions, so a self sustaining or full motor glider will be essential tools.

response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>1552 comment by: <i>Dennis Pasco</i></p> <p>My experience as a flying instructor and CFI at the Cambridge Aero Club (PPL training, including night and IMC) over some 25 years leads me to support the Sailplane Cloud Flying Rating (SCFR). It would, I suggest, engender safer glider flying in the UK. As to Dual Flight Training, I believe it to be unnecessary to dictate a minimum number of dual flight instructional hours. The SCFR is competency based, thus the training requirement should be geared towards achieving the necessary level of skill to pass the flying test. A percentage of pilots with previous experience of instrument flight will almost certainly achieve competency in under five training hours. I strongly support the opinion that SCFR training should be permitted in TMGs.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the BGA comment No 121 as all the issues you raised (5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>1553 comment by: <i>Rod Barrett</i></p> <p>My comment concerns the proposed Sailplane Cloud Flying Proposal which I FIRMLY SUPPORT. I have conducted cloud flying in gliders over a period of nearly 50 years and want to be able to continue this practice. Without the facility to fly in cloud and also to fly in close proximity to cloud, the sport of gliding would be severely reduced in scope. I also consider it a matter of safety that glider pilots should be thoroughly versed and competent in cloud flying techniques and therefore support the training scheme for the cloud flying rating outlined in pages 190-192 of the document.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for the sailplane cloud flying rating.</p>
comment	<p>1554 comment by: <i>willaim Brown</i></p> <p>Issue analysis and Risk Assessment Pages 229-231</p> <p>(see NPA 2011-16 2.1 <i>What is the issue and who is affected?</i>) The analysis is misleading. By its own admission "<i>Flights within cloud are relatively rare</i>". Therefore the majority of glider pilots do not enter cloud during a cross country flight but do fly up to cloud base to extend their range, where allowed.</p>

However the analysis does not evaluate the impact of allowing flights up to but not in cloud.

For example on a day when the cloud base is 4000ft AMSL and the local terrain is 450ft AMSL the operating band is:-

- 1500ft if restricted to 3000ft AMSL,(i.e. not allowed to fly up to cloud base)
- 2500ft if allowed to cloud base

Clearly the ability to climb to cloud base increases the glider's range to 31 km, i.e. 66% greater, and thus reduces the risk of a 'field landing', this advantage increases as the cloud base becomes higher.

The analysis implies this benefit only occurs if entering cloud is allowed, which is clearly not the case.

Analysis of Impacts pages 234-236

The majority of sailplane pilots flying cross country, given the choice, will fly up to cloud base, because it brings the benefit of increased range and a reduction in the risk of a field landing. Therefore Option 2 (allowing sailplanes to fly up to cloud base) will "Maintain or improve the level of safety".

Thus Option 2 should also have a 'Safety' weighting of 3. (Option 2 equates to the current situation in the UK but without the ability to enter cloud.)

Whilst it is clear that the ability to enter cloud provides some incremental additional benefits the overall effect is small and therefore as "*Flights within cloud are relatively rare*", the ability to fly up to cloud base (Option 2) must have virtually the same impact on the 'Overall Objectives' as the ability to actually enter clouds (Option 1) and thus should receive similar weightings in the other "Overall Objectives".

Conclusion and preferred option page 237

By applying the rational above both Option 1 and Option 2 receive a total score of 5

Therefore both options should be approved.

Following the pattern of other licences which have a number of 'Privileges' enshrined in the base licence with additional 'Privileges' which can be earned by further training etc. the recommendation should be changed to incorporate Option 2 as a 'Privilege' in the base licence and Option 1 as an additional 'Privilege'.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the BGA comment No 121 as the issue you raised (option 2 — restricted cloud flying rating) was also identified by BGA.

comment

1555

comment by: *Swiss Air-Rescue (Rega)*

Attachment [#6](#)

See the attachment.

response

Noted

Thank you for providing this comment.

After receiving several similar comments the Agency has noticed that there is a need to create a certain task to develop helicopter IR with similar privileges as EIR and competency-based IR for aeroplanes. This will be taken into account in the Agency's future rulemaking planning.

comment

1556

comment by: *John Adams*

The new EASA proposals - if implemented - will affect gliders and sailplane flying in a drastic way.

Clearly the people making these proposals either a) have no understanding of the nature of the sport of gliding or b) if they do understand, they are deliberately planning to eliminate gliding completely.

To make gliders stay 1000' away and below clouds is impractical.

Cloudbase levels change all the time and in any case how is a glider pilot in flight suppose to be able to measure the distance between his machine and cloudbase.

Quite apart from this it would be virtually impossible for gliding for any length of time to continue if the proposals are implemented.

The nearer to cloudbase a glider flies - the stronger the lift. Without the ability to climb to cloudbase, gliding would be severely limited to short 'circuit - type' flights.

The historic and international sport of cross country flying would not be possible and many glider pilots, like me, I feel, would simply give up - there would be no fun or challenge any more.

In the UK there are already strict rules for gliders pilots which state that the moment visibility to the ground is lost (such as reaching cloudbase or entering a cloud) the pilot must immediately fly down or away into an area of visible conditions.

This seems to work well as there are very few accidents caused by gliders in or near cloud.

I hope EASA will be able to accept my objections to the proposals

response

Noted

Thank you for providing this comment.

The Agency does not agree that the proposal for a harmonised cloud flying rating 'has been made by people who have no understanding' or 'people are deliberately planning to eliminate gliding' as stated in your comment. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which VMC minima are established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

1557

comment by: *Hughes personal comment*

Attachment [#7](#)

	Please see the attachment.
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs) 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test the Agency agrees with the proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.</p> <p>The skill test for sailplane cloud flying rating can be flown also with TMG.</p>
comment	<p>1558 comment by: <i>London Gliding Club</i></p> <p>As a basic instructor at The London Gliding Club and a member of The British Gliding Association in The United Kingdom I fully support the above proposal as a sensible approach to the matter of sailplane flying in or near cloudbase.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment and your support for the sailplane cloud flying rating.</p>
comment	<p>1559 comment by: <i>David Ireland</i></p> <p>Dear Sirs I am writing to inform you that I wish to register my personal support of the British Gliding Association's response to the above NPA 2011-16.</p> <p>David Ireland Silver Badge Glider Pilot, member Stratford-upon-Avon Gliding Club.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency acknowledges your support for the BGA comments. Please check the response provided to the BGA comment No 121.</p>
comment	<p>1560 comment by: <i>Tony CROWDEN</i></p> <p>I have been an active glider pilot for over 30 years and wish to make it known that it is vitally important to the UK gliding movement that we keep our freedom to fly in cloud. If we lost this freedom it would severely curtail our ability to fly cross country to fly ridges and to wave fly.</p> <p>I can already cloud fly and do not need or want 5 hours training. All that would be required to satisfy an examiner would be for me to take ground and flying</p>

	<p>tests.</p> <p>Please extend your proposals to cover experienced glider pilots such as myself.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the BGA comment No 121 as the issue you raised (5 hours training) was also identified by BGA. In addition, the Agency would like to highlight that previous experience may be credited towards a Part-FCL licence or rating during the conversion process. This process is the responsibility of the Member State in consultation with EASA.</p>
comment	<p>1561 comment by: <i>Ray Reese</i></p>
	<p>As a Tug Pilot with About 40 years experience and a Glider pilot over a similar time I would hope that any new legislation would not prevent me from towing gliders under, around and over clouds outside controlled airspace. I am expected where possible to take gliders to the best places to receive cloud upcurrents. This requires navigation very close to clouds. I trust that there will not be further restrictions placed on this type of flying. Yours truly C.R.Reese</p>
response	<p><i>Noted</i></p>
	<p>Thank you for providing this comment. The Agency confirms that a towing aeroplane pilot will be required to hold an EIR or IR(A) when flying within 1 000 ft of clouds above 3 000 AMSL. A Part-FCL licence cannot exempt certain airspace users flying VFR not to comply with the ICAO airspace requirements.</p>
comment	<p>1562 comment by: <i>Nurcombe</i></p>
	<p>I submit that Para 3.1 is mostly nonsense. I have been flying sailplanes in cloud - self taught in the first place - for more than forty years. The holding of a licence will make not the slightest difference to my ability, or the safety of others, but merely serve to add cost and potential legal difficulties. Sailplanes differ from other aircraft in several major ways:</p> <ul style="list-style-type: none"> • No one cloud-flies gliders in controlled airspace, or 'en route'. • cloud-flying is generally short-term vertical penetration, either climbing in cumulus or descending through a cloud layer. • The great majority of GA in the open FIR keeps clear of cloud, and I have never, ever, seen another aircraft (other than gliders flying the same task) penetrating cloud anywhere in the vicinity while flying in the open FIR into and above cloud. • The mountainous areas where it is most likely that a sailplane may have to descend through a cloud-sheet after flying high in standing waves are generally remote areas with little or no other traffic. • Cloud-climbing in cumulus by definition means that there is clear air between the cumulus in which to descend. Self-preservation and the very manoeuvrability of sailplanes - enabling the pilot to remain clear of cloud in the descent - means that unlike fast GA or heavy commercial aircraft, it is most unusual for a glider to deliberately drop out of the bottom of a cloud. • The statistical probability of collision in cloud, even between gliders

deliberately using the same cloud, is vanishingly small. This view is supported by a considerable body of evidence from the 1960s, when cloud-flying in gliders was much more prevalent than nowadays.

- Most sailplanes with cloud-flying capability are equipped with speed-limiting devices. Such aircraft may be flown safely in cloud even by relative novices.
- Very clean sailplanes that are not equipped with a speed-limiting device - perhaps a tail-parachute - are unsuitable for cloud flying by ANY pilot, licence or not, as the penalty for loss of control may well be catastrophic, such is the ease of overspeeding. A licence will not alter this fact.

- Gliding is an 'adventure' sport, where the ability to develop skills progressively is all part of its attraction

Finally,

- the record of British Gliding over the past fifty years (or more) demonstrates the efficacy of 'light-touch' regulation, with the oversight of the sport left with those best qualified to judge: the Governing Body. There is simply no evidence whatsoever that the introduction of licenses will do anything to improve safety.

My vote goes for 'No Change'

Failing that, the minimum regulation possible.

response *Noted*

Thank you for providing this comment.

The Agency does not agree that the proposal 'is mostly nonsense' as stated in your comment. As an experienced sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which VMC minima are established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment *1563*

comment by: *McCarthy*

British glider pilots have always taken advantage of being able to fly up to cloudbase and into cloud following certain procedures.

The typical weather in the British Isles means that cloud bases can vary frequently depending on proximity to any water features, be it rivers, canals lakes and reservoirs. It is challenging enough to glider pilots just to fly in an environment completely surrounded by sea water. No one in England at least lives more than 70 miles from the sea.

When glider pilots encounter low cloud, they can, using their acquired skills navigate under the clouds but close to the base in order to complete their cross country flight whether it be for competitions, FAI badge flight or just pleasure. Glider pilots naturally keep a good lookout for other aviation and also because they need to see where the next source of air currents will come from.

To limit pilots' opportunities to fly close to cloud will restrict glider flying considerably, for the reasons mentioned in para 1 above.

Additionally glider pilots often fly on ridges using hill lift and in standing waves generated by large hills. During their climbs the air may well be clear of cloud but later it is often the case that more cloud appears and quite common for pilots to fly close to or in cloud in order to make their safe descents back to the airfield where they took off from.

At this point in time there have not been any aviation problems in flying in this way and I hope that pilots will be able to fly close to clouds in future, just obeying the rules and disciplines which have served us well this far in our history. There seems to be no case for a rule when no danger is apparent.

response *Noted*

Thank you for providing this comment.
The Agency would like to highlight that the proposed sailplane cloud flying rating will enable flight close to or within clouds. The Agency also strongly believes that these new harmonised rules for cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment *1564*

comment by: *Gareth Jones*

My comments relate to NPA 2011-16 and in particular the "Sailplane cloud flying rating"

I am a member of a UK Gliding club and of the British Gliding Association. The BGA represents me, and thousands of other glider pilots. In the absence of a better alternative, the BGA supports the cloud flying proposals within NPA 2011-16 and I expect you to give full weight to its views.

- Cloud flying, and especially the ability to fly near to cloud above 3000 ft, is essential in the UK.
- The 5 hours mandatory minimum training is unjustified. Training "as necessary" would be more suitable.
- The ability to train in TMGs is essential.

I would add that the requirement for a proficiency check for the revalidation of the rating should not be necessary - logbook evidence of use of the rating should be sufficient.

I note that your NPA states "The main reason for creating such a rating is to extend the operating range of sailplane pilots under certain weather conditions". In the UK gliders have always been able to operate under these conditions, without problem and with an excellent safety record. It is only that now that you seek to restrict this privilege; without your new restrictions no "extension" would be needed.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and the issues you raised (5 hours training/use of TMG) were also identified by BGA. The Agency would like to further highlight that sailplane cloud flying rating has a recency requirement only, no revalidation. In addition, the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment *1565*

comment by: *David OLIVER*

As a PPL A and glider pilot I have read NPA 2011-16 and the opinions of the BGA (British Gliding Association). The BGA recommend support for the glider cloud flying and I agree.

Therefore I want to add my agreement to accept the NPA 2011 16 cloud flying proposal.

It is far from ideal and does not seem to have taken account of the normal weather conditions and cloud base heights that apply to the Northern parts of Europe, conditions which we have been flying in since gliding started in the 1930s. Climbing to cloud base in unregulated airspace is an essential part of UK gliding.

It is vital that regulators do not impose restrictions on gliding that make successful cross country flights less likely. If club members are put off gliding they will leave the sport with unwelcome outcomes likely for those who wish to continue.

The gliding movement employs a significant number of people as Instructors, office and restaurant staff etc. There are persons employed for maintenance and repair, others in the Insurance connected with gliding.

The UK has a lot of gliders based here, perhaps the majority were bought from Germany. German glider firms would be affected if new regulations cause pilots to move away from gliding.

response *Noted*

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as you refer to the comment sent by the British Gliding Association (BGA) and all the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment *1566*

comment by: *Patrick Eaton*

I am a glider pilot with 29 years experience and hold a Silver C and a TMG license and have previously held a fully categorised instructor rating.

I comply with the necessary regulations and respect and honour the self regulation that has been maintained by the British Gliding movement.

I support the main reasoning behind the proposed Sailplane Cloud Flying Rating and have some responses, as follows
The Sailplane Cloud Flying Rating is very important to me to retain my confidence in the safety of UK glider flying.

I consider it vital that the NPA is available to both LAPL(S) and SPL holders.

I believe a Dual Flight Training Requirement is required and that this should be for a minimum of 3 hours instruction.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the BGA comment No 121 as all the issues you raised (LAPL(S)/SPL/5 hours training) were also identified by BGA.

comment *1567*

comment by: *Stefano Maruelli*

I'm probably writing you what nobody (Gliding pilots) has the courage to write

you before. Please read all this as "will to ensure greater safety to all flying persons"

1) We thank you very much to seriously make concerning about glider pilots safety cloud flight (or close to clouds). If the rules will be made by glider pilots instructors and cross country high experienced pilots there will be a good new opportunity. Vice-versa there will be the high risk that all that will rest a mountain of waste paper. Also: for sure Italian authority will deny us this at all... with a simply letter faxed to local DCA...2) Thanks aslo for keep the moment to understood that Gliding pilots are able to make wave flight between 5-9000m following the Alps ridge to make round trip of more than 1400km without consuming a litre of gasoline.

I think is a time to leave flying people the rights to meke again, in safety, this kind of flights.

I think all the pilots able to make wave flight (and all flying persons too) will thank you for:

a) Allow the National pilots association to send you a map of wave school camps area:

A cilinder of 50-100km of diameter close to highest / better mountain where airline Flight will NEVER enter... This zone can be easy found, it cost zero, and also make us, all, sure that airline pilots don't make stupid azard to cut their rout just to short the flight...

(I several time see short airline airplane from Italy to Switzerland overpass the mountain with no more than some hundred meters...)

b) Define a Gliding wave zone close to mountains ridge (for example the Alps for Frace-Italy-Sitzerland-Austria-Sloveina) that allow glider pilot equipped with Xponder Mode S to safe flight enter 5-7000meters below airline planes.

What is also clear is that:

- No wind, NO Wave so no glider over 5000m... and in case of wind (>50km/h, so wave) the airline pilots (so passengers) will be more safe if far (much higher) from mountains....

In New Zeland (picture in attachments) this is normal FROM MANY YEARS AGO. ...But as normal here in Europe is more easy to deny all... and put the head bellow the sand saying: O good, now all is safe! No other flying object in Class A space...

- If a glider pilot wanna make wave flight he must be in contact with radar, in case of airways crossing etc...

(sorry if you, reader, are a good pilot and/or you understand perfectly what I'm asking)

c) Military Drone Flight: that must be declared to the local airports or we will soon see accident. I was several time in contact with drone driven by stupid guy that wanna play with gliding pilots...

3) I take this opportunity to ask to EASA to check what Italian authority (ENAC) is doing with highly limitation of pilots rights, quote and so, safety.

a) We have the largest CRT in the world, some Enac people wrote too that those CTR are too big, and lowering all the VFR Pilots is not a safety act. That was know from long time ago, but nothing was done !

b) Enac produce the most unbelievable docs in the aviation history:

Is called "Airfield liberalization..." but if you read it you understand that is the exact opposite: you have to contact the airfield 1 weak before use the field !!! And you must wait for his positive answer !

This, of course is the short way (in bureaucracy mind) to control all flights and force pilots to use just "paying" airports.

Also: in the mind of new pilot airfields become !"dangerous place" so in case of emergency they are no longer able to think to airfield as the safe place where land in case of problems. They have no skill to make short landings and they are no longer taught by their instructors to correctly identify and use an airfield

, so they will not think to make their flight plane, possibly, following a safe route (for example passing close to the maximum number of airfields or landing zone...).

Pls do some think, SOON, before we will be all grounded by this non flying "burocrates".

I HOPE YOU UNDERSTAND THAT ALL THIS INFORMATION MUST REST CONFIDENTIALLY AND USED FOR THE SOLE SCOPE TO GIVE TO ALL PILOTS (AND PASSENGERS) A CHANCE TO FLYING SAFE (and not for keeping the right time to ground all non paid flights....)

PPL pilot - GPL Instructor / Motorglider / SS / SL/ WINCH - ULM

Instructor - Paragliding pilot

response *Noted*

Thank you for providing this comment and your support for the sailplane cloud flying rating.

The Agency would like to highlight that Member States may define certain airspace zones with specific visual flight rules for sailplane operations. In addition, please be advised that once EU regulations are applicable, Member States (such as Italy) cannot apply additional requirements which are less or more restrictive than the adopted regulations.

comment *1568*

comment by: *Aidan PAUL*

I wish to comment on the recent EASA proposals on sailplane cloud flying and en route IR. I am a UK pilot with a glider pilots licence and a full JAA PPL. I also hold a US licence, which mirrors my UK qualifications. I hold the BGA Basic Instructor licence and own my own glider, an LS8. I started flying in 2002 and have some 450 hours on gliders and 250 hours on power. I have a night rating and a TMG rating, and am near to completion (before the regulations change) of a UK IMC rating. I have some 25 hours of logged instrument flying. Time permitting, I am planning to take either CPL IR or a PPL IR.

The proposed en route IR is almost totally irrelevant to my GA flying. My reason for taking the IMC is to get safely on the ground in the event of being caught by changing weather conditions. The relevant training is therefore the use of non-precision and precision approaches. I have no need to use airways, and their availability would add nothing to my practical use of the privileges of my various licences. On the contrary, I consider the use of airways without the appropriate approach procedures to be highly dangerous. I do not understand why EASA would propose this. It is akin to encouraging people to swim out of their depth. In isolation, I think it will lead to inexperienced pilots getting into situations in IMC for which they are insufficiently trained. The UK IMC training is very specific in its context, but seems to be misunderstood by EASA. It is not intended to allow pilots to fly into airfields like Heathrow, it is to get them safely on the ground at, say, Cranfield, a regional mainly GA airfield with a full ILS.

I therefore ask EAS to reconsider this.

In the UK the BGA is uniquely positioned to grant privileges to sailplane pilots. Sailplane flying in the UK dates back to the 1930s and the UK CAA has had little difficulty in allocating special powers to the BGA to regulate glider pilots. On cross country flights, I regularly, and entirely safely, fly in proximity to cloud, and probably twice or three times a season, continue a thermal climb into cloud, following the BGA procedures. Cloud basis in the UK are substantially

lower than conditions prevailing on the continent, due to the effects of the maritime air which dominates conditions in the UK. I frequently fly in conditions at the beginning and end of the season where cloud basis are under 3,000 ft. A restriction to remain 1,000 ft clear of cloud which is entirely reasonable for powered aircraft with substantially higher speeds and lower manoeuvrability would substantially restrict the gliding sport.

Gliding is an important "feeder" activity for GA and commercial aviation. Some 30% - 40% of the members of my gliding club are connected with commercial aviation, with many entering the profession after becoming interested in gliding.

I would ask that EASA reconsider these restrictions, and accept the procedures at least in the UK by the BGA which are well established, and adapted to the weather conditions of the UK.

response *Not accepted*

Thank you for providing this comment. The Agency acknowledges your concern with regard to EIR. However, the Agency does not share your concern as EIR was extensively discussed during the Review Group experts' meetings and consequently accepted as a viable and safe option to make current IR more accessible.

With regard to your comment on UK sailplane flying, the Agency would like to highlight that it is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was already discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA and supported by several stakeholders this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR not to comply with these ICAO requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment 1569

comment by: *Michael J Fairclough*

Having read the above document,I am in full agreement with the British Gliding Association response. M.J.Fairclough.

response *Noted*

Thank you for providing this comment. The Agency acknowledges your support for the BGA comments. Please check the response provided to the BGA comment No 121.

comment 1570

comment by: *David Chalmers-Brown*

Dear Sir,
My name is David Chalmers-Brown. I am a glider pilot with 2000 hours,

instructor for 30 years, and hold a Gold C with 3 diamonds and am used to gliding in a wide range of conditions and countries.
My address is 24 Yorkshire Place, Warfield, Berkshire, RG42 3XE and phone number is 01344 445869.

I am writing in support the proposal for a gliding instrument rating for cloud flying within NPA 2011-16.

However the training requirement for flying beneath cloud seems inappropriate. Glider pilots are well used to flying below cloud and keeping a careful lookout for other gliders and the occasional aircraft.

The training needed to fly below cloud in IMC (i.e. above 3000ft amsl and 1000ft below cloud) is almost the same as flying in VMC. Both require an keen awareness of collision risk, a very good lookout at all times, and of the need to remain clear of cloud. No additional dual flight instruction is required for this flight. The theory part can be incorporated into current basic training.

There is a danger that the perception of flying on instruments in clear conditions below cloud will reduce the lookout and increase the risk of collision in a busy height band. I predict that in flight glider collisions will be more frequent.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the BGA comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

The statement that 'flying on instruments in clear conditions below cloud will reduce the lookout and increase the risk of collision in a busy height band' is not shared by the Agency as the sailplane instructor should have the capacity to look out. There are many proven ways to conduct instrument training in visual conditions. Therefore, this can be done without causing additional safety risks.

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comment 20

comment by: *KAB*

This should read "Qualification for flying in Instrument Meteorological Conditions - Aeroplane and Helicopter"

Reason: These changes to the Instrument Rating (A) are equally applicable to IR(H) particularly in light of the fact that a significant number of helicopter accidents happen in reduced visibility conditions.

response *Noted*

Thank you for providing this comment.

The Agency understands from several comments received that there is a need for a specific task dealing with similar IR options for helicopters. This is foreseen as a future task, as this issue is outside of the current scope.

comment 450

comment by: *Andy Jessett*

I am a UK glider pilot with 900+ hours on 20+ types of sailplane, holding the FAI Diamond Badge and a UK assistant instructor rating.

My response to NPA 2011-16, specifically concerning the proposed **Sailplane Cloud Flying Rating**, is as follows:

1. LAPL & SPL

I strongly support the proposal for the SCFR, which I believe is essential to the continued practice of safe cross-country flying in the UK

2. Training

I consider the requirement for a minimum of 5 hours dual instruction to be excessive. From my experience as an instructor I believe this requirement would be unnecessary, and unduly expensive, for pilots with higher hours and/or skill levels. I would like to see this proposal reduced to 2 hours.

3. TMGs

It believe it is essential that this rating may be trained for in TMGs. Without this facility, the availability of suitable training would be unnecessarily restricted.

4. Restricted SCFR

I would also like to see a restricted SCFR, to enable flying "up to, but not within" cloud. The UK has operated safely under such a system for many years, and without this facility in future many pilots who wish to fly up to, but not within, cloud will be denied the opportunity.

If such pilots feel unable, or do not wish, to acquire the SCFR in its unrestricted form, they will effectively be unable to operate. This seems unfair and does not appear to confer any safety benefit.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(A)/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.

comment 490

comment by: IAOPA(Europe)

Editorial

IAOPA(EU) notes that many proposals for mandatory requirements in the NPA have been prefaced by the word 'should' rather than 'shall'. Although it is accepted that this is a consequence of EASA document terminology standards, the final document must be restructured to indicate more clearly which proposals are mandatory and which are recommended.

response *Noted*

Thank you for providing this comment.

comment	514	comment by: AOPA(UK)
	<u>Administrative</u>	
	AOPA(UK) responses to NPA2011-16 should be considered to be supplementary to those made by IAOPA(EU) (490-513)	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	515	comment by: AOPA(UK)
	<u>Editorial</u>	
	AOPA(UK) recommends that, where the term 'airfield' has been used in the document, it should be replaced by the correct term 'aerodrome'.	
response	<i>Accepted</i>	
	Thank you for providing this comment.	
comment	525	comment by: <i>edensoaring</i>
	I have to support the licensing for glider pilots to fly in or near to cloud as not to do so would put at risk the safe flying of gliders in the UK under the governance of the BGA which has taken place safely for many years.	
	Glider pilots who have suitable instruments and qualifications need the ability to cloud fly. All glider pilots need to be able to freely fly in proximity to cloud in order to make best and safe use of lift.	
response	<i>Partially accepted</i>	
	Thank you for providing this comment.	
	Provision has been made for holders of a valid EIR or IR(A) to be fully credited towards the requirement for completing a training course at an ATO for the issue of a SCFR.	
	In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace zones with specific visual flight rules for sailplane operations.	
comment	546	comment by: <i>John Roche-Kelly</i>
	As a glider pilot and student studying for an NPPL, chairman of a club and Assistant Instructor I recognise that many other air users will not understand the need for glider pilots to fly close to and into cloud. Since thermal soaring was first tried by humans in gliders this has been the power source for our sport. To date the current system in the UK has been proven to be no more	

	<p>dangerous than VMC flying. the recommendations of an endorsement to a glider licence, gained from 3 hours of tuition, seems to me a sensible position between the equally unacceptable extremes of "no change" and "no way". I appeal to you to support the BGA proposal and to allow us to fly as we have done for many years while accepting that we have a responsibility for the safety of all air users. Thank you. John</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>594 comment by: <i>Thomas</i></p> <p>Dear Sirs,</p> <p>I 100% support and appreciate your initiative. I am a VFR PPL (JAR-FCL) Pilot for a view years and never started the IFR Training due to huge amount of unnecessary material in the theory. With that I mean unnecessary for Pilots which only want to fly GA IFR, non-comercial on planes < 5t and max a twin turbine (no Jet). Result: My flights remained being VFR flights and thus security was lower and the threat to get into IMC or other ciritical situations is higher. At the end it is all about security. I heared rumors about concerns that the ATC System will be jamed by to many GA IFR flights. This is absolutely not true. The GA Pilots will still only use IFR as long as there are no VFR conditions, so all in all we talk about a very, very small additional amount of IFR flights in the ATC System. Look at the share of accidents (or almost accidents) in general aviation caused by unexpected weather conditions.</p> <p>Additional benefit: The overall skill of all privat GA Pilots will get up just through the IFR training, whether they use it or not.</p> <p>Ulitimate Result: More Safety in the sky!!!!!! Not more, Not less. I don't see any mature, reasonable argument against it. I'm looking forward to sign up for my training.</p> <p>Thank you very much and again congratulation for that initiative</p> <p>Best Regards Thomas Brachtel</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>615 comment by: <i>Eric Smith</i></p> <p>I am responding to this NPA as a UK based glider pilot with over 40 years of</p>

experience in all areas of gliding - instructing, cross-country flying, competition flying etc. In addition I have flown gliders in many other European countries.

I can accept the need for correct training to fly IMC in gliders but feel that the requirements proposed are excessive and should be reviewed and the views of countries that currently allow cloud flying by gliders to be used as the basis.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment *618* comment by: *doctopi*

Hello,

I`m a private pilot with a JAR-FCL-license since 1999, about 370 hours flight experience with single engine motor planes and since summer with N-VFR qualification.

I`m very happy about the new EASA regulations referring to IFR licensing. Similar to pilots leaving their home airfield for longer flights I had to flight through bad meteorological conditions for longer time. My opinion is, that in such situations the ability changing flight rules from VFR to IFR would be a very great improvement for the security of myself and all other pilots in my neighbourhood.

The new IFR theoretical and flight training regulations will reduce costs and time - so I beleave it`s possible for me under the actual professional situation finishing with success the examinations.

Because our plane is IFR-equipped I will beginn training for IFR radio telephony license in spring 2012 and after examination, I`ll beginn training for IFR referring to E-IFR and later to C-IFR.

After my opinion these new EASA regulations will be a great step forward improving security for all pilots.

With best regards
Dr. Franz Topitsch
franz.topitschgm.net

response *Noted*

Thank you for providing positive feedback.

comment *809* comment by: *James METCALFE*

Although few UK glider pilots regularly fly actually in cloud, many do so occasionally, usually for only a couple of minutes at a time. It is often essential to the progress of the flight to be able to do this. If the only way of making this legal in future is by means of a Sailplane Cloud Flying Rating, then it is

essential that such a rating is available to us.

All glider pilots spend a large proportion of their flight time close to cloud, in conditions which, though technically IMC, are in practical terms no different from VMC. No extra training is required for this just because it is above 3,000 feet. Again, however, if a (disproportionate) SCFR is the only way of making this legal, then it is essential to the future of the sport.

UK Glider pilots under training will have been given advice about the collision risks of cruising in and out of the base of cloud, and will have been encouraged (under dual instruction) to experience the control, orientation, and navigational difficulties arising from "accidentally" climbing into the base of cloud without the necessary skills and experience. This approach has been adequate to keep UK glider pilots safe, at least for the 33 years that I have been gliding (including 28 very active years instructing).

You might think that, as many European countries prohibit flight in IMC by glider pilots, there is no real problem. However, these matters are of more significance in the UK than on the continent, as cloud conditions are often more difficult. And the reality abroad is that the rules are universally ignored (by pilots of all nationalities), as I have continually seen during 3000+ gliding hours in France over 29 years.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by the BGA.

comment 983

comment by: *Shalbourne Gliding*

The privilege of a Sailplane Cloud Flying Rating is essential for the glider pilots, especially the high percentage who fly lower performance gliders. Without the ability to climb legally to the available cloud base even limited cross country flying would become difficult and hazardous. Not least because of the 'compression' of glider traffic into levels commonly used by GA on fine summer days. There would be an increased likelihood of last minute field landing decisions, with all the attendant hazards.

Furthermore I would add that there are a considerable number of older glider pilots of similar opinion who are not Internet connected to whom this channel is not available.

Colin Baines
Chairman, Shalbourne Gliding

response *Noted*

Thank you for providing this comment.

comment 992

comment by: *John Scott*

I am both a sailplane and power pilot with a valid IMC rating which I regularly

exercise remaining current and in practice in cloud flying. I believe if we have to have further regulation then the SCFR should be implemented. However, I wonder why the so called european aviation SAFETY agency is implimenting so many rules and regulations which do nothing for safety but only increase cost, reducing flying hours and therefore reducing currency and therefore safety. 5 hrs is a rediculously long time for the rating, especially for pilots who are already skilled in cloud flying. Please take note of my comments.
John Scott

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (5 hours training) was also identified by the BGA.

comment *1129* comment by: *Peter Goldstraw*

The existing practice works well, however, if this needs to be formalised, the NPA 2011-16 is a good starting point but could be improved with a few modifications.

response *Noted*

Thank you for provising this comment.

comment *1238* comment by: *Steven GUNN-RUSSELL*

I welcome this NPA and, in general, I support the SCFR. The nature of gliding in the UK means that cloud flying has always been an integral part of it. In fact, extra hazards would be caused by exclusion from cloud.

response *Noted*

Thank you for providing positive feedback.

comment *1401* comment by: *Greg Faris*

Comment from private user : *U.S. nationality, resident in France for over 25 years due to my professional situation. Private pilot (PPL/JAA) earned in France 2001, US license based on my JAA license 2004, Instrument Rating (FAA/IR) 2009; 300 flight hours, single, high performance and complex, night rating (France) prior to US instrument rating.*

I find it positive that the impetus focuses on the theoretical portion of the test, and the practical test for IR cert remains the same. This is indeed the crux of the matter.

EIR is a double-edged sword. If used as intended, as a stage (module) toward a full IR and a safety aid in the face of unexpected deteriorating weather conditions, then it could argued to be pertinent and helpful to safety, but in other cases it could become an authorization to bore on into a "point of no return" scenario, without the competency to complete an instrument approach when it becomes necessary.

Language appears repeatedly: "Existing requirements were too demanding for PPL holders". The real question is whether they are too demanding, but

whether they are unrealistic or far in excess of what is required for safe operation. A rule that is properly dimensioned for safe operations cannot be challenged because some find it "too demanding". However it is worth noting that the type of operations that private pilots engage in has a lower coefficient of risk to public safety than commercial or airline operations, making some aspects of the current requirements disproportionate with regard to risk, rather than "overly demanding" with regard to pilots, who should be expected to fully qualify with whatever knowledge and practical standards are deemed appropriate for a given type of operation.

I fully concur with the assessment that the UK IMC rating cannot be transferred ipso facto, considering the questionable competence-to-privilege balance of the UK IMC rating. On the contrary, in introducing better balanced requirements for private pilots to obtain a full IR, the aim should also be expressed to eliminate the "IMC" rating, as not meeting qualifying standards.

Perhaps off-topic or beyond scope of this proposal is the importance of specifying autopilot use during IR training. Flight by sole reference to the aircraft instruments under manual control is incomplete in today's world, where even small planes are increasingly equipped with automated systems capable of executing most segments of an IFR flight automatically. Inclusion of these devices in IR training is sporadic and poorly defined in current rules for basic IR. One approach is to say "I do all my IR training and recurrent training without using an autopilot, but when I fly IFR by myself I use it much of the time to improve accuracy and reduce workload. Thus I hold myself to a higher standard in training, yet employ safety-enhancing practices in real-world operations". This approach has its merits, yet leaves the certificated operator without specific training for the automation devices he is using, and which are becoming much more sophisticated. Without operational training, and failure mode training related to these devices, they can present their own risks. Similarly, over-reliance on such devices during IR training will leave the applicant with degraded ability to manage the aircraft on instruments in the event of a failure of the automation system. Integration is also improving between autopilots and flat-panel displays in private aircraft, leading to new challenges in airplane management in the event of main system failure. The partial panel standby instruments in such aircraft are often very summary, and airplane management in transitioning from a huge information flow to a very sparse display of essentials is becoming an essential training issue.

Safety impact of Instrument Rating:

Unfortunately, the table listing the number of general aviation accidents from 2006-2008 by pilot license type is difficult to interpret, as we are presented absolute numbers but not what *proportion* of pilot certificates are involved in these flights. It would be reasonable to assume that far more non Instrument Rated PPL's are flying these small airplanes than ATPLs, therefore the higher absolute number of accidents does not necessarily represent a statistic relevant to their level of training.

6.2 Environmental Impact

It is not clear that an increased proportion of IFR flights will have the effect of reducing emissions due to more direct routings. On the contrary, flights using departure and arrival procedures and airways are almost always longer than VFR flights, which are usually direct. GPS direct routings are increasing, but still concern a minority of flights in Europe. On the other hand, it is worth noting that IFR flights are typically operated at higher altitudes than VFR, which has a significant positive impact on the noise footprint along the flight track. En-route noise from small airplanes allowed to operate at higher altitudes (because they are in the IFR system) are greatly reduced. It is worth noting that CO, CO² and NO² emissions from small airplanes, given the relative

efficiency of their powerplants and the accumulated hours flown is really an insignificant value in Europe, and even the small amount of TEL still present in aviation gasoline is of no genuine environmental significance, though efforts are being made and should continue to eliminate it.

It is not completely clear in the proposed amendment how the question of third-country qualifications (e.g. FAA-IR) is managed. This question is further complicated by its implication in rules of aircraft ownership. In some European countries, it is not possible for a non-national to register an aircraft on the national register. As an American in France, any aircraft I own, I must register on the "N" registry. While I find it perfectly logical that the regulatory authority should require me to demonstrate proficiency in Instrument operations before allowing me to operate IFR in their airspace, I still must be able to do this legally in whatever aircraft I can legally own and operate. It is onerous to require someone in this situation to hold two separate instrument ratings, with recertification and recurrent training requirements. Instead, I believe we should be seeking a level of harmonization which would allow interchangeability, perhaps with primary focus on the specific regulations in the country where the person resides, owns an aircraft, or does most of their flying.

In conclusion, I am very satisfied to see this thorny issue being addressed at last, and the proposal overall looks like real progress. I believe there is an opportunity here to improve our overall safety record through enhancement of training, whilst increasing the utility of our aviation resources.

I am grateful to have the opportunity to offer my comment, and it is my hope that it my small contribution may prove useful.

response *Noted*

Thank you for providing this comment.

comment *1406*

comment by: *ernest perrin*

Gliders should have maximum freedom to fly in Cloud (IMC) conditions outside of controlled airspace as a necessary aspect of their function. There are no recorded safety issues from 50 years of this practice and there is no purpose in artificially inventing problems in order to solve them. That is entirely a bureaucratic answer to a non problem.

response *Noted*

The Agency acknowledges your comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment *1416*

comment by: *Swedish Soaring Federation*

Comments from Swedish Soaring Federation

We welcome and support this NPA. We have been flying in clouds with gliders in Sweden since a long time ago and we have really good experience both with training as well ordinary flying activities in clouds.

We have had a national system that our cloud flying rating has had validity forever. If a pilot felt unsure he could always take a training flight with an instructor.

So the only thing in the NPA we would like to comment is need for revalidation

with an examiner, we think that this could be done with an instructor instead of an ordinary training flight. If we need to have a PC with an examiner it would be difficult and cost more for the actual pilot.
So we recommend for revalidation that an instructor can be used instead of an examiner.

response *Partially accepted*

Thank you for providing this comment.

The SCFR has a recency requirement only, but no revalidation date. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

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comment *1421* comment by: *Alan Johnstone*

I support the proposed cloud flying qualificatio for sailplane pilots as the best option available although
I consider it to be a completely unnecessary piece of red tape that will do nothing to improve safety.

Alan Johnstone

response *Noted*

The Agency acknowledges your comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment *1474* comment by: *J R M Crompton*

Dear Sirs

response *Noted*

Noted.

comment *1481* comment by: *J R M Crompton*

Dear Sirs I wish to comment on this proposal as follows,
I am a lawyer a Notary Public and a Glider Pilot for over 30 years with Silver C and UK PPI (now lapsed).
Gliding is all about soaring which inherently means flying close to cloud whether cumulus orographic or wave, and sometimes into or through cloud.
Creating restrictive rules which are difficult or impossible to monitor and enforce invites disrespect;rules are obeyed because people accept they are reasonable and necessary and they are obeyed by individual consent and not by threat of possible sanction. accordingly to be meaningful the proposed rules must have acceptance and support from the mafority of glider pilots or will be

ignored.
I support the proposed sailplane cloud flying rating in principle; to prevent or restrict flying into or close to cloud would simply kill soaring flight or more likely invite widespread disobedience; it would probably be the end of gliding/soaring as practised for the last 50 years in safety and to no justifiable purpose.
The AMC FCL.830 syllabus seems reasonable but to impose a minimum flight instruction is ridiculous as some pilots will need minimal instruction and some a lot; proficiency must be based on a skills test alone.
J.R.M.Crompton

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (5 hours training) was also identified by the BGA.

EXECUTIVE SUMMARY

p. 2

comment 27

comment by: *Spare Chan*

- After doing the TK for this IR, do pilots who later decide they want to get a CPL or ATPL have to be **re-**examined on all the theoretical material taught for this IR (because the CPL/ATPL syllabus has not changed), hence an overlap in Learning Objectives?

response *Noted*

Thank you for providing this comment. The Agency will address the crediting matter in the resulting text.

comment 32

comment by: *Kai-Uwe Weingandt*

Executive Summary

I fully agree to the idea of this NPA.

response *Noted*

Thank you for providing positive feedback.

comment 36

comment by: *Henning Dammann-Emden*

Hello!

I could not agree more on this proposal. I went through all theoretical and practical training for a IR(A) Rating in Germany. What I had to learn to pass the theoretical exam was total useless stuff. Very little of all this actually helped me to learn how to fly an airplane in IMC conditions. Worst of all was the 200 hours of sitting in a classroom to get the stuff taught to me. A complete waste of my precious time, I could have easily teach it to myself at home.

Next, actual flying at the flight school. Training in the simulator is where I learned the most. Real time flying was always in VMC, the flight instructor was afraid to show me how to fly in IMC. Not a single hour or even an approach was made in

	<p>IMC conditions. Again, a waste of time and money.</p> <p>EASA`s new approach to the IR(A) rating is very good. I like the modular concept and the possibility to study at home. The possibility to use my own aircraft for flight training is very good, too. It shows that EASA has listened to the european GA world. All this is a tremendous step towards more pilots holding an IMC rating, even if it is a limited one.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>38 comment by: <i>Joerg H. Trauboth</i></p> <p>Before the last sentence "By introducing...." insert: The new rating will also respect the knowledge and flying experiences of 3rd country IFR licence holders by reducing the conversion requirements to a theoretical and practical examination by a flight instructor.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for your comment.</p> <p>The Agency would like to clarify that the holder of a valid IR(A) issued by a third country (in compliance with ICAO Annex 1) shall conduct a skills test for the IR and demonstrate an adequate level of theoretical knowledge in accordance with the requirements of Appendix 6 in Part-FCL.</p>
comment	<p>42 comment by: <i>Carmin BEVILACQUA</i></p> <p>The fact that the instrument rating will be more accessible for general aviation pilots cannot be emphasized enough from my point of view. I consider the training towards and the execution of the privileges as a ifr pilot a very important increase in safety for all parts of aviation.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>56 comment by: <i>Exec Flight</i></p> <p>I warmly support this NPA and the proposals to make obtaining an instrument rating by private pilots more accessible.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>107 comment by: <i>Irish Aviation Authority</i></p> <p>In relation to the comment "<i>the future EIR holder should be enabled to fly safely under Instrument Flight Rules (IFR) and in Instrument Meteorological Conditions (IMC) in the en-route phase of flight. The rating will not only allow the holder to get used to the en-route IFR procedures and to cope with unforeseen deteriorating weather conditions</i>" - How is this fact established?</p>

- This rating will allow a pilot to fly perhaps from France to Ireland across the UK; If his intended landing in Ireland is suitable for a VFR landing, but all airports in the UK are below VFR conditions, how is the pilot to manage an enroute diversion in the UK due to a technical emergency? Futhermore, how is each ATC service that the pilot uses enroute to know that the pilot is limited both in ability and privilege. This knowledge is essential to ATC in the event of an enroute emergency which requires the pilot to make an unplanned descent and IFR approach at an intermediate airport enroute which is below VFR minima. Nc 21/11/11

response *Noted*

Thank you for providing this comment.

The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

comment *133*

comment by: *Joachim Werner*

Concerns proposals for IFR amendments:

Sorry, but I can not see the advantages of an enroute IFR (EIR). Flying enroute IFR is the easiest part of the whole procedure. Most enroute IFR flights are between layers or on top of clouds and even the IFR radio work is simple. Since EIR-pilots have to start and land VFR there is again the trouble of going illegal through clouds for an approach, resp. for a decent! Imagine weather deteriorated and the departure as well as the destination airport became overcast with a ceiling of 500 ft, what can an EIR-pilot do? Surely he will poke about in the clouds. More reasonable than the EIR would be to offer an IFR training for ILS approaches with the constraint of flying enroute in visual conditions. It is indispensable and absolutely overdue to have an IFR for PPL, e.g. with requirements as in the US. Fact is, that in germany (and probably similar in other states) many VFR pilots fly illegal in IMC and are a threat to others. This is the safety problem the EASA should be concerned about. The administrations in germany are blind regarding this problem. In the US you get in trouble if you are VFR in IMC - here happens nothing!!! My wife and I both fly and we had some nearly misses of this source. Weather conditons in germany are usually not "charlie" and the goal of safety considerations should be: how can I make the IFR training so attractive that at least 50% or more of the PPL pilots enroll for that. Concerning sailplane pilots I hope that in case they go into clouds a transponder is mandatory and at least one which cannot be switched off.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation

(GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

With regard to transponders during sailplane cloud flying, please check Annex VII Part-NCO NCO.IDE.S.155 'Transponder'.

comment 194

comment by: Alan Sparrow

1. I support the cloud flying rating for sailplane pilots, but with the important proviso that a restricted rating (see point 3 below) should also be allowed. Historically UK sailplane pilots have always been allowed to fly in cloud and have done so safely and without the need for outside regulation. Their ability to fly in cloud can actually increase the safety of flying a sailplane, for example by allowing a higher climb and so enabling a safe recovery back to the home airfield.

2. It is important that the cloud flying rating should apply to both LAPL(S) and SPL licenses.

3. For normal sailplane flying it is extremely desirable that flight near to, but not inside, cloud should be possible. The UK's British Gliding Association has proposed a Restricted Sailplane Cloud Flying Rating covering this situation. This is a very different requirement to flying inside cloud, NPA 2011-16 should be amended to include this restricted rating. When flying a sailplane in the UK (with low cloud bases) it is more or less impossible to operate without flying near to cloud. So if a restricted rating is not included this effectively means all UK sailplane pilots will require a Sailplane Cloud Flying Rating even though the vast majority will never fly inside cloud. This is disproportionate regulation.

response Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/SPL and LAPL(S)) were also identified by BGA.

comment 204

comment by: George Knight

As a holder of a UK IMC rating (IMCR) I am, based on the comments in point '7' on page 5 of the NPA, encouraged by the suggestion that "*The most favourable solution seems to be that a Part-FCL license and an IR will be issued with certain conditions on the basis of a conversion report in order to reflect the current privileges held. This would allow the existing UK IMC holders to continue to exercise their IMC privileges.*" I am very keen that this should happen.

At the same time it is a huge disappointment that EASA will not consider allowing further PPL holders to go through the same training and gain the same privileges as current UK IMC Rating holders - even if the rating is still restricted to use in UK airspace.

The IMC rating has been demonstrated to save lives - the very reason EASA exists. The proposed EIR is the opposite in many ways of the IMCR. The IMCR did not encourage PPLs to undertake long flights under IFR - in fact it was not possible to use it in airways or control areas. What it did do, and did very well, was to train pilots to get out of trouble and land safely if caught out in the typically unpredictable UK weather conditions. The proposed EIR is the opposite - it encourages PPL holders to fly in IMC with little or no emphasis on getting out of trouble if caught out.

response *Noted.*

Thank you for providing this comment.

comment 205

comment by: *George Knight*

As a glider pilot with over 50 years experience I frequently fly within 1,000' vertically and 1,500 metres horizontally from cloud whilst over 3,000' QNH. Occasionally, when conditions demand it, I also fly in cloud.

I strongly support the proposal for a Sailplane Cloud Flying Rating (SCFR). Without it the majority of the cross-country flights that I undertake (virtually all my solo flying in gliders is cross-country) would be severely curtailed. The less frequent wave flights that I do almost always involve flight less than 1,500 metres from cloud (albeit for only a few minutes at a time whilst climbing up in front of a wave cloud) so again, without the SCFR rating, this would cease to be a legal activity.

response *Noted.*

Thank you for providing positive feedback.

comment 216

comment by: *Mervyn EVANS-JONES*

I am a fully-paid-up week-day flying member of Lasham Gliding Society. Having read the relevant documents (2011-16), and the response from the British Gliding Association (BGA), I should like you to note that I FULLY SUPPORT THE BGA RESPONSE. Thank-you

response *Noted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121.

comment 227

comment by: *Stephen HALEY*

I strongly support cloud flying for gliders. In the UK if we were to have fly to VFR rules it would severely curtail our sport especially the rule limiting flying within 1000ft of cloudbase over 3000ft. If it is ok up to 3000ft then I cannot

see the the problem over 3000ft. In addition given the UK flying conditions cloud climbing as opposed to sustained VFR is an integral part of our sport. The UK gliding safety record would indicate that there is no need to change the existing rights and priveleges that glider pilots enjoy.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific visual flight rules for sailplane operations.

comment 292

comment by: *Andrew Sampson*

I support the recommendation of a Sailplane Cloud Flying Rating available to SPL and LAPL (S) holders (option 1) as set out in the document.

I am an active glider pilot and instructor based in the UK, with over 1200 hours experience, much of which has been cross-country flights, using thermals, ridge, wave and/or convergence lift.

I believe there is a need to understand the nature of gliding flight and the interaction with cloud formations. A glider can only climb, or remain airborne for sustained flight, in rising air, which is often associated with cloud.

Convection in unstable air results in thermal lift which, depending on the characteristics of the airmass, may result in the formation of cumulus cloud. The lift is often strongest near to cloudbase and is likely to continue or even increase within the cloud. Glider pilots exploiting the lift in order to climb and thus continue safe flight, will wish to climb to cloudbase and even continue climbing into the cloud.

Cumulus clouds can form into lines, or 'streets', making lines of lift, and again glider pilots will tend to fly along these lines of energy under the clouds.

Ridge lift is the result of wind flowing across a hill or ridge, and gliders fly along the ridge to use the lift. Depending on the characteristics of the airmass, an 'orographic' cloud may form. In this case the glider pilot is unlikely to enter the cloud, because of the hill nearby, but the presence of the cloud will indicate areas of lift.

Upper air wave is caused by the action of wind over hills, creating standing waves in the lee of the hills, often to altitudes in excess of 20,000 ft. The wave may be marked by 'lenticular' cloud formations. It is normal to use thermal lift up to and in to cumulus cloud in order to connect with the upper wave system.

Convergence lift is caused when two different airmasses meet, such as with a cool and damp sea-breeze moving inland to meet a warmer and drier airmass heated by the land, or in hilly areas the valley air meeting cooler upper air. Convergences can give strong lift on one side of the convergence, and if cloud is present, there can be a large difference between the altitude of cloud base between the two masses - a difference of more than 1000ft across a lateral

distance of less than 1000ft would not be unusual.

In addition, it should be noted that thermal, wave, ridge, and convergence can be found in combination. It is very common to experience two or three - and sometimes all four - of these conditions during a single flight.

In early training glider pilots learn how to sustain flight by finding, and climbing in rising air, usually with thermal circling and flying along ridges. In some areas where wave is common, this form of climb will be also taught to early pilots. By climbing to the maximum altitude the glider pilot can maximise the range, and time available to seek a safe landing area. Thus flying close to cloud is normal for even the most inexperienced glider pilot - it is essential for continued flight in gliders.

I believe that any restriction in reaching cloudbase could adversely affect safety for glider pilots, and would severely affect the scope for cross-country flights. This is a sport enjoyed by thousands of pilots throughout the world, and the restriction of flight near to or inside cloud could destroy the sport with no benefit in terms of safety.

I believe there should be scope for a restricted license which would allow all glider pilots to fly up to cloudbase, but not into cloud. This would enable the pilot to achieve maximum altitude under cloud and thus maximise the range to seek a safe landing area. I am disappointed that this option is not included within the proposal.

However, I support the recommendation of a Sailplane Cloud Flying Rating available to SPL and LAPL (S) holders (option 1) as set out in the document.

Indeed I believe the absence of such a rating may severely restrict the possibility and safety of cross-country flight in gliders. However, I believe the proposed Means of Compliance are inappropriate, and I have commented in the relevant section.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issues you raised (SPL and LAPL(S)/restricted cloud flying rating) were also identified by BGA.

comment 306

comment by: *Mike Armstrong*

Page 2 Executive Summary. I certainly agree with the introduction of a proportionate cloud flying rating for sailplane pilots, as stated in the executive summary.

response *Noted*

Thank you for providing this comment.

comment 320

comment by: *Julian RICHARDSON*

Cloud Flying Rating for Sailplane Pilots:

Cloud flying is an essential part of sailplane flying and has an exemplary safety record in the UK under the comprehensive safety management of the British Gliding Association (BGA). Without cloud flying privileges I believe the sport would be irreparably damaged and overall sailplane flying activities would decline dramatically.

To exclude cloud flying would also create additional hazards to sailplane flight, which are correctly acknowledged in this NPA.

I consider the Sailplane Cloud Flying Rating (SCFR) critical to ensure the ongoing safety of sailplane flying in the UK, both for LAPL(S) and SPL holders, as proposed in this NPA.

Therefore I strongly support the main elements of the proposed Sailplane Cloud Flying Rating (SCFR).

response *Accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (SPL and LAPL(S)) was also identified by BGA.

comment 384

comment by: *William ALEXANDER*

I strongly support the proposal for a Sailplane Cloud Flying Rating so that pilots can continue their privilege of flying near cloud above 3,000 ft and also flying in cloud.

I also support the BGA proposal for a restricted rating for flying near cloud but not actually in cloud, which is what most glider pilots do most of the time.

response *Not accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 388

comment by: *Trevor HILLS*

First, in general I commend EASA for putting forward these provisions, in particular the cloud flying rating for sailplane pilots (but see my detailed comments on these provisions).

Having said that, and again in general terms, I believe it is a **serious retrograde step** to withdraw privileges from holders of Private Pilots' Licences (without additional ratings) in respect of flying in IMC below cloud. That is, currently JAR-FCL PPL(A) holders may not fly:

i. on a flight outside controlled airspace when the flight visibility is less than 3

	<p>km; ii. on a special VFR flight in a control zone in a flight visibility less than 10 km except on a route or in an aerodrome traffic zone notified for the purpose of this sub-paragraph; or iii. out of sight of the surface.</p> <p>In other words there is no requirement outside controlled airspace to remain in Visual Meteorological Conditions, in particular when above 3000 feet AMSL by remaining 1000 feet vertically and 1500 m horizontally from cloud.</p> <p>This privilege should be retained.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that current ICAO airspace categories require VFR flights above 3000 AMSL to remain 1000 ft vertically and 1500 m horizontally from cloud.</p>
comment	<p>395 comment by: <i>John Weddell</i></p> <p>A harmonised cloud flying rating for sailplane pilots is a sensible and safe proposal. It has been permitted in the UK for over 40 yrs and has not caused any problems. Indeed, if cloud flying was no longer permitted and VFR rules are strictly maintained, the sport of gliding would wither and die. An outcome which I am sure nobody would wish.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>442 comment by: <i>Warwick HORNE</i></p> <p>Summary of my submissions:-</p> <p>The proposed standardisation for Sailplane Cloud Flying Rating is a good in principle, so long as it is applied equally to LAPL(S) and SPL pilots.</p> <p>The specified 5 hours training is excessive, it should be decided by competence at testing, or at least 3 hours.</p> <p>The 24 months figure for re-validation should be set at 36 months minimum.</p> <p>The restriction of the use of TMG during training and testing should be removed.</p> <p>TMG pilots can be restricted from using the SCFR in general flying.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(S)/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA. With regard to the 24 month period, this will be kept as this is a standard interval used for other revalidation cycles as well. Part-ARA already provides some flexibility for the revalidation process. The Agency does not believe that</p>

additional extra time is needed. In addition to this it should be clarified that the SCFR has only a recency requirement, but no revalidation.

comment

461

comment by: *Luftsportclub Arnsberg e.V.*

With this IFR-regulation its the first time, that europe is ahead of USA in modern aviation-regulation ! Congratulations for this revolutionary idea ! This comment stands for the complete NPA 2011-16. The establishment of this EASA-rule is the most required regulation in general aviation. Please don`t make any more changes, so that this regulation become effective as soon as possible.

In our Aeroclub we already have lost one aircraft due to missing of similar implemented rules. After T/O at minima of 200 feet, which is a "standard weather condition" in middle and northern europe, the pilot with limited experience in instrument flying lost control shortly after entering IMC-conditions and crashed. He just tried to handle a cloud breaking to fly on top. Many people in aeroclubs and many privat pilots are wishfully waiting for the simple but challenging oportunity to get qualified in flying in IMC and to not longer be "grounded" due to a simple low cloud layer. Also perfect from this point of view is your intention to establiih a modular IFR-rating by an enroute-rating and an additional upgrade (approaches) to normal IFR-rating on PPL-level.

Hopefully it will come as soon as possible !!

Winfried Weiss

FI(A)

response

Noted

Thank you for providing positive feedback.

comment

480

comment by: *stoneman*

As a sailplane pilot, I support the move to add a cloud flying rating. Cloud flying, along with the theretical and legal implications of flying in or near cloud is part of our general training now, and so it would be a small, but practical step to include a formal review of an individual's training in order to record the fact that s/he is prepared to fly - or not to fly - in these conditions.

response

Noted

Thank you for providing positive feedback.

comment

486

comment by: *Derren francis*

I strongly believe the SCFR is a vital for safe glider flying and should be a part of the LAPL(s) and SPL licences.

Flight in or near cloud in gliders is part of the proven UK safety record over many years, any reduction in its cloud flying privileges may impact on the excellent safety record of gliders flying in the UK.

Please include the SCFR in the SPL and LAPL(s)

response

Accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (SPL and LAPL(S)) was also identified by the BGA.

comment 516 comment by: AOPA(UK)

Flight training with an instrument instructor outside an ATO.

Currently, all training for Class / Type Ratings must be conducted at an ATO. The training requirements for Instrument Rating Training courses will surely require approval, the terms of which will presumably be specified in part-AR/OR. Consequently, AOPA(UK) recommends that all references to 'training outside an ATO' should be deleted pending clarification of part-AR/OR ATO requirements.

response *Not accepted*

Thank you for providing this comment.

The Agency believes that some hours outside an ATO will make the EIR and CB IR more accessible to pilots not living near an ATO. In any case, final training, partly based on the pre-course assessment, and the skills test are completed at an ATO. An ATO will have a safety management system in place and hold course approval. This will ensure that an applicant is trained and checked towards a minimum training standard.

comment 524 comment by: Alistair Johnson

I support the sailplane cloud flying proposals and believe the rating should be available to light aircraft pilots as well as sailplane pilots.

response *Accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (SPL and LAPL(S)) was also identified by the BGA.

comment 539 comment by: Chris Fox

In overall response to this NPA:

1) The EIR does little to enhance safety for aeroplanes as the privileges and associated training explicitly exclude making instrument approaches.

Given the inevitable unreliability of weather forecasts, it is extremely likely that an EIR holder will find themselves (inadvertently) in a situation requiring an IMC approach for which they have not been trained.

The privileges of and training for the EIR should include making instrument approaches, albeit to higher minima than those for the 'full' IR.

2) The Sailplane Cloud Flying Rating is very welcome, although there are some

specific issues related to the training requirements that are commented on in the text.

The reality of sailplane operations in Members States is that pilots operate to the base of cloud, even in States and conditions where this is technically outwith VMC and therefore prohibited. It is completely impracticable to police or enforce the formal ICAO rules, and always has been.

The Restricted SCFR would permit European Aviation law to recognise the reality of European sailplane operations and avoid the technical breaches that take place at present. It should be included in this NPA.

response *Partially accepted*

Thank you for providing this comment.

1) The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

In addition the Agency decided to mitigate the risk by including a requirement during training for the instructor to demonstrate 2 IFR approaches in the context of an emergency. In any case the EIR holder will not have the privilege to conduct IFR approaches.

2) Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 554

comment by: TOM SAGE

Ref: Sailplane Cloud Flying Rating: In general I support the proposal since this will allow UK glider pilots to continue to fly up to cloud base which is essential for safe cross country - a practice which has existed since gliding started and which appears, in statistical terms, to be essentially safe. However, all glider pilots need to fly to cloud base, although not necessarily in cloud. The skills needed for actually flying in cloud are considerably greater than for flying immediately below at cloud base. Thus option 2 (Restricted cloud flying rating) would have been far more appropriate, had less impact and been less disproportionate.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by the BGA.

comment

563

comment by: *Peter BROWN*

As a UK glider pilot, I fully support the EASA proposal to adopt Option 1 as it relates to sailplane pilots flying in IMC. It appears to be generally well researched, and based on a reasonable understanding of sailplane flying. It is broadly measured and balanced, and should result both in an improvement in flight safety and an overall improvement in the status of the sport, which already has a good safety record.

However, I believe that the training proposal should be modified and have commented on this in the appropriate areas.

response

Noted

Thank you for providing this comment.

comment

564

comment by: *Colin HUNT*

For a sailplane pilot, the key change for a UK pilot appears to be the prevention of flight within 1000 vertical feet of cloud if cloudbase exceeds 3000 feet agl unless the pilot is qualified to fly IFR.

I endorse the requirement for sailplane pilots who wish to fly in cloud to be appropriately trained and rated (see later comments). However, most sailplane pilots flying cross-country tasks within the UK stay below cloud and do not, therefore, either wish or need to be trained for flying within cloud.

Most cross-country soaring tasks in the UK are completed on days when cloudbase is between 3000-4500 feet above ground level. On these days, to restrict soaring altitudes to between 3000-3500 feet above ground level will very seriously constrain the ability of the pilots to continue or complete the task, yet that is the constraint being proposed.

The available accident statistics do not support the change being proposed to prevent pilots not rated for cloud flying from flying within 1000 feet of cloudbase if cloudbase exceeds 3000 feet agl. This aspect of the proposed changes is unreasonable and unjustified and is opposed.

There are the further issues of compliance and enforcement. How can a soaring pilot know when the cloudbase rises above 4000 feet agl, so that he/she make take a climb beyond 3000 feet? And if he/she gets it wrong, because cloudbase has in fact remained below 4000 feet, who will know (or care)? It surely cannot be sensible to introduce legislation if compliance is merely a matter of guesswork, and enforcement impractical?

response

Noted

Thank you for providing this comment.

The requirement to stay 1000 ft below cloud base is an airspace requirement for certain airspace categories. It is given by the ICAO airspace classification. The vertical distance to clouds was also introduced to allow the system 'see and avoid' - especially in airspace blocks shared by VFR and IFR traffic at the same time (e.g. airspace E). Therefore, the opinion that 'compliance is merely a matter of guesswork, and enforcement impractical' cannot be shared as this is

a clear safety issue.

comment

567

comment by: *David NEWTON*

As a relatively new (solo, pre-bronze) sailplane pilot I'm really glad this question has been tackled at last. The approach seems well prepared, thought-out and presented.

I particularly approve:

1. the harmonisation of regulations across the EU,
2. the levels of cloud-flying training/competency endorsed in the regulations,
3. the clarity that a properly mandated Cloud Flying Rating will bring to routine club operations as well as to competition flying.

Flying at our club (Essex & Suffolk GC) is solely thermic and often takes place in close proximity to cloudbase - the infamous moron-osphere which also attracts VFR GA traffic. I hope we can look forward to proposals for sailplane pilots flying in reasonable proximity to cloud and to formal guidelines for enhanced sailplane/GA visibility.

David Newton
ESGC Member no. 9462
FAI UK Gliding Cert no. 32395

response

Noted

Thank you for providing positive feedback.

comment

599

comment by: *Bill LONGSTAFF*

It is all very well harmonising the rules and required skill sets over the whole of Europe but this inevitably reduces the numbers of pilots able to achieve the ratings proposed due to time, cost, and personal limitations. The needs of pilots flying in countries/areas of generally good weather in the summer with clear skies and so little need to ever go near cloud is so different from pilots living in maritime climates and especially in or near mountainous terrain. When you add to this the density of traffic in these disparate areas the contrast (and safety needs) can be extremely different. To apply a "one fits all" system to this can easily be unnecessarily onerous. It becomes the 'highest common denominator'.

For example, pilots flying this last summer at our club in the highlands of Scotland were hardly ever able to fly in VMC due to the bad summer weather, with low cloud, high cloud coverage all coupled with mountainous terrain. But the ariel traffic density is very very low. How can that be compared with the central european pilot who can fly vmc most days of the summer except for easily anticipated storms which can be totally avoided if he wishes without limiting his flying much at all, despite possibly high rates of commercial traffic in the skies?

response

Noted

The Agency acknowledges your comment.

The reasoning for the common rules is the harmonisation of licences and

ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment 627 comment by: PPL holder

Overall, I think this proposed legislation fails in its stated ambition to make more accessible the acquiring of IMC skills for Private Pilots. The UK IMC rating has a long history of delivering a significant proportion of IMC capable PPLs at much lower cost, in a much more accessible way, and with good evidence to support its safety effects. Despite this you have elected to introduce a (slightly) "cut down" IR, whose Requirements are heavy handed and dis-proportionate to the task. Part of the problem is your insistence on a universal rating which will, inevitably, be over and above what a PPL needs. I believe you have under-estimated the TRUE costs of acquiring this rating, and hugely over-estimated the uptake of PPLs. The En-route IR is fundamentally flawed, and is dangerous. It should be abandoned.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

comment 679 comment by: Kate Byrne

I support the reference to continuing to allow gliders "to enter clouds taking into account the airspace structure...".

response *Noted*

Thank you for providing this comment.

comment 689 comment by: Philip Sturley

As an experienced powered and glider pilot, I strongly support the proposed introduction of a Sailplane Cloud Flying Rating (SCFR). Cloud flying has long been possible in the UK, and has been safely undertaken by pilots with the necessary training and experience. Whereas a training requirement will exist with the new Rating, I urge that it is flexible in terms of minimum hours of training. The requirement should reflect the experience and ability of the individual.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment

721

comment by: *Martin Roberts*

Page 2

Paragraph 2; "Within the same NPA the *need (my italics)* for a review of the existing national regulations for a cloud flying rating for sailplanes was identified....". "...together with experts from National Aviation Authorities (NAAs), flight crew organisations, training schools and the general aviation community".

Given the perfect safety record of United Kingdom glider pilots flying in cloud, *there was never any need for any discussion* of the subject of UK cloud flying in sailplanes. Sailplane flight safety in the proximity of cloud across Europe is outstanding compared to its powered flight counterparts, thus it is unclear how this supposed identified *need* came about and no rationale was ever put forward. Not one party or identified group, and certainly not one of the groups quoted, ever came forward to publicly state their case for regulation of cloud flying in the UK, so it remains a mystery as to how the proposal now for a Cloud Flying Rating ever came to be discussed let alone proposed for implementation. This process lacked transparency and as a result the proposals address an imagined need rather than a genuine need based on facts and evidence. If they did, then the facts and evidence would clearly show that no regulation is required.

Paragraph 8; "Based on these national regulations and the group's proposals, the Agency has developed.....". Regarding other member states and their regulations - no case has been made as to why these require unification or regulation. Further, no case has been made as to why States who permit regulated cloud flying should be used as the model for those that do not, or in the case of the United Kingdom - have a perfectly satisfactory system with a perfect safety record to begin with. Given the evidence of outstanding flight safety in proximity to cloud in Europe, there is no need for the Agency to propose any action whatsoever. In short, the system we have, at least in the UK, is already excellent and does not require improvement through regulation. Just because 7 member states have Cloud Flying Ratings, this does not indicate that ALL member states should.

Paragraph 9; "By introducing a harmonised cloud flying rating, the Agency expects positive economic and safety impacts across the EASA Member States". The case for these two assertions is certainly unproven. The safety record of sailplane pilots in and around cloud in the UK is already perfect and thus cannot be improved upon. In my later comments I will show that the proposals will have extremely harmful economic aspects both within the gliding micro-economy and further afield in the aviation industry in general. In a further comment, as an example, I show that "5 hours of dual instruction" *will cost £1320 (1565Euro) and 15 days of flying activity, per pilot*. This is only for the pilot seeking to gain the Rating, and does not take into account the other costs; to create and maintain FE and FI and provision of necessary infrastructure within clubs; aircraft and launch facilities that will be consumed by cloud flying

	<p>training. In the United Kingdom at least there will be <i>extremely harmful</i> economic effects.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p> <p>The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.</p> <p>The Agency estimates the following costs for the sailplane training:</p> <ul style="list-style-type: none">• €30–€50 per sailplane hour (dual)• €60–€100 per TMG hour (dual)• €45–€60 per launch to 1,000 m (which will allow 20 minutes flight time) <p>Therefore:</p> <ul style="list-style-type: none">• 5 hours dual instruction: €150–€250• 5 hours dual TMG instruction: €300–€500• 15 launches to 1,000 m: €675–€900 <p>The total cost of 5 hours of dual instruction without the use of TMG is €825–€1,150. The Agency's estimate was that 5 hours of dual instruction would be carried out within 4 flying days which is a realistic figure confirmed by the Agency's gliding experts.</p> <p>However, addressing the comments received and discussing the proposals again with the experts, the Agency decided to further reduce the minimum amount of training required to 2 hours and leave it to the instructor and ATO to decide when the trainee is ready for the skill test and has completed all the exercises successfully.</p>
comment	<p>733 comment by: <i>David Denbigh</i></p>
	<p>I appreciate the work the BGA has done in agreeing proposals which are sensible and measured. Gliding is undertaken by enthusiasts - not people who have a lot of money - and as such they take their sport and their safety very seriously.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121.</p>
comment	<p>751 comment by: <i>Colin Cownden</i></p>
	<p>Overall I welcome the provision of the SCFR as it places flight in cloud on a regulatory footing with a prescribed training syllabus.</p> <p>However I have some concerns which have been raised as comments within</p>

	<p>this document.</p> <p>Interestingly, a comment in the the Executive Summary states that the IR proposals are in order to establish more proportionate rules for PPL pilots, whilst the proposals put forward will apply disproportionate requirements on pilots of sailplanes. In this I'm thinking of the excessive number of instructional hours required to achieve the SCFR.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>759 comment by: <i>Michael D Miskimmin</i></p> <p>I believe we should have a "formal" cloud flying rating for Sailplanes as recommended by this document.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>778 comment by: <i>ChristopherKknapp</i></p> <p>I wish to record my support for NPA 2011-16 in its entirety.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this feedback.</p>
comment	<p>825 comment by: <i>Timothy Nathan</i></p> <p>The thinking behind this NPA is excellent, and just what European aviation needs. It fully addresses the need that European pilots currently have to acquire an Instrument Rating through foreign country administrations (almost invariably FAA) by removing a number of unnecessary requirements.</p> <p>The most important change is the removal from Theoretical Knowledge a wide range of topics which are superfluous to General Aviation Instrument Flight and the removal of the requirement to spend an excessive period in a classroom setting (the single biggest hurdle in the way of private pilots acquiring an IR.)</p> <p>It is also very valuable to remove the previously arbitrarily raised requirement for the number of hours of training. If a pilot has a good deal of prior experience (such as a foreign IR, military IF or on a UK IMC rating) or is particularly skilled or able, there is no reason for them to waste a great deal of time and money burning holes in the sky to tick regulatory boxes. The granting of an Instrument Qualification should be based on knowledge and competence, not how long it has taken the applicant to gain that knowledge and competence.</p> <p>The EIR is a valuable addition to the armoury. Speaking as someone who has</p>

held a full IR for 35 years, and who has flown several thousand hours in GA all over Europe, I can say that the proportion of time that it is necessary to fly an instrument procedure lower than VFR minima is very small. In my opinion, there is a large body of pilots who will appreciate the safety and convenience of IFR flight on airways, but who will generally cancel flights in very poor conditions because of their mission profile, regardless of their qualifications. If someone wants to go to a foreign country for the weekend for leisure, they would probably cancel for rain, snow, fog or low cloud, even if they were qualified to land in it, because it is not their idea of a fun weekend away. For such people the EIR will be ideal.

I have heard objections to the EIR on the grounds of people being caught out by unforecast bad weather. I consider this to be greatly overstated, in that anyone can be so caught out, whether they are VFR rated, Instrument Rated or even CATIII ILS qualified. There are minima for all types of flight, and it is up to the commander to work within those minima. One might as well not have an IR because the cloudbase might be 100' rather than the forecast 200', or not have VFR qualifications because conditions might fall below VMC unexpectedly.

Furthermore, we have to accept the unlikelihood of weather falling so far below EIR minima as to make a radar cloudbreak impossible anywhere within range. If the pilot sets off with a forecast of VMC over a wide area, there is no chance that weather will be dangerously below VMC everywhere in range. He might have to accept a radar vector to final at, say 800', but that will not be a problem. The thought that he would be forced to do an ILS to minima is ludicrous and should be rightfully ignored.

It is quite right that the UK should retain the IMCR. It has been proved to be an invaluable safety aid to UK pilots for 40 years, and there is no safety case for EASA to remove it. Indeed EASA would not be true to its own title to remove a qualification critical to safety. The retention of the privileges of the IMCR should not only be grandfathered, but should be available for new issue. Although this is a UK rating, it should be available to other NAAs if they consider that it would enhance safety.

response

Noted

Thank you for providing this comment and your support for this NPA.

The Agency would like to highlight that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. After this process has been concluded, the UK IMC rating will no longer be issued.

comment

829

comment by: *Liam Brady*

SCFR is import for glider flying and needs to be kept for safe flying . Gliding has a safe record of glider cloud flying without formal training .

response

Noted

Thank you for providing feedback.

comment	839	comment by: <i>Peter Warner</i>
	As a Glider Pilot, I fully support the proposal to introduce a Sailplane Cloud Flying Rating. Gliding Clubs in the UK have a good safety record in terms of cloud flying, and an appropriate rating will enhance air safety further. However EASA should not introduce regulations preventing Glider Pilots who do not have such a rating from flying VFR within the current and accepted distance from cloud.	
response	<i>Noted</i> Thank you for providing this comment. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.	
comment	841	comment by: <i>Vic Blaxill</i>
	I am a UK PPL holder and a Sailplane pilot. I fully support the philosophy of a simplified on route EIR, a cheaper and more accessible IR and a SCFR for all Sailplane pilots. I would also support a restricted SCFR which would allow sailplanes to fly to cloudbase, along the windward edge of lenticular wave clouds and orographic cloud in order to gain or maintain altitude.	
response	<i>Not accepted</i> Thank you for providing this comment and your support for this NPA. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by the BGA.	
comment	856	comment by: <i>Jeff WARREN</i>
	I broadly support the proposals for a cloud flying rating for sailplane pilots.	
response	<i>Noted</i> Thank you for providing feedback.	
comment	869	comment by: <i>Ulster Gliding Club</i>
	As a UK glider pilot, I agree with the BGA and support in principle the advice of our association. We accept the need for regulation, but wish to note our long record of safe self regulation. We need to ensure that regulations are not pursued for their own sake, but are the minimum to ensure safety for all users without compromising a very successful sport and leisure activity.	

Our weather conditions in Ireland are not the same as Europe and we have minimal local airspace considerations. One size does not fit all.

I agree with the BGA that SCFR is essential and that the rating be available to both LAPL(S) & SPL holders.

We have not had any minimum competency requirement in Ireland, as it has been left to the local assessor, operating under BGA supervision. However if there has to be a requirement, 3 would be preferable to 5 hr dual training.

I agree that it would be helpful if the RSCFR option were to be re-considered by EASA.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (SPL and LAPL(S)/5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

876

comment by: *M Teychenne*

Sirs,

I agree with the BGA in SUPPORTING the EASA proposals for the cloud flying rating for sailplane pilots.

M. Teychenne

response

Noted.

Thank you for providing feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment

912

comment by: *Roger STARLING*

With a number of minor comments and suggestions I am in support of the proposals for the SCFR.

response

Noted

Thank you for providing this comment and your support for the SCFR.

comment

915

comment by: *Jim Lyell*

I agree that the ability to fly sailplanes close to and in clouds in the UK climate is an essential part of gliding in the maritime climate of the UK. The loss of such a privilege would unnecessarily reduce gliding activity and increase the risks associated with gliding and cross country flying in particular for the reasons outlined in this NPA AND also because it will further reduce the airspace available (vertically) to gliders and hence increase traffic density with the attendant increased collision risk.

I therefore strongly support the creation of a Sail[plane Cloud Flying Rating (SCFR) to provide sailplane pilots the opportunity to fly close to an in clouds, a priviledge which which has been enjoyed by UK sailplane pilots for many many years with an excellent saftey record.

response *Noted*

Thank you for providing this comment and your support for the SCFR.

comment

932

comment by: *John T Donovan*

Who am I?

I am a Sailplane pilot and hold a JAR-FCL PPL for aeroplanes and touring motor-gliders. I'm also a sailplane instructor with priveledges to instruct in sailplanes and TMG.

My Father is also a sailplane pilot, instructor and JAR-FCL PPL TMG licence holder.

Beween us we own a DG-500 sailplane (with an EASA CofA) and my Father also owns a Grob 109b TMG.

We have over 1500 hours in sailplanes and light aircraft logged between us.

Generally we both support the majority of the draft qualifications for flying in IMC but offer the following comments.

General Comments

It is encouraging to see the agency recognise that the proposed requirements of FCL for instrument ratings were too demanding and has considered alternative qualifications.

The En-route Instrument Rating (EIR)

This appears to be similar to the UK IMC and American FAA IR, better suited for private pilots.

As a PPL holder I would consider obtaining this rating and support this new rating.

Modular Instrument Rating (IR)

It is unlikely that either of us would ever obtain this rating, however the modular route is positive and has our support.

Sailplane Cloud Flying Rating

This is a welcome additional rating to sailplane pilot licencing and has our support. There are however a couple of elements which still need to be addressed.

response *Noted*

Thank you for providing this comment and your support for this NPA.

comment	939	comment by: <i>Dr Stephen Gibson</i>
	I support a cloud flying rating for sailplanes and the UK's BGA responses to the NPA, and I suggest there is also a great need for a more easily achieved Restricted SCFR to allow flight close to but not inside cloud. I suggest the latter restricted rating should also be available to TMGs.	
response	<i>Not accepted</i>	
	Thank you for providing this comment.	
	Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (restricted cloud flying rating) was also identified by the BGA.	

comment	954	comment by: <i>Tim Lean</i>
	In general, I welcome the initiative to create proportionally reasonable IFR ratings, particularly as regards the proposed SCFR. It is heartening to read that the regulatory authorities recognise that new ratings need to be obtainable for those without significant financial means and who use the sport of gliding as an efficient way to enjoy aviation.	
	Statistically, the evidence shows that cloud flying in the UK has been conducted with levels of safety comparable to those seen in general aviation. This is despite the lack of a mandatory and structured training and evaluation scheme. Nevertheless, I believe it useful to introduce such a scheme provided it does not saddle competent IFR sailplane pilots with expensive flying training that they do not need. The requirement for training should be based upon the individuals needs in their quest for the relevant competency.	
	I believe that the regulatory authority must bear in mind the adventurous and affordable nature of gliding as a recreational sport, a sport which has introduced so many to a life of aviation. Cloud flying is an important part of that sport and a key step in the development of the skills of the ambitious pilot.	
response	<i>Noted</i>	
	Thank you for providing this comment.	
	The Agency would like to highlight that previous experience may be credited during the conversion process when an existing licence and rating are converted into a Part-FCL licence. This process is the responsibility of the Member State in close consultation with the Agency.	

comment	962	comment by: <i>Mark Hawkins</i>
	I support Option 1 and believe that pilots of sailplanes should have these ratings available to them. This includes holders of LAPLs and SPLs. I believe that this is needed to ensure flight safety.	
	The requirement to have 5 hours of dual instruction is far too onerous and is not practical for sailplanes. Many pilots have other cloud flying experience and will not need this amount of training. This requirement should be skills based and	

	<p>not proscribed as a set time. If a minimum training time were to be set then 3 hours would be the maximum in my view.</p> <p>To undertake the dual instruction element of the flying in pure gliders would be extremely impractical and the only way that the training could realistically be carried out would be for it to be flown in Touring Motor Gliders. I understand that this may be seen as a problem, allowing this class of aircraft to do the training and may be seen as a back door to obtaining an IR but I can see no alternative. I am sure that this loophole could be closed with the correct wording of the rules. I do not think that the holder of a SCFR should be able to exercise these privileges in a TMG.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(S)/5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>963 comment by: <i>Mark Hawkins</i></p> <p>A Restricted Sailplane Cloud Flying would be a good option as this would not require the holder to acquire new flying skills but he/she would need to undertake the theoretical knowledge training. This would be a privilege that could be used in the appropriate airspace environments. This should be included as an option.</p>
response	<p><i>Not accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>965 comment by: <i>UK Light Aircraft Association</i></p> <p>We are pleased to have the opportunity to provide comment on this NPA.</p> <p>We welcome the recommendations to make instrument qualification more readily accessible particularly for pilots who are not normally required in the course of their profession to hold such a rating. We endorse the view that increasing the percentage of such holders within the PPL population will improve safety and interoperability. We endorse the view that the present JAR-FCL IR structure is disproportionately complex, costly, and geared heavily toward commercial operation of high performance aircraft. We believe that that the proposed competency-based modular EIR and IR(A) and the training regime upon which they are based should be proportionate to the needs of the PPL, and any additional requirements associated with commercial operation and/or operation of high-performance aircraft should be appended to such relevant syllabi and ratings. We note that the ICAO-compliant FAA-IR provides a single basis for instrument flight for all classes of aircrew and aircraft.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment.

comment

976

comment by: *David GETHIN*

In general, I SUPPORT the content of this NPA.

I am in agreement with the comments of the British Gliding Association in that I believe:

The SCFR is vital for safe glider flying in the UK.

This NPA indicates that it will be available to both LAPL(S) and SPL holders.

I consider it essential that this privilege is retained for the benefit of the general aviation community and for my continued development as a sailplane pilot with option to fly the hull of my choice (e.g. normal or self-launching).

response

Accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (SPL and LAPL(S)) was also identified by the BGA.

The SCFR rating will be valid for sailplanes and powered sailplanes (except TMG).

comment

1033

comment by: *Andrew Johnston*

I have no objection, in principle, for a cloud flying rating for gliders - the existence of such a rating is essential for those situations where cloud flying is necessary for safety reasons, eg, rapid change in meteorological conditions.

The rating should be available to all sailplane licence holders. Currently, in the UK, gliders are permitted to fly in cloud, and it would be contrary to the aims of the EU if this privilege was arbitrarily withdrawn. Hence it should be written into the regulations from the start.

It is sensible for the proposed rating to be skills based around a practical test, rather than theoretical. Given that a practical test has to be passed, it does not seem sensible to put in place a need for a minimum number of hours of dual instruction. The applicant may well already have some training, eg, from a PPL, and this would cause needless duplication and expense. In addition a minimum number of hours would impose a significant and variable, unknown, expense on the trainee as the number of launches needed in a glider to achieve the number of hours will be heavily dependent upon the weather. It is patently unfair to base the cost of obtaining a rating on factors that are not under the control of the trainee. It is perfectly possible to self-teach cloud flying in gliders, so no minimum hours need be set.

None of the TMGs I have flown have been cleared for flight in IMC. Therefore any possible rating could not legally be exercised while flying such. However, there is no reason why the training for such a rating should not take place in a TMG. This is important so that the cost of such training can be estimated in advance, as it would not be reliant on soarable conditions, as would be the case with a pure glider. It would seem sensible for the rating to state that it could not be

	<p>exercised in a TMG.</p> <p>It may also be sensible to re-consider the option of a restricted rating that allows flight in a glider near cloud (technically IMC) but not actually in cloud, again for safety reasons. Since the glider is not actually in cloud no new pilot skills would be needed, just an appreciation of the difference between flying near cloud and in cloud.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p><i>1081</i> comment by: <i>Mike Philpott</i></p> <p>This appears to me to be unnecessary and overly heavy-handed regulation. I would question over the last fifty or so years, how many hazardous incidents or accidents have been brought about by sailplanes flying in or near cloud.</p> <p>The answer to this is practically zero. Why, then is regulation required? Just because some states have regulation should not mean that all others are brought down to this standard. This is clearly another example of "if it ain't broken then don't fix it!".</p> <p>I would also question how this proposed regulation will actually reduce the already miniscule added risks that are brought about by gliders flying in or near to cloud. In the UK, it will place an undue added burden on an already overstretched training facilities and will place added and unnecessary costs on ordinary people who support aviation through volunteer work.</p> <p>It is worth stating that sailplanes rely on atmospheric updraughts to remain airborne. These are usually thermals but can be wave or ridge lift. In most cases, as the air becomes less dense with altitude, cloud will form as a direct result of the updraught. Because of the way that sailplanes have to operate, it is often necessary to fly close to cloud and in some cases within it. In the UK, the altitude at which cloud forms means that in order to be able to gain sufficient height to glide to the next thermal, a sailplane will need to be flown to cloudbase and sometimes within the cloud itself.</p> <p>The current situation in the UK is that there is competency based training that must be undertaken before any sailplane pilot can fly within cloud and there are certain other rules that are mandatory for flight within cloud. Furthermore, the take-up of anti collision equipment such as Flarm further enhances safety in poor visibility.</p> <p>I make these comments as a sailplane pilot of 42 years standing, a regular cross country pilot and instructor as well as a holder of the FAI 'diamond' gliding award.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are 'unnecessary and overly heavy-handed' as stated in your comment. As an experienced sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which the VMC minima are established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment 1105 comment by: *william cook*

As a sailplane pilot of high performance and vintage sailplanes with 40 years experience, I agree with the proposals outlined in NPA 2011-16 regarding sailplane pilot IMC /cloud flying ratings, I fully endorse the position of the British Gliding Association on this matter, who have for many years worked with the national authorities, to maintain a safe world class gliding community. in the UK.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it.

comment 1111 comment by: *Peter M. Henningsen*

This is very good.
This is a support of the fundamental idea that more private pilots needs a simpler way to obtain basic skills and privileges to manouver in IMC conditions.
Creating this rating will for sure have a positive effect on the accident statistics - like a solid database from the IMC rating in the UK have proved.

response *Noted*

Thank you for providing feedback.

comment 1126 comment by: *AOPA Denmark*

From an overall perspective AOPA Denmark warmly supports the initiative to make instrument flying more achievable for a greater population of pilots.

The new approach will result in more GA pilots having their training and qualification level raised and more pilots getting instrument experience is an important contribution to an increase in the overall safety level for general aviation.

response *Noted*

Thank you for providing feedback.

comment 1127 comment by: *AOPA Denmark*

AOPA Denmark fully supports the response provided by IAOPA.

response

This response by AOPA Denmark is intended to either bring up a few additional points or to underline some key aspects which are of particular importance to AOPA Denmark.

Noted

Thank you for providing this comment.

comment

1137

comment by: *AOPA-Germany*

AOPA-Germany fully supports this Rulemaking Initiative and considers it to be an important milestone towards safer Operations of General Aviation in Europe. With a higher share of General Aviation pilots holding Instrument Ratings and En-route Instrument Ratings we expect that the number of accidents influenced by adverse weather phenomena can be significantly reduced.

AOPA-Germany also fully supports the detailed comments provided by its umbrella organisation IAOPA-Europe.

response

Noted

Thank you for providing feedback.

comment

1167

comment by: *General Aviation Manufacturers Association / Hennig*

The General Aviation Manufacturers Association (GAMA) welcomes the European Aviation Safety Agency (EASA) taking this progressive step forward to develop a rating that grants private and commercial pilots instrument and IMC flying privileges with theoretical and flight training requirements more suitable to general aviation operations and aeroplanes. The combined 'Option 3' that establishes a the 'en-route IR' with less flying experience (20 instead of 50 hours cross-country), instrument flight instruction (15 instead of 50 hours) as well as a reduced amount of theoretical knowledge (100 hours instead of 150 hours with opportunity for remote learning for most of the time) in combination of a 'competency based' (modular) IR is a way forwarded supported by our members.

GAMA provides some targeted comments with the purpose of identifying select additional opportunities to make flying simpler in Europe (see CRT comment 1171) while ensuring safety and at the same time also enhancing safety by enabling more European pilots to expand their skills and knowledge in a cost effective manner. This includes some clarifying questions since the association's request to be part of the FCL.008 rulemaking group was not retained as a group member (see, MBO/mro/R(R3)2008(D) 84359). Additionally, we provide some comments about license validation in the areas where NPA 2011-16 identifies issues.

GAMA congratulates EASA on working with the industry to provide a more suitable set of requirements for general aviation through this rulemaking task.

response

Noted

Thank you for providing this comment.

comment	1180	comment by: <i>Aero-Club of Switzerland</i>
	<p>The Aero-Club of Switzerland with its more than 23'000 members active in all air sports supports the proposals</p> <ul style="list-style-type: none">a) En-route IRb) Competency based IRc) cloud-flying with sailplanes. <p>established by the Agency and thanks for the efforts undertaken which go in the right direction.</p> <p>Looking at the differences across Europe with regards to licensing, however, we wish to contribute to new rules that allow all holders of present licences to continue to execute his/her rights existing under today's regime by delegating the relevant competencies to the national authorities where such a solution brings the best possible result for our communities.</p> <p>No new regulation hindering a pilot to continue his/her present activity should become effective, on the contrary: The more liberal regulations are the more profitable we shall be able to work within the many fields covered by General Aviation. In doing so, General Aviation, the source for almost all aviation staff recruitment, will become more attractive, will be strengthened and promote the use of aircraft as means of transport asking for much less infrastructure than road and/or railway connections.</p>	
response	<i>Noted</i>	
	<p>Thank you for providing feedback.</p> <p>Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing national licence and rating may be converted into a Part-FCL licence/rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>	
comment	1206	comment by: <i>John Wright</i>
	<p>Page 2</p> <p>If the SCFR is not implemented it would be considered a dreadful state of affairs by many glider pilots, and this rating gets my full support. Otherwise existing privileges to fly in or near cloud would be removed. From the safety point of view, with no real evidence to show that collision in cloud involving sailplanes is a real risk of any sort, removing the ability to fly in clouds would not be the act of a sensible person.</p> <p>This document itself mentions the restrictions that would be enforced in terms of how closed to a cloud a pilot without this rating would be allowed to fly, and clearly those restrictions would cause many pilots problems. If the SCFR is not implemented, it could ruin gliding across all or Europe, and when European pilots took part in competitions in non European states, they could be at a big disadvantage, and the European dominance of World gliding championships would be lost.</p> <p>Glider pilots really need to get a rating like this to pursue the sport properly, and while I am not in favour of adding more regulation to sport, the lack of such a rating would be even more detrimental than being forced to pass the</p>	

response	<p>extra training and flight tests!</p> <p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1207 comment by: <i>Don BROOKMAN</i></p> <p>Cloud flying is an important element of flying sailplanes in the UK. Most wave flights in the UK take place above cloud and the need to make a descent through cloud is always a possibility. Further, the ability to fly in cloud significantly increases the likelihood of being able to glide safely to an appropriate airfield and thereby reduces the need to land out (i.e. to make a forced landing in an unknown field, with its attendant risks). This is especially important to sailplane flights in the UK where typical cloudbases are relatively low.</p> <p>The introduction of a sailplane cloud flying rating is therefore an important step in improving safety since it will enable flight in cloud whilst ensuring that pilots are competent so to do.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1233 comment by: <i>Stephen FLOWITT-HILL</i></p> <p>I support the general proposal to increase the safety of Sailplanes while cloud flying, however I think the Agency is incorrect in considering Option 1 and Option 2 as alternatives. They are compatible and together will increase safety. Therefore I support the adoption of both options. Furthermore the conclusion expressed in page 15, point 7, lacks substance. What assessment was carried out to arrive at the conclusion that Option 1 would be the safer option? Surely attempting to reduce the small incidence of mid-air collisions (very few in clouds) by increasing the risk of forced landouts doesn't make sense!</p> <p>A cloud flying qualification is a good idea but the recommendation on training for the qualification is too inflexible and needs to reflect different ability and experience levels.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency acknowledges your support for both Option 1 and 2.</p> <p>With regard to Option 2, the restricted sailplane cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by the BGA.</p>
comment	<p>1259 comment by: <i>Greg OHAGAN</i></p> <p>As an active glider pilot I wish to register my support for the addition of the Cloud Flying Endorsement to the new Sailplane rating as an effective way of allowing the sport in the UK to continue is record of safe flying in the vicinity of</p>

response	<p>and within cloud.</p> <p>The loss of the ability to fly within 1000' feet of cloud above 3000' AMSL will severely restrict the ability of glider pilots to fly successfully cross country in the UK increasing the risk of land outs with the attendant risk associated with preparing for and landing in unprepared fields.</p> <p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1263 comment by: <i>Adrian Giles</i></p> <p>As a glider pilot who flies within the UK airspace I have valued the experience gained from flying briefly in cloud. I estimate that my total time in cloud each year would be less than one hour, however that time has been very important as I have gained height thus enabling my flights to continue away from cloud. I support the proposal to set up a sailplane cloud flying licence to allow my flying in cloud to continue, although I find the proposed five hour training rather excessive.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>1275 comment by: <i>Michael Williams</i></p> <p>In terms of the SCFR, this NPA reports that a Cloud Flying Rating exists in some Member States. I suspect that some individual Member States will still exclude Gliders from IMC/cloud irrespective of revised EASA regulations, due to individual States Laws and National Airspace Models.</p> <p>In this respect, could EASA be financially prudent and reduce costs by delegating SCFR issues to individual member states that permit IMC flight / cloud flying?</p>
response	<p><i>Noted</i></p> <p>Thank you for your comment.</p> <p>Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements (less or more restrictive).</p> <p>With regard to financial cost issues, please refer to the RIA part dealing with economic impact included in this NPA.</p>
comment	<p>1320 comment by: <i>Glider Pilot - 3400hrs FAI Diamond Badge Full Rated BGA Instructor</i></p> <p>The SCFR for sailplane pilots is a necessity for the continuation of safe glider operation in the UK and as such I wholly support the introduction of this rating.</p>

response	<p>Without this rating the sailplane safety margins will be severely reduced and sailplane operations in the UK would become impractical.</p> <p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1340 comment by: <i>A Dowell</i></p> <p>I am in support of the introduction of an harmonised cloud flying rating. As a glider pilot I feel it is essential to retain this facility and skill and therefore it needs to be included within this NPA.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>1341 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Europe Air Sports, the organisation representing European National Aero-Clubs and Air Sports Organisations in regulatory matters with European Authorities and Institutions, thanks the Agency for this NPA.</p> <p>We wholeheartedly support</p> <ul style="list-style-type: none"> a) the En-route IR b) the Competency based IR c) the full range Sailplane cloud-flying rating <p>In addition, as quite important differences exist across Europe with regards to flight crew licensing, we are in favour of a solution giving flexibility to national authorities, to maintain national variants. No new rules and regulations should hinder pilots to continue actually existing rights. In granting this, General Aviation will continue to be attractive for young pilots entering aviation, as future holders of CPL and ATPL will come therefrom.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating may be converted into a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>1361 comment by: <i>Greg Monaghan</i></p> <p>I believe that the SCFR is required for safe operation of gliders in UK and should be made available for both LAPL(S) and SPL holders. It is important that the privilege of cloud flying in gliders is retained and thus the SCFR should be established as proposed.</p>
response	<p><i>Accepted</i></p>

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (SPL and LAPL(S)) was also identified by the BGA.

comment 1366 comment by: *Royal Danish Aeroclub*

The Royal Danish Aeroclub – representing the common private flying and air sports in Denmark, do support this proposal. The improved possibilities for the general pilot and air sports pilot to fly in Instrument Meteorological Conditions are good and will improve the safety and in general expand the use of pilot licenses.

response *Noted*

Thank you for providing feedback.

comment 1383 comment by: *George Metcalfe*

The introduction of the Sailplane cloud flying rating will be valuable to many sailplane pilots. As in all areas of private aviation will not be taken up by all, because not all pilots choose forms of sailplane flying requiring the ability to fly in clouds, or perhaps because they do not do enough to justify the additional training and revalidation requirement.

I note that this is referred to as a cloud flying rating for sailplane pilots, and as such understand that this rating is not a requirement for flight in IMC but outside cloud. This is an important point because gliding is critically dependent on flight close below cloud, and the introduction of this rating and associated regulations and practices must not be allowed to "spill over" into restriction on flight outside cloud. In most European countries any such "spill over" would severely restrict safe sailplane operation in the first few hours of most soaring days, and almost eliminate it on many. This would be a catastrophic effect for individual pilots and for the sport of soaring as a whole.

response *Noted*

Thank you for providing this comment.

The Agency would like to clarify that the SCFR will be required when flying in IMC outside and within cloud. Please note that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific visual flight rules for sailplane operations.

comment 1398 comment by: *Morag SAUNDERS*

The need to improve flight safety is paramount and as such I fully support the introduction of the proposed SCFR. However, from my personal standpoint as a glider pilot with 700 hours who has never flown in cloud and do not wish to, I find the requirements for the rating as stated in the NPA are far in excess for me and probably the vast majority of glider pilot needs.

The restricted SCFR as outlined in option 2 would adequately satisfy the needs of most glider pilots and I feel that it would be a great oversight for it to be excluded.

response *Not accepted*

Thank you for providing this comment and your support for the SCFR.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by the BGA.

comment 1435 comment by: *René Meier, Europe Air Sports*

Page No. 2

Paragraph: Executive Summary

Comment: This proposal is one of the most significant rulemaking proposals to be produced by EASA since its inception. It addresses the need for a more proportionate training and TK route to an IR for private pilots, until now effectively denied to most private pilots by the unjustified cost and TK barriers in the JAA-FCL IR. At long last we can see the possibility of obtaining an IR without the built-in assumption that the pilot is destined for a career as a CAT pilot. The addition of the proposed EIR will provide a useful stepping stone to the full IR and despite a few doubts about the lack of IFR approach privileges the EIR will undoubtedly provide the potential for enhanced overall safety of private pilots by allowing IFR 'on top' thereby avoiding lower level VFR flights which run the risk of entering IMC in areas of, particularly, higher terrain.

Justification: This is a liberalising measure which must be fully supported by Member States and the European Commission in the interests of large numbers of private pilots across the EU. The proposals for the IR and EIR will be an improvement to safety compared with the status quo

Proposed text: Not applicable

response *Noted*

Thank you for providing positive feedback.

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comment 654 comment by: *Colin Roney*

Dear Sir/Madam,
My response to the proposed Sailplane Cloud Flying Rating is to support it.
Kind regards,

Colin Roney.

response *Noted*

Thank you for providing this positive feedback.

A. Explanatory Note - I. Introduction

p. 4-5

comment

3

comment by: *Colin Hampson*

Two key points relating to the IMCr are important:

- 1) That existing privileges are transferred into Part-FCL in a manner that enables holders of the rating to continue to exercise these privileges.
- 2) That credit is given for existing ratings (IMCr) and associated (PIC/IMC) experience towards a 'full' Part-FCL IR.

The proposals recognise both points and offer reassurances on both counts. It would be welcome if these reassurances were backed up with concrete proposals on exactly what credit is given for IMCr holders and experience but the broad theme of the proposals are very encouraging.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

36 ❖

comment by: *Henning Dammann-Emden*

Hello!

I could not agree more on this proposal. I went through all theoretical and practical training for a IR(A) Rating in Germany. What I had to learn to pass the theoretical exam was total useless stuff. Very little of all this actually helped me to learn how to fly an airplane in IMC conditions. Worst of all was the 200 hours of sitting in a classroom to get the stuff taught to me. A complete waste of my precious time, I could have easily teach it to myself at home.

Next, actual flying at the flight school. Training in the simulator is where I learned the most. Real time flying was always in VMC, the flight instructor was afraid to show me how to fly in IMC. Not a single hour or even an approach was made in IMC conditions. Again, a waste of time and money.

EASA's new approach to the IR(A) rating is very good. I like the modular concept and the possibility to study at home. The possibility to use my own aircraft for flight training is very good, too. It shows that EASA has listened to the European GA world. All this is a tremendous step towards more pilots holding an IMC rating, even if it is a limited one.

response

Noted

Thank you for providing positive feedback.

comment

62

comment by: *Timmy SCHWARZ*

Finally, reality has been realized and the statements (especially no. 1 & 2) are

absolutely true: "existing requirements for the IR were too demanding for a PPL holder".

Hopefully, the suggestions and proposals can make their way to become effective law and don't get changed to a disadvantage for the general aviation during that whole process.

response *Noted*

Thank you for providing this comment.

comment

73

comment by: *PPL/IR Europe*

Para 7:

We support the solution proposed to allow existing UK IMC Rating holders to continue to exercise their IMC Rating privileges. However, we note some additional problems which this does not address:

- The period between the implementation of EASA FCL in 2012 and the future date of implementation for the provisions of this NPA
- After the implementation of this NPA, specific national requirements for instrument qualifications which are not addressed by the EIR or the Competence-based Modular IR – for example, neither of these are a replacement for the UK IMCr, and we support the UK stakeholders who consider it vital to the interests of UK GA to preserve this qualification. An additional example is that of Member States who might wish to issue instrument qualifications for national use that do not require ICAO English.

On this basis, we recommend that either

(i) the provisions of JAR FCL 1.175(b) be introduced to FCL.600, to allow EASA IRs to be issued with national restrictions in accordance with national requirements

or

(ii) a form of wording such as the following be added to Article 4 of Part FCL in the form of a new Para 8

A Member State may authorise a pilot without an instrument rating to exercise limited privileges without supervision before he/she meets all the requirements necessary for the issuance of an IR under the following conditions:

- (a) the privileges shall be limited to its national territory or a part of it;***
- (b) the privileges shall be restricted to non-complex aeroplanes***
- (c) those authorisations shall be issued on the basis of an individual safety risk assessment carried out by an Examiner following a concept safety risk assessment carried out by the Member State;***
- (d) the Member State shall submit periodical reports to the Commission and the Agency every 3 years***

on the basis of the precedent in the existing Article 4 Para 7 of Part FCL

response *Noted*

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case,

the Agency will support the CAA UK in finding a practical solution to the issue.

comment 83 comment by: *P Thornton*

I strongly support the suggestion that existing UK IMC holders should be able to continue to exercise their IMC privileges. The safety value of the UK IMC is well established and it is important that existing IMC holders who do not choose to seek the Competency-based modular IR(A) should not be prevented from maintaining their IMC flying skills.

response *Noted*

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment 110 comment by: *Peter GELDARD*

The recognition that the UK IMC Rating is a major asset to safety – especially in the Northern climate of the UK – is to be applauded. The ability for existing holders to continue/renew their privileges should be approved.

response *Noted*

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment 117 comment by: *Richard Coundley*

Like many IMC rated pilots I passionately believe in the utility and safety benefits of the UK IMC rating. And there is plenty of data and experience in the UK to support that assertion. I can think of a number of occasions early in my flying where the training for the rating has turned a potentially very serious situation into a trivial one. It is not difficult when flying VFR to inadvertently find yourself in IMC. If other countries don't want to avail themselves of the safety benefits of an IMC rating that is their choice, but please let us Brits keep our enviable safety record. Don't let the desire for uniformity / harmonisation across Europe become an end in itself. It should be a means to an end (an objective) and one objective should be safety.

response *Noted*

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

160

comment by: *David Trowse*

I am pleased to see and fully support the confirmation that existing UK IMC Rating holders will have a means to retain their rating privileges in UK airspace.

I am disappointed that EASA has not seen fit to extend the UK IMC rating or equivalent to other countries. I disagree with the statement that the privileges compared to training could not be applied to other countries. The UK IMC Rating has proved itself to be a great benefit to safety in the UK and it should be possible to make an equivalent benefit Europe wide with relatively few changes to the syllabus and test requirements. I would urge EASA to continue to work to make an equivalent rating.

Some pilots may not find the new EIR a useful addition to their licence hence EASA should allow the UK to continue to issue new 'IMC Ratings' so that new UK pilots can continue to benefit from the safety improvements that this rating has given.

response

Noted

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

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comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Section: Explanatory note

Page 4

Relevant Text:

Comment: The Swedish Transport Agency does not consider the proposed competency-based IR to be a viable alternative. We would much rather see a reduction in the theoretical requirements for the "normal" IR as well as an increase in the possible crediting for previous flight experience instead. If you compare the proposed rules with JAR-FCL the theoretical knowledge training is reduced by 50 %, from 200 to 100 hours. The theoretical knowledge

examination is reduced to correlate to the new proposed route. At the same time all the privileges, apart from the crediting between aircraft categories, are the same. If EASA really believes that the same level of competence and flight safety can be maintained, then the normal modular IR can be reduced just as much instead. Otherwise we will have a system where two IR(A)-holders have the same rating in the licence, with similar privileges, but with different theoretical knowledge and flight experience. Our proposal is to maintain the current system with only one IR and if needed an EIR.

Proposal: Delete the proposed competency-based IR and reduce the requirements for modular IR instead.

response *Not accepted*

Thank you for providing this comment. The Agency, supported by many stakeholders, strongly believes that the competency-based IR(A) course will make it easier for private non-commercial pilots holding a PPL or CPL to obtain the IR(A) qualification. Therefore, the Agency will keep the proposal as is.

comment

237

comment by: *Philip Bath*

COLOUR BLIND PILOTS

As a UK PPL, I have a UK national IMC rating. I am colour blind which prevents me from obtaining a night rating or a commercial instrument rating. However, the UK IMC rating allows me to fly under non VMC conditions during the day only, i.e. I cannot fly at night using my UK IMC rating.

I trust that the new En-route Instrument Rating (EIR) will accommodate and continue this facility, i.e. colour blind pilots may obtain and use the EIR during day time only.

Please remember that a significant minority of pilots are colour blind (in the population 8% of men and 1% of women) and they should be allowed to fly under the proposed EIR during day light hours.

response *Noted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to amend paragraph FCL.610. Now an applicant for the IR(A) shall hold a night rating only if the IR privileges will be used at night. The Agency also decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment

402

comment by: *Ian Carrick*

Any change to the existing conditions for cloud flying in sailplanes that does not retain or improve its availability will drastically reduce the soaring potential of the sport.

response *Noted*

Thank you for providing feedback.

comment

412

comment by: UK CAA

Page No: 5

Paragraph No: A.I.7

Comment: The UK CAA welcomes the confirmation given in this paragraph that the text of Regulation 1178/2011 should be interpreted as providing for the retention of national licence privileges already obtained by individual pilots.

Justification: As is well known, UK-licensed pilots holding the UK Instrument Meteorological Conditions Rating (IMC Rating) have been very concerned that they should be able to continue to use those privileges. The UK CAA will seek further discussions with the Agency on the terms of this and the nature of the conversion report to be provided.

Proposed Text: None.

response

Noted

Thank you for providing this comment.

comment

517

comment by: AOPA(UK)

Para 7. in respect of the conversion of existing IMC Ratings.

NPA 2011-16 has not identified an acceptable solution for the continuance of the UK IMCR. Although the UK will continue to issue IMCRs for non-EASA aeroplanes, which will be included in United Kingdom pilot licences, AOPA(UK) proposes a more general solution which will broaden NPA 2011-16 proposals to encompass not just the UK IMCR, but also a number of national needs specific to other Member States. Our proposal is to amend **FCL.600.IR – General** by including the existing provisions of JAR-FCL 1.175(b) as follows:

FCL.600 IR – General

(a) Except as provided in FCL.600(b) and FCL.825, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC) may be converted into a Part-FCL licence and rating during the

conversion process. Please refer to the 1178/2011 EU Regulation Article 4. This Article provides for the possible conversion of the UK IMC rating into a Part FCL IR(A) with restricted privileges. The conversion process is the responsibility of the Member State in consultation with the Agency.

In addition, please be advised that once EU regulations are applicable, Member States cannot apply additional requirements (less or more restrictive) to newly issued Part-FCL licences and ratings.

comment

540

comment by: *Richard TEBB*

As a holder of a PPL(A) and IMC rating, I fully support the NPA as proposed and I consider that it will enhance the safety of PPL holders throughout Europe.

I would like to comment on the conversion of existing IMC ratings, but the NPA does not propose how this will take place. I agree with the proposition that pilots should maintain their current scope of activities and I trust that the arrangements for existing IMC holders will ensure that this continues to be the case.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. Please refer to the 1178/2011 EU Regulation Article 4. This Article provides for the possible conversion of the UK IMC rating into a Part-FCL IR(A) with restricted privileges. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

542

comment by: *FlyElstreeLtd*

Pilot A: Ivor Nulicence.

Gained PPL December 2011

Gains IMC Rating and huge safety advantage for himself, his passengers and those underneath him for a mere £2,500 some study and 15 hours training.

Pilot B: May Parsoon.

Gains PPL March 2012

Not allowed to increase her safety in the same way and unable to afford the time or cost of a full IR

Isn't this discrimination?

Isn't Europe supposed to ensure equal rights?

response

Noted

Thank you for your comments.

The Agency would like to direct you to the UK CAA and their conversion activities relating to converting an UK IMC rating into a Part-FCL rating. EASA will support the UK CAA in finding a solution to this issue.

comment	572	comment by: <i>John Richardson</i>
	<p><u>A Explanatory note</u></p> <p>The introduction of a more accessible IR is a positive step by EASA which I welcome. The current IR is inaccessible to the average PPL holder in terms of both the time commitment needed to achieve the rating and the excessive cost of the training given that the PPL holder is likely to be constrained in terms of time due to full time employment and probably has family commitments which make the cost of the rating difficult to justify.</p> <p>The TK requirements are excessive and often irrelevant for the PPL IR candidate which has given the JAA IR a poor reputation with GA and the practical flying training has to be conducted at an FTO which is geared towards professional training of young aspiring commercial pilots which often takes place only during weekdays. It is not surprising that only a small number of private pilots achieve the PPL IR each year with a consequent impact on safety.</p>	
response	<p><i>Noted</i></p>	
	<p>Thank you for providing this comment</p>	
comment	573	comment by: <i>John Richardson</i>
	<p><u>I. Introduction paragraph 7</u></p> <p>The greater accessibility of the FAA IR both in terms of TK and training time has lead to many European pilots using this route to achieve an IR which can be used in European airspace.</p> <p>In the UK the IMC rating has been extremely successful in bridging the gap between the PPL and the IR. The limitations of the IMC rating restrict the use to UK airspace and preclude Class A use but this has not been a disadvantage during the years that it has been in existence and it has often been the springboard for PPL holders to progress to an IR. In the 40 years it has been available in the UK there has been no credible suggestion that it is unsafe; during that time the Civil Aviation Authority has been audited at least 20 times by ICAO and no negative comment has been made on the rating. Some 25,000 British pilots have obtained the rating, and the Civil Aviation Authority has found only one fatal accident involving an IMCR holder in IMC conditions in 40 years.</p> <p>It is a retrograde step which will significantly increase safety risk to remove the ability of UK PPL's to achieve the IMC rating in the UK. EASA should give careful consideration to the increased safety risk of withdrawing a rating class which has a demonstrable safety record such as the IMC rating and replacing this with the new and untested EIR which is seen as the stepping stone to a CBM IR. I suggest that the provisions of JAR FCL 1.175(b) be introduced to FCL.600, to allow EASA IRs to be issued with national restrictions in accordance with national requirements or provisions are made for national governments to authorise a pilot without an instrument rating to exercise limited privileges within the national territory subject to a suitable safety risk assessment carried out by a qualified examiner.</p>	
response	<p><i>Noted</i></p>	

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements or have national licence variations (less or more restrictive) pertaining to operating EASA aircraft. However, please note that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

624

comment by: *PPL holder*

Paragraph 2:

So because of "the time constraints for developing the Implementation rules", the UK IMC rating, which satisfies the perceived need for a more accessible IMC rating perfectly, and which has an excellent record of uptake and safety to support it, is dismissed out of hand

Paragraph 6:

"It was concluded that..."

On the basis of what evidence?

What is so different about operating in the European Common Airspace?

Paragraph 7:

When the JAR licences and medicals were inflicted upon us, we were promised that no UK PPL holder would be disadvantaged by this process, and that newer requirements would not be imposed.

This did not happen, and for example, I have been involved in considerable expense, and yearly worry because the UK PPL Eyesight requirements (which I can pass easily) have been replaced with the JAR requirements (which I find much more difficult). So even if it were within your remit, I would not, and do not believe assurances in this regard

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to this issue.

comment

639

comment by: *British Gliding Association*

Para 7. We support the proposal to permit existing UK IMC privileges to be continued through a Part FCL rating with certain conditions on the basis of a conversion report.

response

Noted

Thank you for providing this comment.

As this is an issue to be solved during the conversion process, there is no need to further evaluate the problem here or in the resulting text. However, the

Agency will support the CAA UK finding a practicable solution for this issue.

comment

734

comment by: *David Chambers*

Page 5/Para 7

As a UK IMC Rating holder myself, I fully support the proposal for current holders of this rating to retain its privileges for use in EASA aircraft. The rating has a long track record of improving the safety record in the UK; it is accessible to many because so many flight schools can offer training, which also reduces the cost.

However, the uncertainty of the IMC rating status and in what form these privileges will be retained has caused concern to many. The transition period between EASA FCL being introduced in 2012 and the unknown future date of implementation of this NPA are of particular concern. The loss of the IMC rating privileges without any immediate replacement and/or transition period would result in significantly reduced safety, with those previously entitled to climb into cloud and fly IFR no longer legally able to do so.

I would therefore propose that Article 4 of Part FCL be amended to include the option for a Member State to authorise pilots to exercise restricted IR privileges within its own territory in non-complex EASA aircraft subject to appropriate skills tests.

response

Noted

Thank you for your comments.

The Agency would like to direct you to the UK CAA and their conversion activities relating to converting an UK IMC rating into a Part-FCL rating. EASA will support the UK CAA in finding a solution to this issue.

comment

804

comment by: *Peter BOYALL*

"It was concluded that the UK IMC rating, because of the specific needs when operating in the European common airspace"

As far as I am aware, there is no difference in the physics of flight throughout the world, therefore "specific needs" must relate to legal requirements, e.g. airspace classes.

I suspect this is the large amount of low-level Class A/Airways in the Continental airspace.

The IMC rating PROHIBITS flight in Class A airspace.

The EIR proposal PERMITS flight in Class A.

The IMS PERMITS approaches under IMC. The EIR PROHIBITS these.

It would seem that the EIR is primarily intended to permit airways flight by pilots with limited training, as a mechanism to work around the large amount of low level Class A airspace in Continental Europe.

Perhaps it would be wise to review how much of the low level Class A is actually

used by Commercial Air Traffic (CAT) rather than putting in this amount of effort to work around a problem which may not actually exist.

response *Noted*

Thank you for providing this comment.

The Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation (GA) VFR pilots to obtain the full IR(A) rating at a later stage. In addition, the Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR.

comment 846 comment by: *Timothy Nathan*

It is quite right that the UK should retain the IMCR. It has been proved to be an invaluable safety aid to UK pilots for 40 years, and there is no safety case for EASA to remove it. Indeed EASA would not be true to its own title to remove a qualification critical to safety. The retention of the privileges of the IMCR should not only be grandfathered, but should be available for new issue. Although this is a UK rating, it should be available to other NAAs if they consider that it would enhance safety.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment 971 comment by: *rdbc1986*

I fully support the notion of the EIR and section 7 of the introduction. I believe grandfathering the privileges of the UK IMC rating is a must, as the rating maintains flight safety for pilots caught in unstable and unpredictable UK weather.

The EIR seems to be a positive move to create a sustainable and obtainable level of IMC training and experience. Flying in airways will help to reduce the pilots workload, thus helping maintain flight safety and security. I believe the tiered approach to IF training may induce pilots to gradually build on their skills and obtain the full IR. This can only be a positive for aviation.

response *Noted*

Thank you for providing positive feedback.

The Agency would like to highlight that an existing national licence and rating

(i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

1014

comment by: D Clarke

Page 5 Paragraph 7

It is appreciated that the authorities have considered a way of allowing UK IMC Rating holders to continue to exercise their IMC privileges. This has the added benefit of allowing UK IMC Rating holders to practice their IMC skills which will also be needed for the EIR or IR.

Without that, it would have been a disappointment to let those IMC skills fade away while trying to find the time away from an extremely demanding job in order to do a course for the European rating.

response

Noted

Thank you for providing this comment.

comment

1114

comment by: P. Elvdige

Firstly EASA should ensure that the existing the existing privileges and procedures in use by all GA power and glider pilots in the UK and throughout Europe are maintained except where there is a clear and demonstrable SAFETY case for not doing so. In the UK the IMC rating and BGA gliding regulations have allowed pilots to safely go about their flights without prohibitive qualification and revalidation requirements for many years. EASA should remember that many people have spent a great deal of time and money in obtaining these qualifications and privileges and have operated safely under these rules for many years.

As a private pilot (with IMC rating) and glider instructor with over 2000hrs experience over twenty years I can see no reason for removing / reducing existing privileges of UK IMC/IFR privileges. In fact I believe withdrawing or requiring unrealistic qualification / revalidation requirements is likely to reduce safety.

As such:-

1. The UK IMC rating must be allowed to continue without the addition of restrictions, further qualification or validation requirements.
2. The proposed SCFR and RSCFR both must proceed in accordance with the above principles.
3. TMGs must be allowed to be used for training - any restriction on TMGs must be based on a verifiable safety case.
4. The requirement for 5hrs dual instruction should be fully justified particularly in the case of gliders. In my experience dual until the pupil has demonstrated competence is more than sufficient and would not require 5Hrs.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/use of TMG/5 hours training) were also identified by BGA.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment *1166*

comment by: *Peter BUSHILL*

It is difficult to see what extra training is required to be allowed to fly closer than 1000' from cloud. In my opinion, the risk of collision is not decreased by such training, it is already part of a glider pilot's primary concern and he already spends more than 95% of his time looking outside the cockpit, precisely to avoid other aircraft.

If any extra training is necessary to fly close to but not inside clouds above 3000' then this should be part of the normal qualifications as most glider pilots will need to do it at some time. I do not see this as an IR.

On the other hand, flying with instruments inside clouds is a different matter, a formalisation of the existing cloud flying training is therefore almost certainly the way forward but should not be necessary for all pilots.

response *Noted*

Thank you for providing feedback.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. The Agency therefore decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment *1267*

comment by: *Ian HEY*

A. Explanatory Note

I. Introduction

Para 7

The possibility of existing UK IMC rating holders being able to continue to use the rating is welcomed. If EASA is content to permit such continued use of this rating, it is not logical to prevent the new issue of this rating. One hopes that EASA will permit the UK IMC rating to continue to be granted in future as it has been in the past.

response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Apart from converted privileges from previous existing licences and ratings, Member States cannot apply additional requirements to newly issued Part-FCL licences and ratings (less or more restrictive) pertaining to operating EASA aircraft. A UK IMC rating may still continue to be granted for non-EASA aircraft (Annex II aircraft) for flights within national UK airspace.</p>
comment	<p>1413 comment by: <i>Gordon Moir</i></p> <p>I would support the UK National Authority being able to retain the UK IMC Rating as a national rating. To do otherwise I believe would have a negative impact on safety and would be perceived as such. This NPA does however offer a wide range of benefits and I would hope that both existing and future holders of the UK IMC rating would be encouraged to exploit these.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.</p>
comment	<p>1436 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Page No. 4 Paragraph: Explanatory Note - I Introduction section 2 Comment: Europe Air Sports (EAS) had several experts on the MDM.032 group. Whilst it is true to say that developing a new IR was a significant task - and not really within the scope of MDM.032 - nevertheless the group was advised by EASA that introducing such a change during the formulation of the main FCL rules would complicate matters. Hence the agreement during MDM.032's work that the drafting of a new IR and related SCFR should be a separate rulemaking task to follow closely behind the main FCL work. This is referred to in section 3 of the Introduction.</p> <p>Justification: As above.</p> <p>Proposed text: Not applicable.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comment.</p>
comment	<p>1437 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Page No. 5 Paragraph: Explanatory Note - I Introduction section 7 Comment: EAS supports its UK member associations in their wish for the UK IMC to be retained for use on 'EASA aircraft' within UK airspace and would</p>

strongly encourage EASA and the UK CAA to find the appropriate legal solution for this.

Justification: The UK IMC has proved its worth in safety terms over many years. The pilots holding the IMC should not be disenfranchised by the creation of new EU legislation and the inherent additional cost of gaining the proposed new IR to replace their IMC privileges. This matter goes to the heart of 'grandfather rights' and subsidiarity.

Proposed text: EASA and UK CAA to resolve appropriate text. A suggestion appears under our comment re page 16 FCL.600 IR General.

response *Noted*

Thank you for your comment.

Apart from converted privileges from previous existing licences and ratings, Member States cannot apply additional requirements to newly issued Part-FCL licences and ratings (less or more restrictive) pertaining to operating EASA aircraft once EU regulations become applicable. A UK IMC rating may still continue to be granted for non-EASA aircraft (Annex II aircraft) for flights within national UK airspace.

A. Explanatory Note - II. Process and scope

p. 5-6

comment

9

comment by: *Alan Benton*

I believe that it is extremely to important to ensure that current UK IMC holders are allowed to retain and exercise their privileges. I also believe that the UK national IMC rating should be retained to allow pilots who do not already hold an IMC rating the opportunity to train for that rating.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

36 ❖

comment by: *Henning Dammann-Emden*

Hello!

I could not agree more on this proposal. I went trough all theoretical and practical training for a IR(A) Rating in Germany. What I had to learn to pass the theoretical exam was total useless stuff. Very little of all this actually helped me to learn how to fly an airplane in IMC conditions. Worst of all was the 200 hours of sitting in a classroom to get the stuff taught to me. A complete waste of my precious time, I could have easily teach it to myself at home.

Next, actual flying at the flight school. Training in the simulator is were I learnd the most. Real time flying was always in VMC, the flight instructor was afraid to show me how to fly in IMC. Not a single hour or even an approach was made in

response	<p>IMC conditions. Again, a waste of time and money.</p> <p>EASA`s new approach to the IR(A) rating is very good. I like the modular concept and the possibility to study at home. The possibility to use my own aircraft for flight training is very good, too. It shows that EASA has listened to the european GA world. All this is a tremendous step towards more pilots holding an IMC rating, even if it is a limited one.</p> <p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>50 comment by: <i>Trier</i></p> <p>The introduction or EIR will help to increase safety by helping pilots to pull themselves out of critical enroute situations and by opening a door into a full blown IR.</p> <p>All potential complains of ATC with regards of potentially more workload to handle should be completely disregarded. ATC's sole reason for existance is safety for air traffic. Whatever helps to increase safety has to be executed and supported by ATC. It would be a true perversion to spare ATC from "more work" at the cost of sacrificing increases in air safety.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>116 comment by: <i>Richard Coundley</i></p>
response	<p><i>Noted</i></p> <p>No comment provided.</p>
comment	<p>223 comment by: <i>Dave Tan</i></p> <p>test</p>
response	<p><i>Noted</i></p> <p>No comment provided.</p>
comment	<p>411 comment by: <i>UK CAA</i></p> <p>Page No: 6 to 15</p> <p>Paragraph No: Various</p> <p>Comment: The UK CAA welcomes these proposals as a very positive development.</p> <p>Justification: The proposals made should provide a proportionate, appropriate and tiered structure for the training and qualification of pilots to fly in IMC according to the needs of their activities. This should make the acquisition of</p>

these skills more affordable and so increase the numbers of pilots receiving training in flying on instruments, with consequent improvement in their flying skills and associated benefits to safety. These proposed rules would allow a more flexible and competency based route for pilots to obtain a full Instrument Rating, including for a professional licence. Finally, the En Route IR would provide a more affordable means for the private pilot to be able to access all classes of airspace, which will be more convenient, but would also enable private pilots to avoid routings that might take them closer to marginal weather conditions and other hazards.

Proposed Text: None.

response *Noted*

Thank you for providing positive feedback.

comment **818** comment by: *Patrick de Nonneville*

I support the solution to allow existing UK IMCr holders to continue to exercise their privileges.
The UK IMCr is a vital safety feature and a route for new students to take it should be created.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment **1083** comment by: *Danish Powered Flying Union*

Danish Powered Flying Union welcomes EASA's proposals which we in general find very positive. The proposals offer pilots a far more flexible and affordable access to obtain an Instrument Rating. The structure for training and qualifications according to the need of flying activities will increase the number of pilots receiving training for flying on instruments and these improvements in flying skills will benefit to flight safety.

response *Noted*

Thank you for providing positive feedback.

comment **1087** comment by: *John Milner*

In paragraph seven I understand the meaning to be that existing UK IMCR holders will be issued with an EASA IR and that the IR will have restrictions placed upon it. However those restrictions are not articulated as far as I can tell, though the intent to preserve existing privileges is clear. Could it be made clear that wording of those restrictions will be for the UK CAA to determine?

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In this case, the Agency will support the CAA UK in finding a practical solution to the issue.

comment

1342

comment by: *Neil Houghton*

I fail to see the advantage of having an enroute rating for IFR flying in IMC **IF** as the pilot in command you need to take off and ensure you land in VFR conditions. Here in the UK on a flight from England to Scotland which may last 3 hours (in my 172 it would be 2-3 hours) it is almost impossible to predict the weather three hours in advance in the hills of Scotland.

Surely a responsible pilot would not depart in poor weather conditions and fly into IMC not knowing at his destination what the weather conditions were, and if IFR he would not be allowed to make an instrument approach as is now the case with a UK IMC rating.

The enroute rating for the majority of pilots in the UK would be useless, the majority of PPL's fly under 6000ft ALT and not in the airways.

If we are IFR we have a deconfliction service from LARS ATC Mode S or C and at our destination we can (if required) perform an instrument approach to make a safe landing in IMC.

The new EIR should be similar to the UK IMC granting the privileges of a life saving instrument approach should the weather prove to be not as predicted at our destination.

I am an IMC rated PPL in the UK. I have needed to use my IMC and perform several instrument approaches at destinations either rapidly covered in sea fog, low cloud or visibility.

I would recommend that the EIR has these provisions, we do not need to fly in the airways, but we DO need to make a safe approach at our destination.

response

Noted

Thank you for providing this comment.

The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach.

In addition, the Agency, supported by many stakeholders, strongly believes the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

A. Explanatory Note - III. Overview of the changes proposed in this NPA

p. 6-13

comment

16

comment by: *P. Holy*

Crediting for 3rd country rating holders:

The words "demonstrate knowledge of Air Law" etc should allow an ORAL

examination. The present system of "demonstrating knowledge" comprises of written exams based on the ancient JAA CQB, does very little to verify knowledge (because most of the questions are not relevant to flying, and as a result most of the study is done using the question bank) and imposes a big burden in terms of time and hassle on candidates, due to limited exam locations, mandatory ground school, etc. An oral exam gives the examiner the opportunity to check real knowledge relating to practical flying.

This is what the FAA uses and it demonstrably works very well.

Also, the holder of an ICAO IR has already demonstrated theoretical knowledge in accordance with ICAO requirements, and should not have to do it all over again.

response *Accepted*

Thank you for providing this comment.

The text has been amended to allow the examiner to establish whether the applicant has attained an adequate level of IR(A) theoretical knowledge.

In addition, the holder of a Part-FCL PPL or CPL and a valid IR(A) issued in compliance with the requirement of Annex 1 to the Chicago Convention by a third country may be credited in full towards the IR(A) training course requirement.

comment 22

comment by: *Peter Reading*

The proposed EIR rating should be for IFR flight OUTSIDE of controlled airspace. This rating would INCREASE the risk to public transport operations within controlled airspace, due to reduced training, reduced currency. The holders of this rating would normally be operating GA aircraft which has a reduced capability due compared to other users of controlled airspace.

All cloud flying in sailplanes is outside of controlled airspace.

response *Not accepted*

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR.

The Agency, supported by many stakeholders, believes that the proposed rating will make IFR flight more accessible and will encourage PPL and CPL holders to obtain an IR(A) at a later stage.

comment 23

comment by: *Peter KEUTGENS*

Paragraph 2.4. Flight instruction

The wording under paragraph 2.4 leaves room for interpretation as to whether

instrument flight time on the basis of an FAA IRA may be taken into account or not towards the maximum of 30 hours credit. It appears that credit should be possible for PIC instrument flight time on the basis of an FAA IRA, but it is not clear that instrument flight time under supervision of an FAA certified instrument flight instructor may be taken into account. If that should not be the case, then many FAA rated instrument not meeting the 100 hours PIC instrument flight time requirement would be forced to undergo 25 hours of additional dual instrument flight instruction. That appears unnecessarily cruel and more than required for differences training towards the European test standards. I believe that 10-15 hours would be more appropriate for FAA instrument rated pilots not meeting the 100 hours PIC instrument flight time wishing to convert to an EASA IR. My recommendation therefore would be a clarification that any ICAO consistent training may be taken into account towards the 30 hours credit.

Paragraph 2.7. Crediting for third country rating holders

The requirement referred to in paragraph 2.7, essentially of 100 hours PIC instrument flight time for a Part-FCL PPL or CPL holder with current ICAO-based third country IR(A) in order to be credited in full towards the flight training course requirements, is an awful lot for any pilot to accumulate, in particular a private pilot. If one assumes that an average flight under IFR may be only 20% of the time in actual IMC, then this equates to 500 hours for the pilot to accumulate under IFR after obtaining the IR(A). My recommendation would be that the 100 hours requirement should be reduced to 50 or all hours instrument flight training be taken into account, including dual and PIC.

Part-FCL pilots holding an ICAO third country IR(A) but not meeting the abovementioned 100 hours of PIC instrument flight time will need to seek credit under paragraph 2.4 for their hours of instrument flight instruction under supervision of, most likely, an FAA certified instrument flight instructor and for hours PIC instrument flight as a FAA rated instrument pilot. However it appears not clear that FAA rated instrument would get any credit for their hours dual instrument flight training and would therefore be required to undergo at least 25 hours of ATO dual training.

response *Partially accepted*

Thank you for providing this comment.

The Agency has added a GM1 Appendix 6 (6)(b)(d) to clarify what kind of instrument training or flying time should be credited. A maximum of 15 hours dual flight training time will be credited towards the 25 hours of dual training required. Also the prior flight time requirement for competency-based IR was changed to 50 hours flight time under IFR as PIC on aeroplanes during the review process for those pilots who hold both Part-FCL licence and an Annex 1 IR issued by a third country.

comment 28

comment by: *Gérard PEILLER*

The goal of getting a large number of IR or EIR private pilots is fully supported in the sake of flight safety.

Nevertheless the requirements on the instructors to be IRI or FI+IR extension will be killing for this objective. For example, in France there is only a very small number (less than 10 or even less than 5) of flying clubs which have an IRI or FI+IR extension.

The aircraft requirement should also be clarified. We believed that initial basic skills training could take place on a less costly aircraft than an IFR approved aircraft, this could help to reduce the total cost.

Our flying club has about 200 members (nearly only PPL), we have a nice IFR Bonanza with a modern set of avionics, we have other aircraft "nearly IFR" (e.g. just lacking a DME), we have 3 CPL-IRME-FI but none are FI+IR extension, and neither PPL IR nor EIR are going to happen with the regulation as proposed in this NPA : experience, time and cost to get an IRI or IR extension is beyond economical justification for both the FI and the training organisation. This means that, for most PPL, getting an IR or an EIR will bound them to go far from home with travel/hotel cost and time availability (+induced cost) which will not be balanced by the reduction of cost of the private IR or EIR. This will kill the very nice attempt of this proposed regulation.

A large number of flying clubs have one or several CPL-IRME-FI and an IFR aircraft (or nearly). Therefore a way should be found to match the training requirement with the goal in order it may happen close to the PPL home in a reasonable way.

Therefore we invite EASA to investigate and to create :

- 1) Two intermediate "ratings" between FI and FI+IR extension :
- 1-a) an FI+EIR extension to give privileges for EIR training on SEP aircraft,
- 1-b) an FI+ PPL-IR extension to give privileges for PPL-IR training on SEP aircraft
- 2) the way the FI+EIR extension will go to the FI+ PPL-IR extension and from there to the existing FI+IR extension.

We also invite EASA to investigate and to clarify that initial basic skills training may take place on an aircraft not necessarily IFR approved.

This way, EIR and PPL-IR will really happen. It will also help FI's to move up step by step toward IR extension and this will also be helpful for the training industry later on.

response

Not accepted

Thank you for providing this comment.

The Agency believes that there will be sufficient IRI(A) and FI(A)+IRI instructors to cope with the foreseen training demand. In any case, a student could elect to complete all training at an ATO. Therefore, the Agency does not foresee the need to establish an 'intermediate rating'.

In addition, the Agency would like to highlight that aeroplane equipment requirements for IFR operations are contained in Part-NCO and are therefore outside the scope of this NPA.

With regard to initial basic skills training, please refer to AMC to ORA.ATO.135 for training aeroplane requirements for the IR and EIR.

comment

35

comment by: *David Weston*

For third-country ICAO IR holders looking to comply with the new requirements by obtaining an EASA IR, the 100 hours of PIC in instrument conditions required to avoid retraining is a very high number that might be achieved only

	<p>after flying as many as 800 hours or more in the IFR/airways environment. Surely it would be more realistic to set the target in relation to IFR time, at a level of 200 hours or so, or/and a more reasonable 40-60 in actual IMC or in simulated IMC conditions?</p> <p>The method by which third-country ICAO IR holders "demonstrate" their TK needs to be defined.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p> <p>After several related comments from stakeholders, the Agency and the Review Group discussed the requirements again. As a result, the Agency and the group decided to change the experience requirement to 50 hours flight time under IFR as PIC on aeroplanes. In addition, it was decided to allow an applicant to demonstrate the theoretical knowledge requirement to an examiner during the skills test.</p>
comment	<p>39 comment by: <i>Joerg H. Trauboth</i></p> <p>2.7 Crediting for third country rating holders Delete the first passage after the first sentences starting from "With a certain amount...to...Human Performance". Insert: "The theoretical knowledge and flying experiences of a Part-FCL licence holder and a holder of third country licence will be credited in full. Nevertheless, the applicant has to demonstrate appropriate theoretical and English knowledge during an oral examination and a proficiency instrument check flight by an ATO instructor".</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>After several related comments from stakeholders, the Agency and the Review Group discussed the requirements again. The Agency and the group concluded that some theoretical knowledge testing and flying experience is required, albeit with lesser requirements. As a result, the Agency and the group decided to change the experience requirement to 50 hours flight time under IFR as PIC on aeroplanes. In addition, it was decided to allow an applicant to demonstrate the theoretical knowledge requirement to an examiner during the skills test.</p>
comment	<p>41 comment by: <i>Flugschule Marl</i></p> <p>Use of FNPT or BITD for EIR: Using an FNPT or BITD will improve the training by giving the students the opportunity to concentrate on specific tasks (e.g. scanning or radio navigation) without the high general workload during a real flight. Also situations can be trained, which are difficult to impossible to conduct in a real aircraft, for example a gradual vacuum pump failure. Thus from my experience using e.g. 5 hours FNPT plus 10 hours flight yields better training results than 15 hours flight time. Allowing to substitute 5 of the hours towards the EIR with FNPT or BITD time will not exclude small ATOs without FNPT to offer an EIR because they can offer it with 15 hours flight training with a still comparable price. And</p>

maybe they can afford at least a BITD (which I see as almost as good as an FNPT for the purpose of the training towards an EIR), so I explicitly mention this in my comment. And it gives a motivation to small ATOs to do the investment in a BITD, which is not very motivated by the existing rules and thus will improve the overall training quality.

Allowing 5 hours FNPT will also allow to build on the module A according to appendix 1 to FCL 1.205 (basic IR). Some pilots already did this thinking to start later on with a full IR. Now with the new EIR the FNPT/BITD time is not credible. A suggestion from my side is to include something like:

"A pilot who has completed a the training of the module A according to appendix 1 to FCL 1.205 (basic IR) is credited 10 hours towards the 15 hours flight time required for the EIR".

response *Not accepted*

Thank you for providing this comment.

Several stakeholders commented on this issue and it was, therefore, further discussed by the Agency and the Review Group. It was decided, due to the low number of training hours, that all training must be completed in an aeroplane to give the candidate maximum exposure to the real environment (ATC, weather, etc.).

comment 43

comment by: *Carmin BEVILACQUA*

Considering the theoretical training towards either the EIR or the Competency Based IR it is a big improvement over the regulations right now that training can be done in large scale as a computer-based course in contrast to a classroom training that is mandatory at the present time. Especially for private pilots who are full time employed and have to do their training towards IR in their spare time the computer based training is much more convenient to fit in a tight schedule than is the mandatory class room based training.

response *Noted*

Thank you for providing this comment.

comment 44

comment by: *Carmin BEVILACQUA*

The modular approach to the IR is highly favorable. Every possibility to decrease the difficulties to approach the IR training will pay in a very high gain in general aviation safety and can only be highly encouraged.

response *Noted*

Thank you for providing positive feedback.

comment 51

comment by: *Trier*

The proposed new regulation has to build a bridge to pilots who are in most cases operation safely for years if not decades under the existing legislation.

The general concept of taking material from the theoretical tests form IR into HPA is a logical step. **However, it must be assured that existing HPA certificats will be honoured without any restrictions.** It would be totally

unacceptable to request pilots with existing HPA and years of experience to require re-testing just because the syllabus has changed. I see a significant legal risk should this be required by EASA, aside from the partial stupidity of such a step. This would quickly be challenged in front of the courts which are likely to understand and honour pilots who have acquired their HPA under the previous syllabus and shown safe operations ever since. Such a court ruling would be a tremendous embarrassment for EASA.

In general pilots who are operating with years of experience under the existing regulations must be shown a suitable path into the new regulation. Suitable means to requirement to prove their practical abilities which no one will have reason to complain about. Suitable does definitely not mean to require theoretical knowledge with anything above and beyond an oral check of his abilities. It is of vital importance to the success and acceptance of the new regulation that the "demonstration ... (of) knowledge of air law, meteorology ..." does not mean and cannot be mistaken to be test executed by a national authority (such as the LBA in case of Germany).

I may act as an example for this. I have acquired my German PPL in 1990 and upgraded my skills with an US Instrument Rating in 2002. I have accumulated more than 1.000 hrs of flying in total and about 500+ hours of instrument flying since getting my IR in 2002. There has not been a single incident or violation filed. I'm flying non-commercial missions for my company (in German: Werkverkehr) on a N-registered airplane. Everyone will understand that changes in legislation such as to require an EASA rating to operate in Europe with the potential need to undergo new theoretical testing does not improve my safety situation the least. **So, the dictum for the new regulation is clear: it has to provide a bridge for pilots with years of experience without imposing unproductive theoretical testing.** Anything else would fail the mission and -as mentioned above- certainly not sustain being tested in court.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing licence, rating and previous experience may be credited towards a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment

52

comment by: *Trier*

Airplane used for Training

For pilots with VFR skill only it is important to have a chance to get instructed on their own (IR-qualified) plane if asking for it. This would increase the safety a lot as owner-pilots would be trained on exactly the plane they fly the most (if not exclusively in most cases). Any rule to require training in flight-school planes is totally contrary to maximizing safety. Such a restriction would only be an economic protection for flight schools which they do not need as they would quickly distinguish in their hourly training rates between training on their planes and training on third party planes anyway.

Multi-Engine

There has to be an easy way to upgrade an IR to multi-engine, preferably by a moderate amount of training at an ATO.

response

Noted

Thank you for your comment.

The requirement for a minimum of 10 hours of flight training at an ATO has been re-examined by the expert working group. It was established that several Member States have such a system in place without creating any additional safety risks and, therefore, it is a trusted method. As a result, the expert group, in consultation with the Agency, decided to keep the 10 hours requirement.

comment

64

comment by: *Pilatus*

Pilatus appreciates the aim of EASA to make it easier for pilots to obtain an IFR rating using the steep approach, thereby enabling more pilots to start flying in IFR conditions.

Pilatus does not support the new proposal as we are of the opinion this approach may introduce more dangers. Individuals with the limited proposed new IFR rating may not necessarily recognize their limitations in IFR conditions which may lead to accidents or even more dangerous is the possible abuse of the rating by flying beyond what is allowed.

response

Noted

Thank you for providing this comment.

The Agency and the Review Group acknowledge your concerns with regard to the EIR. However, the Agency believes that 15 hours is an appropriate minimum requirement for the EIR as the rating only applies to operating under IFR during the en-route segment of a flight. During this training the limitations and threats will be emphasised. The student will receive a demonstration of at least two IFR approaches in the context of an emergency situation. The theoretical training has the same content as the competency-based IR. An adequate level of checking is also established to guarantee a good level of knowledge and skills for this type of operations.

comment

71

comment by: *mark casey*

Dear Sir/Madam,

Following extensive discussion regarding the proposed new ER instrument rating with our panel of 26 instructors at a recent instructors standardisation meeting in our FTO the general consensus amongst a wide ranging level of experienced instructors from both airline and non airline experience backgrounds was that the ER instrument rating was quite an extreme "watering down" of the current IR level of instruction a potential student would receive under the current system in the majority of European states.

We are concerned that given the somewhat challenging European weather a student would not have had sufficient training in the required skills and decision making process in order that an acceptable level of competency is achieved.

It must also be considered that the 50 hour IR course is an absolute minimum requirement which invariably results in a student surpassing the minimum current requirement to achieve competency in all elements of IR flying.

We feel that the 15 hour half way house option will result in an incomplete level of appreciation and skills required to fly in IMC conditions in Europe.

response

Sincerely,
MJC
Head of training

Noted

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

In addition, the Agency and the group believe that 15 hours is an appropriate minimum requirement for the EIR as the rating only applies to operating under IFR during the en-route segment of a flight.

comment

74

comment by: PPL/IR Europe

Comment on 1.1 General, first para

We agree with the Agency view that the EIR and CBM-IR should apply to both PPL and CPL holders. It is consistent with both EASA FCL and ICAO that additional Ratings (eg. Class Ratings, Instructor Ratings and Instrument Ratings) should be established independently of the pilot licence to which they are attached. There is no reason why the EIR or the CBM training method for the IR should not apply to CPL holders.

Comment on 2.2 Possible restriction of privileges

We strongly support the Agency in its choice of "the second route", ie. to not restrict the privileges of the CBM IR to certain aeroplane classes or types on the following grounds

- We understand that FCL008's proposals were developed on the basis of reviewing the training process for the existing EASA FCL Instrument Rating, and not the creation of a "restricted IR". This is consistent with FCL008's terms of reference.
- Given there is no proposed change to the content of the IR Test or the syllabus for the flight training, we believe it is a fallacy to consider that there could be an appropriate "restriction". What could be the possible upgrade examination for an IR holder who has completed Competence-based Modular training, since the training and test content are exactly the same as for the Modular or Integrated IR?
- We note that EASA regulations already impose significantly greater requirements on advanced light aircraft than the ICAO norms or other regimes such as the FAA. The requirements for type-specific Class Ratings for the piston PA46 and for sub 5.7t single and multi-engine turboprops, the HPA examination, and the regulations for Complex aircraft operated Non-Commercially are already in place through the mechanism of Part FCL class rating privileges and Part OPS. There is no justification for a

redundant extra layer of restriction on the Instrument Rating, since holding an Instrument Rating gives no concession to the Class Rating or Part OPS requirements

Comment on 2.3 Learning Objectives

We strongly agree with the proposed deletion of IR LOs. The present JAR-FCL IR TK syllabus contains a very significant amount of depth and detail that cannot be considered relevant to the incremental privileges of the Instrument Rating. We believe that this has both discouraged pilots from undertaking IR training and harmed the "fitness for purpose" reputation of JAR FCL TK.

Comment on 2.4 Flight instruction, final para

We believe that there should be a specific route for a competency-based course towards a multi-engine IR(A). There is no reason for there not to be such a route. The relationship between the existing Modular ME and SE IR(A) should be mirrored in the CBM IR.

We have not commented further on paras 2.4-2.7 in this section of the CRT, all of our views on the content of these paras are detailed in our comments on the Draft Opinion section.

Comment on 3 Sailplane cloud flying rating

We fully support the proposals for the Sailplane cloud flying rating

response *Partially accepted*

Thank you for providing feedback.

The Agency and the Review Group further discussed the 'ab initio' flight instruction for the multi-engine competency-based IR(A) and, as a result, the requirements were added. A total 45 hours of instrument flight instruction is required if no certain previous flight experience or training are credited. In any case a minimum of 25 hour dual instrument instruction of which at least 15 hours completed on a multi-engine aeroplane are required.

comment 82

comment by: *P Thornton*

I support the EIR and Competency-based modular IR(A) as outlined in section A III. The training and skill test requirements seem proportionate to me and I would be likely to seek to obtain both ratings.

The Theoretical Knowledge Syllabus and Learning Objectives set out later in the NPA under part B look reasonable and appropriate.

response *Noted*

Thank you for providing this comment.

comment 108

comment by: *Irish Aviation Authority*

In regard to the following comments at 1.6 -

1) "The Agency is proposing this entry level en-route instrument rating as a valuable tool to reduce the rate of accidents or incidents arising frequently from PPL or CPL holders not holding an instrument rating who nevertheless

inadvertently enter IMC."

What accidents or incidents are being cited here ? This is not Training to assist pilots who inadvertently enter IMC, rather this proposed rating is going to encourage low time pilots with only 15 hours training to actually enter IMC; Accident investigation studies have frequently identified that Controlled Flight into Terrain (CFIT) accidents involving VFR pilots are caused by a conscious decision to "press on" into IMC conditions rather than inadvertent entry into IMC.

2) "In these cases, most private pilots have not been trained on how to handle IMC, resulting in safety critical situations."

The EIR is not proposed as training to handle inadvertent IMC, rather it is proposed as a way to fly in IMC for unspecified enroute flights which may overfly several States and varying enroute surface weather and terrain conditions - It is a possibility that this rating (EIR) may encourage pilots into a 'safety critical situation' by allowing them to fly in IMC without the full privilege or ability to use all the safeguards built into IFR flying, particularly in the event of an enroute emergency requiring a descent and approach in IFR conditions.

3)" The introduction of this rating is expected to reduce the safety risks by facilitating a wider skill-base to private pilots. Pilots holding an EIR will be able to cope with these situations. The potential safety risks induced by the fact that training for this rating mainly focuses on the en-route IFR skills and provides no approach and landing privileges is mitigated by the restrictions of privileges on the one hand and some specific training modules for handling emergency situations on the other."

An enroute technical emergency will require the pilot to declare a 'Mayday' for the technical emergency and also a 'Mayday' for the IFR descent and IFR approach to a suitable alternate due to his lack of training or ability, and lack of privilege under the intended rule.

ATC services will expect pilots that have filed IFR will be able to comply with IFR instructions including enroute holding, descent and IFR approach. How are the restrictions of an EIR rated pilot's IFR privileges to be communicated to ATIS units along his/her intended route. Perhaps there should be a mandatory remark included in the ATIS Flight Plan which alerts the ATIS unit / controller to the status of the EIR pilot and affords them the opportunity to reject the flight or require it to circumnavigate their airspace.

Also, by making the safe option of descent and approach under IFR / ATIS control into an "Emergency Procedure" for the EIR pilot, this introduces an element of 'Negative Training' that could encourage such pilots to attempt risky IFR to VFR "transitions" to avoid the embarrassing or intimidating prospect of declaring an "Emergency". NC 11/11/2011

response *Noted*

Thank you for providing this comment. In relation to your comment on 'accidents or incidents', please refer to Regulatory Impact Assessment (RIA) toward the end of the NPA, in particular paragraph 2.3. In addition, the Agency, supported by many stakeholders, strongly believes that the EIR will have an

overall positive effect on safety and will provide an incentive to General Aviation (GA) VFR pilots to obtain the full IR(A) rating at a later stage.

An EIR holder is qualified to fly IFR en-route. The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. ATC has access to the flight plan which will indicate the IFR/VFR/IFR transition points (Y and Z plans) and that no IFR arrival or departure is filed. In addition, it would be possible for the pilot to enter 'EIR holder' into the remarks section. The Agency acknowledges that there will be a need for some initial publicity so that ATC units are aware of the nature of the EIR rating.

Finally, the Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.

In any case, it is the pilot's responsibility to assess the conditions en-route as well as at the destination during pre-flight.

comment

115

comment by: *Patrick Malone*

The En Route Instrument Rating is an illogical and dangerous pseudo-qualification which will increase the accident rate. Particularly in north-west Europe, no weather forecast is trustworthy enough to guarantee VMC three or four hours ahead of arrival. Any pilot who deliberately flew into IMC without the skills and training to make instrument approaches would be guilty of bad airmanship, and a regulatory system which encouraged such behaviour is to be deprecated. If VMC is required for departure, destination and alternate aerodromes, what happens when an emergency diversion en-route becomes necessary in IMC?

In order to qualify for the EIR pilots must have passed all the Theoretical Knowledge exams for the full IR; it is these that currently represent the greatest barrier to obtaining the IR, not the flying. Pilots should instead be encouraged to take the remaining 10 hours of dual training to receive the full IR. Any interim instrument qualification should concentrate primarily on returning safely to earth from IMC rather than how to fly on instruments in the cruise.

response

Noted

Thank you for providing this comment. The Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation (GA) VFR pilots to obtain the full IR(A) rating at a later stage. The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR.

. During pre-flight it is always the pilot's responsibility to assess the conditions

en-route as well as at the destination and not to start the flight if not sure of safe operation.
In addition, the Agency has reduced the minimum amount of theoretical knowledge hours to 80, and the exams requirements are reduced slightly when compared to the full IR theory exams.

comment

118

comment by: *Richard Coundley*

EIR

In my opinion the EIR as currently conceived is just a licence to get yourself into trouble with no training and legal way to potentially get yourself out of trouble and safely onto the ground. As a VFR pilot in IMC there is only one safe place to be, and that is in VFR and then safely on the ground. Hence it is essential that the EIR training and privileges be expanded to include instrument approaches albeit to higher minima, similar to the UK IMC rating. If you are caught flying in a 500 foot cloud base there is only one place you can safely break cloud and transition to VFR, and that is on finals for an instrument approach. For example you don't have to fly a very accurate radar vectored ILS to be able to transition to VFR at 500 feet, and have plenty of time and altitude to make a safe and uneventful visual landing. In marginal VFR conditions there are only two safe places to be, either on the ground or above minimum safe altitude on instruments. Don't force pilots to 'scud run' in order to stay legal

PPL IR

Please learn from the FAA approach. FAA has a relevant and practical approach to the TK aspects. And the FAA had a much more practical and safer approach to the flight training and the test. The key points being that:-

- 1) 1. The pilot has to demonstrate that the ability to both hand fly and use the autopilot for instrument approaches.
- 2) 2. The FAA pragmatically allows the pilot to do the training and test in the aircraft of the pilot's choice. Whereas the UK CAA effectively forces you to use a school aircraft. In my own case I was able to do the training in my own aircraft, a Cirrus SR22 Turbo with a modern glass cockpit driven by a pair Garmin 430s. Under the FAA approach I was able to do all of my instrument training with an FAA IR instructor who specialises in Cirrus aircraft. That is major contribution to safety.
- 3) 3. Allow the use of foggles as opposed to screens for the training and tests.
- 4) 4. Abandon the obligatory use of the NDB in the training flight and test, and allow it to be substitute by a much more reliable and stable instrument i.e. a bearing pointer drive by a GPS. In my case a bearing pointer driven by of the two Garmin 430s in my a/c. NDBs are not reliable because they can get confused by coast lines, they tend to point at thunderstorms and they dip violently in the turn. Please focus on safety!
- 5) 5. Remember the key safety ingredient in flight training is the instructor, not tick boxes and endless bureaucracy. Allow qualified independent instructors to undertake the training for the IR. Listen to the private pilots. It is our lives that are being compromised by ridiculous restrictions. Make training affordable. Training saves lives!

Conversion to a EASA IR from a FAA IR

Please take a sensible approach to the TK component of this conversion. Bear in mind that many European pilots like myself have done most or all of their instrument flying in Europe. Please restrict the TK element to practical and relevant differences between the content of the FAA IR TK and the EASA IR TK.

response *Partially accepted*

Thank you for providing this comment. With regard to the EIR, the Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.

With regard to the competency-based IR(A), the Agency would like to highlight that a pilot will be trained and checked in his/her ability to conduct an instrument approach with and without autopilot. In addition, a certain amount of prior instrument instruction (by IRI(A) or FI(A) holding the privilege to instruct for the IR(A)) or PIC time, flown outside an ATO, may be credited towards the total hour requirement. The aircraft used for training by an ATO need to fulfil requirements stipulated by ORA.ATO.135. A new AMC was developed for training given outside an ATO. This AMC includes guidance for aircraft used and also record-keeping.

With regard to the use of foggles, they are not prohibited. Currently, it is up to the instructor/examiner to decide what equipment is to be used to simulate the IMC.

With regard to the use of NDB in training and checking, the Agency would like to clarify that as long as NDBs exist, it is important to train and test pilots in their use. It is in the interest of the safety of the pilot to be able to use all types of navigational aids. The Agency will closely monitor the development in this area and modify the rules accordingly.

Finally, with regard to your comment on the conversion to the EIR from a third country IR(A), the Agency has decided to allow the applicant to demonstrate an adequate level of theoretical knowledge (Air law, meteorology and flight planning & performance) during the skill test to the examiner. In any case, it is the pilot's responsibility to assess the conditions en-route as well as at the destination during pre-flight.

comment 132

comment by: *Robert John*

3. I support the proposal to introduce a cloud flying rating for sailplanes. In the UK, it is vitally important for sailplane pilots to be able to fly close to and occasionally in cloud. Typical UK cloudbases are far too low to enable cross country flight on most otherwise good days if pilots were restricted to flying 1000 feet below cloudbase. The thermals we need are invariably below clouds (except in blue conditions) so it is usually impossible to climb in the blue areas between clouds.

The ability to safely enter cloud to enable a climb to a height that will allow a good glide range is invaluable on low cloudbase days and extremely useful on other occasions. The ability to enter cloud safely on the decent from a wave flight is sometimes a vital skill and privilege when cloud closes below the pilot.

Glider pilots have safely exercised this privilege since the 1930s. Loss of gliders in cloud is extremely rare, death or injury of pilots almost unheard of and injury to persons on the ground caused by loss of control of a glider in cloud has never been recorded. British Gliding demonstrates a superlative safety record in this regard and its practices should be used (as they so often are) as an exemplar for a safe, international system. Any variation from the proven safe UK system must be viewed with extreme suspicion and concern.

3.2 Cloud flying is entirely a skill issue. Time as P1 has little relevance though a 30 hour minimum would ensure a degree of experience and maturity at the controls and would be accepted as reasonable. 5 hours of dual training on instrument-only control is a pointless and dramatically excessive requirement. It is very rare for a sailplane to remain in cloud for more than the time taken to complete a climb, rarely more than 10 or 15 minutes at a time. Training flights in sailplanes are (in the UK at least) usually measured in minutes, not hours as there is no engine to conveniently regain lost height. The drain on instructors' time and aircraft availability would be prohibitive and, for flat-land clubs where wave flying is not an option, training would be extremely expensive in high aerotow costs. No safety case has been (or I believe can be) made for a minimum instructional time and I strongly urge that this element be dropped. It serves no useful purpose where there is to be a skills test.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment 140

comment by: *Joachim Werner*

Concerns 2.7 crediting for third country rating holders:
I have fundamental problems in reconstructing the logic of the crediting procedure: The requirements are 100 hours flight experience as a PIC, e.g. in Europe. Nevertheless the "validation" involves a knowledge test in 4 topics. In my logic as a university professor there are only two solutions to this contradiction: 1. my 100 hours flight experience are a chance product, which has a lower probability than winning the jackpot, 2. these 4 knowledge tests have nothing to do with IFR flying, but pilots have to be trained in negligible contents!! Even the skill test could be questioned! In the Social Sciences a proven wisdom tells us: The best predictor of the future is the past. So if pilots fly 100 hours in Europe without complaints, don't bother them with extra costs and examination stress. Why are FAA certified pilots the scapegoat and the whipping boy of the Europeans????

response *Partially accepted*

Thank you for providing this comment.

After receiving several stakeholder comments, the Agency and the Review Group decided to further discuss the issue. As a result, Appendix 6 A.2. (8) has been amended. The current requirements for crediting third country IR(A) stipulate the conduct of a skills test, demonstration of adequate theoretical knowledge and 50 hours of flight time under IFR as PIC on aeroplanes. If the applicant is unable to fulfil the PIC hours requirement, previous third-country instrument flight experience may be counted towards the competency-based IR(A) or EIR course as appropriate.

comment 161 comment by: *David Trowse*

I support the intention to allow initial training for the EIR and IR(A) to be conducted outside of an ATO.

It is important that the EIR provides the training for instrument approaches and gives the holder privileges to conduct an instrument approach in IMC in the event of unforecast weather conditions below VMC at destination or diversion.

response *Partially accepted*

Thank you for providing this comment.

After receiving several similar comments, the Agency further reviewed the issue and decided to include a demonstration of two IFR approaches in the context of an emergency. However the EIR, due to the limited amount of training, will not include the privilege to conduct IFR approaches.

comment 162 comment by: *David Trowse*

I support the general proposals for a competency based IR(A) attainable via modular training.

I support the proposal not to restrict the privileges of the competency based IR(A).

response *Noted*

Thank you for providing this comment.

comment 163 comment by: *David Trowse*

I support the proposal for a reduction in the TK syllabus for the competency based IR(A).

I support the proposal to credit up to 30 hours PIC instrument flight time towards the training hours for the competency based IR(A).

response *Noted*

Thank you for providing this comment.

comment 164 comment by: *David Trowse*

response	<p>I support the proposal to allow the initial training for the IR(A) to be conducted outside an ATO and require only 10 hours training at an ATO.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>165 comment by: <i>David Trowse</i></p> <p>I support in general the proposal for a SCFR.</p> <p>But, given that a skill test will be required, think that there is no need to specify a minimum number of training hours. I propose that the 5 hours dual training minimum be removed or reduced.</p> <p>I also request EASA to consider introducing a Restricted SCRF for that would allow pilots to fly in conditions that do not meet VMC minima but do not require flying solely by reference to instruments.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>168 comment by: <i>R.M.Evans</i></p> <p>para 3.2 requires 5 hrs dual instruction, I would consider this for the experienced pilots too long and costly, it should be completed when the examining instructor is satisfied that full competency has been reached</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>170 comment by: <i>Danny Lamb</i></p> <p>The suppositions about glider flying are a bit odd. I have over 1000 gliding hours, I am an instructor, I have my own aircraft (equipped with an Artificial Horizon) and have completed Cloud flying training some years ago in a converted ASK13 with rear hood blanked out. Flying in cloud is a last resort so that I can get home or manage to complete my flight safely. What we do almost every flight is fly up to cloudbase where sometimes the visibility can be reduced, personally I very rarely lose sight of the ground in these circumstances and always have a planned way out. Gliders do not "Cruise" in cloud it is always a climb and then away from the cloud.</p> <p>My training was completed in a weekend at a cost of approx £150 for the launches/flight time/instructor(free). The imposition of 5 hours flying in cloud</p>

at a gliding club would necessitate some £100 for glider hire, Hopefully £0 for the instructor and £200 to £300 for launches at least double what I paid in the past. I have not put a cost in for "Ground School" as this is usually Free at most UK gliding clubs.

I would recommend that 2 hours for an experienced pilot is enough training time. Looking through my log book I can only estimate my longest time in real cloud flying - no visibility - would be around 15minutes. With the modern high performance gliders actual cloud flying is minimised but close to cloud and using the wispy bits is the usual way of completing most flights.

Personally I have never used ATC to facilitate Cloud flying as I very rarely have to fly in an ATC controlled Airspace. As gliders cannot comply with maintain height and heading type instructions it would make the volume of airspace used up higher than a cruising power plane.

There are comments about Approach and landing in IMC. Gliding clubs are very careful to ensure that operations of this phase of any flight are completed outside of IMC conditions - we only have one chance to land at least we should be able to see the ground from sufficient altitude to complete that phase of the flight.

Overall I support the need for harmonisation in Sailplane Cloud flying but the training need is over specified for the average UK pilot.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 210

comment by: *guy Corbett*

The proposal for a cloud flying rating for sailplane pilots has a requirement for 5 hours dual instruction. This is excessive, I have been flying gliders/sailplanes for 42 years during which I have flown 4900 hours of which only 43 were under instruction. This consisted of 278 launches giving an average flight time of just less than 10 minutes, at that rate 5 hours would necessitate over 50 flights as the take-off and landing would not be relevant to this rating. It is difficult to receive instruction and soar at the same time, especially in the UK. So in practice the 5 hours would need to be done in a powered aircraft which has little relevance to sailplanes.

There should be no stipulated minimum time for dual instruction, the criteria for the rating should purely be the flight test.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 224

comment by: *Dave Tan*

The basis of justification for this regulation is that it will increase pilot safety significantly. This is a very laudable aim but unfortunately in the context of sailplane is seriously erroneous to the extent that if implemented will increase the death rate and the serious injury rates of sailplane pilots. Furthermore this increase in injury rates and death rates will disproportionately fall on the low hour pilots, the one who most need agencies such as EASA to protect their safety. As a 2000+ hour sailplane I find this misunderstanding of sailplane operating modes and methods of flying terrifying. To put low hour pilots at such extra risks is not the act of a responsible agency and I have faith that as EASA has safety as a primary charter it will not implement such a dangerous rule. The reasoning for this is not directly associated with cloud flying but rather more associated with the requirement for a pilot to keep 1000' below cloudbase when the cloudbase is above 3000' during VFR flying. Consider the example of a very typical summer day in the United Kingdom where the cloud base is 4000' which is probably in the median to upper quartile of cloudbase heights during a typical soaring window. Flying VFR only means that the non IR rated pilot must keep below 3000' during a flight. Consider the situation when this pilot is on a cross country flight out of range of a landable airfield or airstrip. Normal training for a sailplane pilot on cross country flying is to operate between cloudbase and 50% of cloudbase. The reason for this is that thermals are stronger, easier to work and more reliable in this height band. This substantially reduces the risk of land out for all pilots and for low hour pilots it reduces the risk of landout by even more substantial factors as low height band thermalling skills are much more difficult than for higher levels for reasons already stated. Therefore taking the example of the typical summers day already mentioned then under current rules the operating band for a typical cross country flight is 2000' (4000 to 2000) before entering the region where land out risk is substantially increased, however for a new rules VFR pilot this is reduced by 50% to 1000' (3000 to 2000). Probability of detecting a thermal is directly proportional to the distance flown through air during a search for energy. This means for a high performance glider a rough calculation of 10k distance per 1000' can be used, for a lower performance cross county glider 5-6k per 1000' can be assumed. This gives: -

Current rules

High performance sailplane search distance 20km

Medium performance sailplane search distance 12km

New VFR rules

High performance sailplane search distance 10km

Medium performance sailplane search distance 6km

This means the probability of not finding energy between like sailplane types is reduced by over 50% under these conditions and between a high performance sailplane and and a medium performance the difference is over 70%. In reality as the search distance reduces the probability of finding energy reduces non linearly as on any typical soaring day the typical distance between thermals is fixed and this can vary between seperations measured in single kms or can be separated by distances in excess of 10km. This means the implications becomes even more stark as the rule change could mean on a cross country flight in the above example the search distance for energy could change from being able to operate within the recommended operating height band with ease in a high performance glider to almost never being able to operate within the recommended height band in a medium performance glider. Once the pilot starts to operate below 50% of the operating height band the risk of needing to land out (make an emergency landing) increases substantially again this curve is not linear as the risk is probably driven by something like a square law (i.e.

the risk has probably not doubled but quadrupled). The most dangerous part of a sailplane flight regime is the emergency land out when the pilot must select a suitable landing area free from obstructions, hazards and with a suitable surface. From the air it is not possible to guarantee these things and until the aircraft has come to a complete stop the suitability of the chosen land out area is not completely known. It is for this reason that the bulk of incidents, accidents and injuries during sailplane cross country flights occur during out landing. For this reason in the above example which is very typical for the United Kingdom weather conditions the rule change would make cross country sailplane flying more dangerous not less dangerous. The number of incidents that occur due to mid air collisions between sailplanes and other aircraft is mercifully very low and very rare but incidents during outlandings are much higher. It is on this basis that I suggest these new rules can be very dangerous by increasing outlanding risk. As with all activity flying is a risk based activity and the prudent pilot and authority should use a risk based approach to minimise them, therefore the current status quo give much better safety risk than the new regime.

It becomes especially stark when you consider that the early cross country pilot has the risk substantially increased for the following reasons:-

1) As an early pilot they will not have built up the experience and judgement over the minimum requirements in all aspects of flying. Flying is an experience based environment where in general the more experience you have the better your ability to soar and stay aloft and avoid a field landing. When forced to make an emergency landing the skills and judgement of an experienced pilot ensure that on average safer decisions and choices will be made.

2) An early pilot typically flies lower performance (non top of the range) machines due to both their better handling characteristics and due to cost. This means on a cross country flight they are statistically more likely to land out for this reason alone.

3) The more experienced pilots will find it easy and be more likely to obtain an IR rating due to the fact that training and flight tests will be easier to get through and early pilots may not feel up to the demands of in cloud flying but will be comfortable for flying clear of cloud.

I would therefore recommend that you seriously consider the risks to sailplane pilots that this rule would imply. I do not emphasise hear the dramatic if not catastrophic effect these rules would have on sailplane flying as I suspect many of my fellow sailplane pilots will also be committing in the impacts in this area.

response

Not accepted.

Thank you for your comments.

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome or will 'increase the death rate and the serious injury rates of sailplane pilots' as stated in your comment. As an experienced sailplane instructor you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which the VMC minima are established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

231

comment by: *Stephen Lynn*

I would recommend that the SCFR rating be valid for 36 months.

response

Not accepted

Thank you for your comments.

The 24 months period will be kept as this is a standard interval used for other revalidation cycles. Part-ARA already provides some flexibility for the revalidation process. The Agency does not believe that additional extra time is needed. In addition to this, it should be clarified that the SCFR only has a recency requirement but no revalidation date.

comment

240

comment by: *Roland Trautner*

As a PPL holder and VMC pilot, who frequently performs touring flights of 500 - 1500km across Europe, I would greatly appreciate the introduction of the EIR.

On the one hand, the rating could allow to fly en-route parts of flights in IMC at safe altitude over terrain, which would allow to safely avoid low-altitude routes through tricky terrain such as those often encountered when crossing the alps, flying across all of Germany when there is good weather in the North and in Austria but extended cloudy regions in the center of the country, etc.

On the other hand, the EIR, with acceptable requirements in terms of required classroom and dual flight training, would provide a low enough threshold for me to acquire this rating and get training for IMC flight which would not only allow the legal execution of the rating privileges on EIR flights but provide a significant overall improvement also for my VMC flying in less-than-optimal weather conditions.

For me it is absolutely clear that the EIR would significantly improve the overall safety in my flying, with a threshold low enough to convince me to do the investment (cost and effort for a full IFR rating is not justified for my type of flying).

As a sidenote, I do not think that I would do much more than 4-8 EIR flights per year as I am essentially a good-weather touring pilot. I believe this would also be valid for many non-IFR private pilots, so the additional ATC work would be negligible. I would however expect a significant decrease of weather related accidents due to more pilots receiving IMC training, towards the levels seen in UK and US where the authorities offer a IMC rating (UK) or a significantly higher number of pilots hold IFR ratings (US).

I would like to thank the relevant authorities for the EIR proposal which I fully support, and hope it will be maintained as proposed.
R. Trautner

response

Noted

Thank you for providing positive feedback.

comment

248

comment by: *Neil RATHBONE*

I strongly support:

- Option 3 - the adoption of the EIR and the PPL/IR
- The creation of the sailplane cloud rating

In addition:

- PPL/IR Grandrather rights should be given to holders of the UK IMC rating - possibly with some specific en-route airways training
- People like myself who have done ATPL theory under the old system should be credited for it under the new

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. In addition, valid JAR ATPL theory will be credited toward the theory requirements of the EIR.

comment 255

comment by: *David Martin*

My comments.

I am a sailplane pilot with 35 years experience at all levels and have been an instructor for over 25 years.

Whilst I have flown in clouds this is not a practice I use regularly but occasions require its use.

I accept that there are some pilots who relish this activity so I would not like to see it banned.

The UK has well established guidelines for pilots wishing to fly in cloud and whilst there is no formal training structure for this activity the accident records show it is not a problem.

There are however 2 sides to IMC Ratings one flying in cloud and the other flying close to cloud.

Whilst I do the former on rare or for practical reasons the second I do regularly in my general sailplane activities, from low land level sites and mountain sites as solo pilot or instructor.

As I fly from a ridge top site, in certain weather conditions flying clear of clouds BUT in IMC conditions is possible.

Any restrictions to this type of flying would be an infringement of my long held rights and privileges and would severely affect the fortunes of mine and many other clubs. It is also by circumstance rather than by legislation that this type of flying is taught throughout Europe.

The dangers of flying clear of cloud in certain wave weather conditions are that it is possible to climb above cloud and still be in clear air but the clouds can close underneath, then one has a choice, stay there or descend through cloud. This is where I and others need the ability to cloud fly, on SAFETY grounds.

The removal of the ability to fly in clear air and IMC would as your report suggests clearly restrict cross country activities of sailplanes on many days especially in the UK.

The argument that increased cloud flying would increase field landings is a red herring, ALL sailplane pilots are taught to select and use fields in which to make outlandings and is part of the current UK requirement of obtain a cross country endorsement.

Correspondence with many sailplane pilots suggest that whatever European country we fly in and even globally, the IMC in clear air rules are ignored to a greater or lesser extent. Total cloud flying is a practice carried out by a few.

So what are my choices.

Annex II 4

Option 0 does not foresee a cloud flying rating.

Ignores the issue and it will not go away as the Rules of the Air require an IMC rating to fly in cloud and many pilots will ignore the rules.

Option 1 Requires a formal structured training for all to fly in IMC conditions even in clear air close to cloud. This would place an impossible burden on the Europe wide gliding movement and would again be ignored.

Option 2 This option is the best option offered but is badly worded. Here is an attempt.

"The holder of a sailplane licence would be allowed to fly in IMC conditions and remain clear of cloud, provided airspace structure allows." This would require that both practical and theoretical, instruction is given prior to the licence being issued.

Additionally Sailplane pilots who wish to fly for prolonged periods in cloud would require to demonstrate that they have undertaken a period of training and are proficient in these skill. This would require some sort of practical and theoretical test and licence endorsement by an examiner, that like a radio licence could be validated by proof of continued use.

David Martin
December 6th 2011

response

Not accepted

Thank you for your comments.

As Option 2 refers to the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by the BGA.

comment

275

comment by: *Sarah Kelman*

3.SCFR

3.1 I strongly support the continuation of cloud flying privileges for glider pilots. Cloud flying is a necessary skill both for competitive / cross-country advantage but also for safety, especially when flying in wave systems. It is not uncommon for the wave gaps to close or for pilots to underestimate the sink of wave systems and find themselves compelled to penetrate cloud. The BGA syllabus currently ensures adequate training in this to permit safe flight and the privileges should be permitted to continue.

3.2 The requirement for 30hrs solo flight is marginally reasonable for a person who has learned solely on sailplanes but takes no account of, say, an airline pilot who has converted to gliding with a mountain of instrument flying experience. Similarly, the 5 hrs requirement is overly onerous. Sailplane flights are necessarily short and even soaring flights have very short periods in cloud. Realistically, a pilot should be expected to perform two cloud flying manoeuvres:

(1) to establish in a dry thermal and then continue that climb up into cloud and safely exit on a prescribed course. Thermals are short lived and even a tedious slow climb would take no more than 10 minutes after which the pilot will level the wings and out the side of the cloud into clear air again. It is unrealistic to attempt to spend 5 hrs doing this. (2) unintended penetration of a cloud layer. Again, the pilot commences from steady state wings level descending gliding flight and would penetrate the payee wings level until exiting. Thirdly, emergency manoeuvres should be practised, such as spiral dive recovery and low airspeed recovery. Again, 5 hrs of this is ridiculous for typical sailplane flights and sounds as if it has been plucked from the air by a power pilot without appreciable experience of cloud flying in sailplanes!

3.3 A theoretical and practical test is supported.

3.4 The requirement for sailplane SCFR renewal should be waived for pilots holding a current JAR Instrument Rating after the initial SCFR test has been passed, so long as sailplane currency has been maintained.

3.5 I worry about how we are going to confer examiner / instructor rights on existing instructors / examiners in the gliding community.

In addition, there is a requirement to permit sailplanes to operate outside VFR but whilst remaining in VMC, ie to permit gliders to operate right up to cloud base and around the edges of clouds whilst remaining in VMC above 3000ft (ie waiving of 1000ft / 1500m from cloud rule). In the UK with low cloudbases, it is unsafe for a pilot to be restricted to flight below 3000ft AMSL when cloudbase is frequently 4000ft over areas with high terrain such as Scotland and the Pennines or Wales. Similarly, when flying in East Anglia where cloudbase regularly exceeds 5000ft, it is impossible to tell when you are climbing when you are 1000ft from cloudbase unless you have already been up there to see it! Breaking off a climb 1000ft below cloud would result in more frequent out landings with corresponding increase in risk of damage and injury as gliders are often only able to reach the next usable lift from cloudbase (or even from within the cloud itself for pilots suitably qualified!!). I have often only been able to complete a flight safely by taking a last climb into or up the side of a lower area of cloud such as that associated with a sea breeze (cloudbase can plummet several thousand feet and such sea breezes penetrate up to 100 miles inland over East Anglia where I operate). I understand this was initially proposed as a Restricted SCFR and strongly press that it is reconsidered on safety grounds.

Training Requirement

For the SCFR, should the 5 hrs training be enforced, the only way to achieve this is using a motor glider (TMG). Thus TMGs should be permitted to penetrate cloud in the ways I have described above to facilitate realistic training. Flying in free air is very different from the turbulence and strong lift experienced in a genuine cloud climb and pilots need to have experienced this first hand under training before being let loose solo. It is not always possible for a training 2-seater sailplane to reach a suitable cloud to practice, but a TMG is able to motor out to these.

It is important to realise that a thermalling cloud climb is a very different skill to penetrating a stratiform wave cloud or skirting round a sea breeze front wings level. Pilots need to be trained in BOTH skills before achieving the rating.

I thank EASA for remembering the sporting sailplane community in this

	<p>proposal and hope our comments will be welcomed and considered.</p> <p>Sarah Kelman Former sailplane world champion Gliding instructor and former FI Airline pilot</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) were also identified by BGA.</p> <p>In addition, holders of a valid IR(A) will be exempt from the requirement to follow an SCFR training course at an ATO. It should also be clarified that the SCFR only has a recency requirement, but no revalidation date.</p>
comment	<p>276 comment by: <i>Carwyn Grange</i></p> <p>Ref page 14 Sailplane and cloud flying rating</p> <p>With regards to option 2 I feel that it may need to be reassessed ,it will increase the potential to contact wave systems especially at lower altitudes around 6000ft this would require flying in close proximity to clouds ,but not in actual fact in clouds</p> <p>As I understand it , including option 2 dose not indicate to me that option 1 is excluded. I think that this would be a good pathway to option 1</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p> <p>As Option 2 refers to the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by the BGA.</p>
comment	<p>279 comment by: <i>Christopher MORRIS</i></p> <p>Ref AMC2 FCL.830:</p> <p>I would comment on the training requirements proposed for this rating and would suggest that setting a minimum 5-hour dual flying requirement is excessive. I would ideally like to see a more flexible approach to this, taking account of the pilot's instrument flying experience, ratings and ability as assessed by the instructor/examiner.</p> <p>I believe that 5 hours dual as a minimum will be very excessive in many cases, given the cloud flying privileges (and thus experience) that UK glider pilots have enjoyed to date. If a minimum dual hours figure must be stipulated, I would suggest that this should be nearer 2 hours than 5, but always with the instructor/examiner having the final say in assessing the pilot for the Rating.</p> <p>Finally, it will be no surprise that, as a glider pilot well used to British weather and typically lower cloudbases than might be experienced in warmer parts of Europe, I am very concerned at restricting non-SCFR rated pilots to operating</p>

at 1000ft or more below cloudbase. This could lead to many restricted cross-country flights and a much higher number of out-landings than hitherto, with the consequential risk of damage and inconvenience.
This will, in my opinion, result in a serious downturn in gliding activity in the UK and considerable commercial hardship as a result.
I would therefore strongly urge that EASA re-consider the introduction of a Restricted SCFR, permitting IMC flight CLEAR OF CLOUD to accommodate safe and disciplined glider operations in this regime.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

In addition, pilots holding a valid EIR or IR(A) will be credited to the requirement to attend the SCFR training course. However, in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment 293

comment by: *Andrew Sampson*

Clause 3.2. I believe the requirement for a minimum of 5 hours dual flight instruction is excessive.

Given the achievement of the rating will be subject to a satisfactory Skill Test and Proficiency Check, clearly some pilots may achieve the satisfactory standard in a much shorter time, others may need more. There is also the matter of cost.

If there is to be a minimum time specified I would request that it should be reduced to 2 hours.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment 300

comment by: *Albert Jackson*

The requirement for a minimum of 5 hours of dual instruction is excessive. In my experience, a competent sailplane pilot can master cloud flying with 1 hour of dual instruction or less. Consequently SCFR rating should require no more than a minimum of 2 hours of dual instruction. This would allow a 100% margin for the minority of pilots that may struggle to achieve the necessary proficiency.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment

307

comment by: *Mike Armstrong*

Page 11 3.2 Flight Instruction. 5 hours of dual flight instruction on instruments seems excessive for experienced pilots although I agree it might be appropriate for those with only 30 hours time P1. Since it is a skill based test to obtain the licence, is a minimum amount of dual instruction necessary? I would propose deleting the words "... and at least 5 hours of dual flight instruction controlling the sailplane solely by reference to instruments." As a less desirable but acceptable alternative, reduce the minimum from 5 hours to 1 hour to allow experienced pilots to qualify without unnecessary dual flight training.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment

321

comment by: *Julian RICHARDSON*

Page 11, 3.2 and Page 19, 6) (b) (2) (i): Sailplane Cloud Flying Rating (SCFR); requirement for 5 hours of dual flight instruction

Specifying a minimum number of hours of dual flight instruction for this type of competency-based qualification would be counter-productive, for the following reasons:

- The training which delivered the exemplary UK record for safe sailplane cloud flying has never included minimum hours requirements.
- Time spent learning is no guarantee of competency. Competency demonstrated by assessment (the Skill Test) is the most reliable method of ensuring standards are achieved.
- The number of hours of required instructional time varies considerably between students; enforcing a 'one-size fits all' hours requirement may be insufficient for some students and may result in frustration and a negative perception of the training process for faster learners/more experienced pilots. Frustration and negative perceptions of the training process could lead to negative attitudes to flight training with potential safety implications. This comment applies to many aspects of flight training and is not specific to the SCFR.

Therefore, I urge that minimum hours requirements should not be mandated.

However, if this is unavoidable please consider the difficulties of achieving this in sailplanes where the average training flight time is measured in minutes, and reduce the requirement to 1-2 hours.

Page 11, 3.3 and Page 19, 6) (b) (3): Sailplane Cloud Flying Rating (SCFR); Skill Test

Implementing a skills test makes this an 'assessed, competency-based

	<p>qualification'. I strongly support assessed competency-based qualifications.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>333 comment by: <i>Adrian Long</i></p> <p>Trying to legislate to bring all gliding qualifications on a level basis throughout the EU in respect of cloud flying is fundamentally flawed, it has to be appreciated that the weather patterns of northern and southern Europe and in particular the UK are totally different. This is why the northern states allow cloud flying and the southern states do not, simply because the number of days when blue skies, sunshine and cloudless thermic conditions are so rare that flying near cloud is the only way a UK Soaring Pilot can stay in the air. The southern pilots do not have this problem.</p> <p>Many Hill sites in the UK are situated above 300m and with winch launches are launching pilots to within 300m of cloud when the base is at or below 1000m, thus it would be virtually impossible for an unrated pilot to fly if they are restricted to VMC rules on many days.</p> <p>Thus ab initio training will be severely limited and unrated pilots will find it hard to gain experience.</p> <p>Thermic lift takes gliders to cloud base, wave lift involves flying along side clouds and at altitude it is difficult to predict cloud cover closing in so Glider Pilots will find it hard to comply with the regulations and will thus regularly be in breach, thus UK Glider flying will be massively adversely affected.</p> <p>These regulations must allow for the realities of Gliding in the UK.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p> <p>A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.</p>
comment	<p>340 comment by: <i>Stuart NORTH</i></p> <p>Sailplane Cloud Flying Rating</p> <p>I am pleased to agree with the proposal for a Sailplane Cloud Flying Rating that will enable UK pilots to continue to fly gliders as safely as possible. It is essential that the rating is made available to all pilots, both LAPL(S) and SPL.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (SPL and LAPL(S)) was also identified by the BGA.</p>

comment	341	comment by: <i>Stuart NORTH</i>
	Sailplane Cloud Flying Rating Flight Instruction The requirement for a minimum of 5 hours of dual instruction is excessive given the limited set of skills that are subsequently tested (AMC2). The proposal is for a competency based qualification subject to testing which I fully support. Since the rating is competency based there is no need to set a minimum number of hours instruction, pilots may, for example, have already acquired instrument flying skills on other types of aircraft. The effect of setting a minimum number of hours of dual instruction may be to discourage pilots from acquiring the rating.	
response	<i>Partially accepted</i> Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.	
comment	351	comment by: <i>Mike FLYNN</i>
	III,2,2.4 – All instruction time towards the UK IMCr should be counted towards the 30 hours of previous instruction. It is impractical to differentiate the exact historic status of the instructors having provided such training (i.e. to confirm the instructor held at the time of instruction for the IMCr an FI(A) with the privilege to provide training for the IR specifically - rather than for the IR or IMCR)	
response	<i>Noted</i> Thank you for providing this comment. The Agency would like to highlight that the UK CAA, during the conversion process, will need to determine the amount of crediting of previous UK IMC rating instrument flight instruction towards a Part-FCL EIR or IR(A) rating.	
comment	365	comment by: <i>Justin FIELDING</i>
	I find 5 hours to be a superfluous and excessive requirement for dual flight instruction solely by reference to instruments, particularly given the average duration of a training flight in sailplanes. While some pilots may require more than the 5h of training, many others will require much less and I believe this should be a judgement made by the instructor. If there absolutely must be a specified minimum figure then I would suggest 2h to be more reasonable.	
response	<i>Partially accepted</i> Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.	

comment

378

comment by: *Cairngorm Gliding Club*

It is not clear from the text that The UK is included in the list of those countries that already have some form of an SCFR. If not then you ought to realise that such an entity has been enforced on a BGA to Club CFI bas is for many years and has operated effectively, judged on the number of incidents that have resulted from poor cloud flying by sailplane pilots. I must nevertheless acknowledge that if a more formal glider licence has to be brought into being that this proposal is sensible and workable, subject to the comments I append below.

response

Noted

Thank you for your comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue has already been discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. The Agency, therefore, decided not to introduce an additional rating with these specific additional privileges. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

382

comment by: *Michael Taggart*

My club is situated on an elevated strip approx 700' above sea level and I am one of many early solo pilots that shall find it difficult to achieve the 30 hours required to qualify for SCFR training if I am restricted to launching under a minimum 2500' cloud base and may like others may regrettably be forced to seek other leisure activities not dominated by EC regulations.

While I fully appreciate the rationale of SCFR for those wishing to extend range and reduce outlandings, I simply wish to soar locally, clear of cloud and within range of my club without any significant risk. Even with instruments, I fail to see the attraction of cloud flying and imagine it being akin to driving a car with my eyes closed.

If however we are forced to accept SCFR, I feel that option 1 would have such a major negative impact on gliding in the UK that many clubs will be forced to close and therefore preclude gliding as an affordable method of entry for young people into aviation. Regular high levels of cloud base are rare in many parts of UK and I would therefore envisage a high dropout rate in club memberships and closure of many clubs. Thirty hours PIC before commencement of 5 hours dual training in British weather would take so long as to be unfeasible. It must therefore be possible for training and testing of the SCFR to be performed in a TMG at an earlier stage in pilot development, possibly as part of our BGA bronze qualification.

response	<p>I believe this NPA has severely underestimated the social and economic impact that option 1 in current form will have on gliding in the UK. I therefore urge the adoption of option 2 with the same level of safety but greater positive social and economic impact by allowing people like me to continue gliding.</p> <p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (use of TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>386 comment by: <i>William ALEXANDER</i></p> <p>I think the requirement for a minimum 5 hours dual instruction is unnecessary, it should be purely competency based. Many glider pilots, including myself, have already got more than five hours cloud flying experience.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>390 comment by: <i>Trevor HILLS</i></p> <p>Section 3.3 (skill test for the sailplane cloud flying rating) should be a sufficient requirement for the issue of the rating. Five hours' dual flight instruction (section 3.2) is grossly excessive and should not be required if the skill test is properly conducted.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>403 comment by: <i>Ian Carrick</i></p> <p>The 5 hours seems a rather excessive amount of training to cover the required skills. Perhaps a compromise of less training plus the required standard to be achieved at an ATO.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>

comment	468	comment by: <i>Eisten Nilsson</i>
	I appreciate the intruduction of this new rules.	
response	<i>Noted</i>	
	Thank you for your positive feedback.	
comment	469	comment by: <i>Eisten Nilsson</i>
	I aggree that the EIR will contribute to a better flight safety situation, and aggre with the described risk situation	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	470	comment by: <i>Eisten Nilsson</i>
	Thanks for suggesting more propotional requirements	
response	<i>Noted</i>	
	Thank you for your positive feedback.	
comment	479	comment by: <i>David Legge</i>
	Regarding the cloud flying rating for sailplne pilots:	
	As holder of a Swedish glider pilot licence with instrument rating now resident in the UK, I welcome the harmonisation efforts being carried out.	
	My experience of learning to fly on instruments was a very positive one and certainly helped improve my general flying skills. The program of training (I forget the exact details of hours required etc. although the detail given around page 190 of the proposal are very familiar) felt at the time to be appropriate. I felt that the skills test with an independent examiner reinforced the value of the training and abilities developed and required for cloud flying.	
	I am however concerned that the proposals may restrict the use of TMG's in training. My own experience was certainly one where appropriate conditions could not always be found in the immediate vicinity of the airfield and the ability to go find using a TMG would make for a more efficient use of both trainees and instructors time.	
	Also, I believe that the proposed 24 months validity is a valid one, but that steps must be taken to ensure that revalidation/renewal can be accomplished at reasonable cost and in a timely manner.	
response	<i>Partially accepted</i>	
	Thank you for providing this comment.	
	Please check the response provided to the British Gliding Association (BGA)	

comment No 121 as the issue you raised (use of TMG) was also identified by the BGA.

In addition, it should also be clarified that the SCFR only has a 24 months recency requirement but no revalidation date.

comment 491 comment by: *IAOPA(Europe)*

EIR 1.1 General.

IAOPA(EU) agrees that the EIR should be extended to the CPL(A).

response *Noted*

Thank you for this comment.

comment 492 comment by: *IAOPA(Europe)*

EIR 1.6 Reasons for proposal.

IAOPA(EU) considers that a different emphasis should be put on the reason for proposing the EIR. This is primarily a rating which extends the privileges of a VFR-only pilot to include en-route flight under circumstances which require mandatory compliance with IFR, whether in VMC or IMC and as such we support it. However, only the instrument flight training appropriate to support such limited privileges is given and therefore the EIR should not be thought of as an 'instrument' rating in the true sense. IAOPA(EU) therefore proposes that the EIR should be re-titled 'En-Route **IFR** Rating'.

response *Not accepted*

Thank you for providing this comment.

The Agency agrees with your reasoning for the EIR. However, as this rating may lead to an IR(A), the Agency decided to keep the existing title in line with the IR(A) title.

comment 493 comment by: *IAOPA(Europe)*

EIR 1.6 Reasons for proposal.

IAOPA(EU) agrees that, if used strictly within the associated rating privileges, the EIR can significantly enhance safety by reducing instances of inappropriate VFR flight.

response *Noted*

Thank you for providing this comment.

comment 494 comment by: *IAOPA(Europe)*

Competence-based IR (C-B IR) 2.2 Possible restriction of privileges.

IAOPA(EU) strongly supports the Agency's very welcome initiative of proposing

the C-B IR. IAOPA(EU) also supports the Agency's proposal to adopt the second option ('non-HPA') and not to restrict C-B IR privileges further. Additionally, the pragmatic proposal to relocate the requisite theoretical knowledge syllabus items pertinent to the operation of HPA under IFR is welcomed.

response *Noted*

Thank you for providing this comment.

comment

495

comment by: *IAOPA(Europe)*

C-B IR 2.3 Learning Objectives (LOs).

IAOPA(EU) welcomes the Agency's proposal to reduce IR theoretical knowledge content to approximately 60% of its existing level, but would support any stakeholder who proposes further reductions. IAOPA(EU) does not consider that any of the LOs which have been proposed for removal or relocation should be retained in the C-B IR syllabus.

response *Noted*

Thank you for providing this comment.

comment

496

comment by: *IAOPA(Europe)*

C-B IR 2.4 Multi-engine IR.

IAOPA(EU) considers that, since the whole essence of the C-B IR is 'competency', the proposed C-B IR course will be adequate for a multi-engine IR provided that the following supplementary clause is adopted:

'Where multi-engine IR privileges are sought, the 25 hrs instrument instructional time shall also include a minimum of 5 hrs on multi-engine aeroplanes, of which 3 hrs may be may be in an FFS or FNPT II.'

In other words, although the entire 25 hrs of instrument instructional time *could* be conducted on multi-engine aeroplanes, a minimum of 2 of the specified 10 hrs of flight time in aeroplanes must be conducted in a multi-engine aeroplane and a maximum of 3 of the remainder may be conducted in an FSS or FNPT II.

response *Noted*

Thank you for providing this comment.

The Agency and the Review Group further discussed the 'ab initio' multi-engine requirements for the competency-based IR(A). As a result, requirements, among others, were added for flight instruction for the multi-engine competency-based IR(A) consisting of minimum 25 hour of dual instrument instruction of which at least 15 hours shall be completed on a multi-engine aeroplane.

comment

497

comment by: *IAOPA(Europe)*

C-B IR 2.7 Crediting for third country rating holders.

IAOPA(EU) welcomes proposals for straightforward conversion of existing ICAO-based third country IRs; our detailed proposals are in our comments on the Draft Opinion section of NPA 2011-16.

IAOPA(EU) also considers that, although credit for military IRs is a national responsibility, generally similar credit should be granted to military IR holders as is proposed for ICAO-based third country IRs.

response *Noted*

Thank you for providing this comment.

comment 498

comment by: *IAOPA(Europe)*

Sailplane cloud flying rating (SCR) 3.1 General.

Although IAOPA(EU) welcomes the Agency's Option 1 proposals for the SCR and notes the particular need for such a rating in certain parts of the EU, we also note that the NPA does not address the parallel needs for sailplane towing in such areas, particularly in areas of significant elevation. NPA 2011-16 does not, in its current state, provide a proportionate solution for sailplane towing operations near cloud in most airspace categories; the only current solution being for the towing pilot to hold an EIR, which is clearly unreasonable for the average sailplane club tow pilot. IAOPA(EU) proposes an amendment to **FCL.600** in order to address this shortcoming. (See response to II. Regulatory Impact Assessment for the sailplane cloud flying rating 2.1 WHAT IS THE ISSUE AND WHO IS AFFECTED?)

response *Not accepted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

As a result, a sailplane towing pilot will require either an EIR or IR(A) when flying close or into the clouds.

comment 513

comment by: *IAOPA(Europe)*

5. Regulatory amendment.

IAOPA(EU) welcomes proposals to amend the rules identified in this paragraph and proposes an amendment to **FCL.600** in the spirit of the EASA management board's call for greater rulemaking flexibility. We also note that the European Commission has already accepted greater flexibility in other areas of aviation legislation, notably SERA and EU-OPS1, in order to meet national needs and consider that similar flexibility may reasonably be applied to aircrew licensing regulation.

response *Noted*

Thank you for providing this comment.

comment	518	comment by: AOPA(UK)
	<u>EIR 1.2 Flight Instruction.</u>	
	Pending clarification, to avoid any criticism that 'training outside an ATO' could devalue training quality, AOPA(UK) proposes deletion of the section reading: ' <i>At least 10 hours of the required instrument flight instruction time shall be completed in an ATO whereas the remaining flight time may be completed under the supervision of an Instrument Rating Instructor (IRI(A)) or a Flight Instructor (FI(A)) holding the privileges to provide training for the EIR or IR.</i> '	
response	<i>Not accepted</i>	
	Thank you for providing this comment.	
	The Agency and the Review Group believe that allowing 5 hours of training outside an ATO to be credited towards 15 hours is appropriate and will make the rating more accessible. The pre-course assessment and 10 hours at an ATO will ensure that a minimum quality standard is established. In addition, the Agency foresees that an ATO will be able to provide feedback on training provided by instructors outside an ATO through existing communication links with their respective competent authority.	
comment	519	comment by: AOPA(UK)
	<u>C-B IR 2.4 Flight Instruction.</u>	
	AOPA(UK) considers that paragraph 2.4 could have been phrased with greater clarity. A suggested re-wording, summarising the requirements is as follows: ' <i>Applicants for the C-B IR shall complete not less than 40 hrs of instrument flight time. This shall include a minimum of 25 hrs instrument instructional time, of which not less than 10 hrs shall be conducted in an aeroplane.</i> '	
response	<i>Noted</i>	
	Thank you for providing this comment.	
	The Agency would like to highlight that the proposed wording follows ICAO. However, the text was amended to further clarify the requirements for the use of FFS or FNPT devices.	
comment	528	comment by: Anthony Danbury
	Over the last 25 years and over 5,000 flights much of my soaring time has been spent close to or in cloud. This has enabled long flights with much reduced risk of land-outs with the associated risk of damage. I believe restricting glider flying to be some distance from cloud would greatly reduce flying time, pilots skills and therefore increase land-outs, damage/injury risks and possible nuisance to landowners. The Option 1 identified on the FCL.008 is surely the only sensible way forward.	
response	<i>Noted</i>	
	Thank you for providing this comment.	

comment

543

comment by: *David Evans*

Re Para 3.1 As a reasonably experienced sailplane pilot who flies some 10 to 30 crosscountry flights each summer I welcome the EASA proposals to introduce a cloud flying rating for sailplanes. The lack of a suitable specific provision for sailplane pilots undertaking such flights would be highly damaging to UK gliding and would add additional and unnecessary risks to such flights. EASA and other stakeholders should recognise that during the soaring season that a very high proportion of UK noncommercial aircraft movements are undertaken by sailplanes and training gliders.

response

Noted

Thank you for providing this comment.

comment

574

comment by: *John Richardson*

III. Overview of the changes proposed in this NPA

I support the principle of the CBM IR with some reservations which are described in later sections but do not believe that the EIR will enhance safety and hence do not support the principle of the EIR.

response

Noted

Thank you for providing this comment.

comment

575

comment by: *John Richardson*

1. En-route Instrument Rating (EIR)

The EIR is an unsafe rating which could allow holders to get into situations for which they are not trained. The limited training which is envisaged in terms of approach procedures will not train holders sufficiently to manage difficult IMC conditions if the EIR holder cannot establish VMC on approach to the destination airfield. It will encourage complacency in terms of weather conditions since the holder will have the benefit of flying enroute in IMC. This is in complete contrast to the IMC rating in the UK which is specifically designed to train pilots to deal with just this circumstance.

As such I believe that the EIR is a potentially dangerous rating which could lead to significant accidents if it is introduced. There is no positive impact on flight safety and there is little benefit in a PPL undertaking the course for the EIR as proposed given that the TK is the same as the CBM IR and there are no departure or approach privileges under IFR. Indeed one could foresee distinct safety problems with EIR holders descending through overcast conditions having cancelled IFR and leaving controlled airspace, and therefore receiving no radar service, into VFR traffic which is below. Again this is in contrast to the UK IMC rating when IMC rating holders are able to use the full approach facilities at the destination airport or to use the ILS procedure at a nearby airport to descend safely into VMC and then proceed to the destination airport.

response

Noted

Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the

risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage. Finally, holders of an existing UK IMC rating may convert their rating and IFR experience into a Part-FCL rating during the conversion process. This process is the responsibility of the UK CAA in consultation with the Agency.

comment

577

comment by: *John Richardson*

1.1.6 Reasons for proposing this rating (EIR)

This suggests that "the introduction of this rating is expected to reduce the safety risks by facilitating a wider skill-base to private pilots" with which I completely disagree. It is incorrect to suggest that safety will be enhanced when the pilot has received a small amount of training to undertake an emergency approach and yet this phase of flight is the time that is most likely to lead to a serious accident. There is actually very little additional skill base involved in flying airways routes which in the enroute phase are normally conducted in VMC. The removal of the IMC rating in the UK will mean fewer pilots receive any IMC training and lead to increased accidents.

I am encouraged that the NPA supports the principle that the UK IMC rating should be converted to a "Part-FCL licence and an IR which will be issued with certain conditions on the basis of a specific conversion report in order to reflect the current privileges held. This would allow the existing UK IMC holders to continue to exercise their IMC privileges". However, there are certain problems which arise with this approach. Since there will be no more training for the IMC rating, the current stock of examiners will diminish since there will be no incentive to pay for their license renewal. The revalidation flight will therefore have to be conducted by an IRE, of which there is a limited stock of examiners, and they charge much high fees to compensate for their own rating costs. This is imposing an additional cost on the IMC rating holder which restricts their ability to exercise their flight privileges. The renewal flight for the restricted IR holders who have been converted from an IMC rating will be conducted to IR tolerances and it is unlikely that many IMC holders will pass this revalidation flight since the IMC rating is not intended to be conducted to the same tolerance as an IR. It is therefore likely that the excellent safety record which is held by UK private pilots will be reduced since there will be no additional IMC ratings undertaken in the UK and the current holders will gradually allow their ratings to lapse due to cost and the difficulty of passing the revalidation. The effect of the NPA in this respect will be an increase in accidents due to inadvertent flight in IMC.

response

Noted

Thank you for providing this comment.

Please refer to the response provided to comment 575 in relation to your EIR comments. In addition, the Agency would like to highlight that existing UK IMC rating instructors and examiners may also have their licence and rating converted into a Part-FCL licence and rating during the conversion process. The Agency therefore believes that there will be a sufficient number of instructors

and examiners with the privilege to provide training or examinations for the EIR and IR.

comment

578

comment by: *John Richardson*

2. Competency-based modular course for the IR(A)

2.4 Flight instruction

The flight training requirement for the CBM IR includes the provision that if the applicant has completed instrument flight instruction under the supervision of an IRI(A) or an FI(A) holding the privilege to provide training for the IR those hours can count towards the 40 hours training up to a maximum of 30 hours. It is not clear whether training provided for an IMC rating in the UK qualifies for this exemption but the assumption is that since the UK IMC rating confers privileges to fly in IMC the 15 training hours received for the IMC rating will indeed count towards the 30 hours exemption and also towards the minimum 25 hours dual training requirements. This means that a UK IMC rated pilot could achieve a CBM IR with only 10 hours dual training at an ATO. Clarification is required on this issue.

It is essential to the success of the CBM IR that flight training conducted outside the ATO environment is allowed up the maximum of 30 hours. The ability to use flight instructors who operate outside an ATO is essential to the success of the rating and should not be diluted in any way. There is no safety argument for mandating that all flight training is conducted at an ATO.

Although I welcome the introduction of a simplified IR for GA there are safety implications implied in the proposals for the CBM IR which require changes in the design of the rating. It is possible to achieve the CBM IR with only 10 hours dual training and after gaining the rating the only safety check is an annual revalidation. There are significant differences in commercial and GA continuing training following the achievement of an IR which reflect both the environment and the type of flying. In the commercial world there is line training and the fact that most aircraft are dual pilot allows the new IR pilot to gain practical experience with a more experienced senior pilot. There is no such mechanism in the GA world and newly qualified IR pilots are usually flying alone and left to gain experience by making mistakes which are hopefully not serious ones. There are numerous pilot forum which offer advice but the quality of such advice varies from helpful to dangerous with often no way for the new IR pilot to distinguish between the extremes. There are also ad hoc unauthorised schemes of mentoring which provide very useful assistance to the more motivated pilots. However, there is now an opportunity in designing the new CBM IR to include elements of practical flight training which equip the GA IR pilot for flying the IFR system.

The initial minimum training could be extended but this is unlikely to achieve the required outcome and will only increase the cost of achieving the rating and hence deter some pilots from attempting it with no guarantee that flight safety has been enhanced. A better solution would be to include an element of mentoring post achieving the rating whereby the new IR pilot is required to fly with a qualified IR pilot for a number of hours. I would suggest that the first 10 hours of flight under IFR post qualification should be with a qualified IR pilot acting as a mentor but assuming no flight responsibility. This flight time must be logged and checked at the first revalidation flight. This will enhance safety

for the newly qualified IR pilot. I would prefer a formal continuing professional development (CPD) programme to be introduced for all GA IR pilots but this is beyond the scope of the current NPA.

The FAA system used during the flight review process should also be considered for the CBM IR. The use of a one hour ground school session prior to the revalidation flight each year would allow for regulatory changes or topical IR issues to be reviewed and would aid flight safety for a minimal cost. This would be an easy addition to the CBM IR and I urge you to consider it as at least a partial move towards a formal CPD process.

There is a requirement for a specific training programme for a multi engine CBM IR. There is no reason for there not to be such a route. The relationship between the existing Modular ME and SE IR(A) should be mirrored in the CBM IR.

response *Partially accepted.*

Thank you for providing this comment.

The existing national ratings such as UK IMCR may be converted into Part-FCL ratings during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

The Agency and the Review Group have discussed the training hours completed at the ATO and outside the ATO. It was regarded as an important element to have at least 10 hours training at ATO since the pre-course assessment and the flight training completed at the ATO are needed to ensure the harmonisation and the high quality of IR flight training.

According to the rules, the total amount of instrument flight instruction for competency-based IR shall not be less than 25 hours. The Agency and the Review Group support the idea of mentoring pilots; however, it should be used on a voluntary basis. Therefore, the requirement will not be written in the rule.

The Agency and the Review Group further discussed the 'ab initio' flight instruction for the multi-engine competency-based IR(A) and, as a result, the requirements were added. A total of 45 hours of instrument flight instruction is required if no certain previous flight experience or training are credited. In any case a minimum of 25 hour dual instrument instruction of which at least 15 hours completed on a multi-engine aeroplane are required.

comment 600

comment by: *Bill LONGSTAFF*

There is a big difference between flying in clouds and flying near clouds i.e. outside the accepted VMC/IFR rules. When the cloudbase is low - only too prevalent in many parts of Europe - it can be much safer to fly close to cloudbase, vertically, rather than closer to the ground and/or mountains. Landing out can be a huge hazard. Also, when wave flying, it is often imperative to fly close to cloud horizontally in order to be in lift. This can also result in the time spent close to cloud being significantly reduced as climbing clear of cloud is then executed in the minimum of time.

response *Noted.*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

612

comment by: *Gerhard Stappen*

I just wanted to give a general positive comment to the EIR: I am a privat pilot mainly departing from and approaching aerodromes without any precision approach facilities. Therefore a full IFR rating never made sense for me. The cost and the training time of a full IFR rating was in no useful relation to the benefit.

The EIR is just what I have been waiting for for yeas! I will defenitely obtain this rating as soon as it will be available in my country. And I know a lot of pilots who are in the same situation as I am. Therefore I think that a lot of pilots will obtain the EIR, which will be a big contribution to more safety in general aviation.

Thank you for this useful proposal!

response

Noted

Thank you for providing positive feedback.

comment

625

comment by: *PPL holder*

SECTION III

1) The En-route IR

Whose idea was this?

It is UTTER MADNESS to train and equip pilots deiberately to enter IMC, and yet NOT TRAIN THEM TO LAND from it

The concept of this rating is UTTERLY FLAWED, and it should be discarded

100 hours of Instruction is Ridiculous... Where has this figure come from?
...and if you require a certain amount of study why do you have an exam? You don't need both!!

1.6

You dismiss the UK IMC rating which DOES have evidence supporting increase in safety, and propose this ridiculous one, which will not. In you last aparagraoph, even you seem to acknowledge that the rating is fundamentally flawed

I don't think that "all in all a clear positive safety impact" IS to be expected from the rating. I can see no evidence as to why you do, or any reason why it should!!!

Paragraph 2.2

	<p>In trying to make the rating as "one size fits all", you have failed in your stated ambition to make a (significantly) more accessible IR rating, that will be taken up in GA</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR.</p> <p>The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.</p> <p>In addition, the Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.</p> <p>The Agency would like to clarify that a minimum amount of theoretical training hours must be set to ensure standardisation across all European ATO's. The theory requirement has been further reduced to 80 hours after a review by the Agency and the Review Group as a result of stakeholder comments.</p> <p>Finally, holders of an existing UK IMC rating may convert their rating and IFR experience into a Part-FCL rating during the conversion process. This process is the responsibility of the UK CAA in consultation with the Agency.</p>

<p>comment</p>	<p>632 comment by: <i>john harter</i></p> <p>Paragraph 3.2. Flight Instruction</p> <p>Whilst I support the creation of the SCFR, and agree with the proposed requirement for Theoretical Knowledge instruction. I do not agree that a minimum of 5 hours of dual flight instruction should be necessary to attain the rating.</p> <p>If the rating is to be issued based on the satisfactory completion of a skills test, then meeting the required standard should be sufficient. Thus, no minimum hours requirement is justified.</p>
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<p>response</p>	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
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comment

636

comment by: *Andrew Brown*

Cloud flying is an important part of gliding in the UK. It is especially important that gliders can fly within 1,000 ft below cloud. Cross country flights would be difficult or impossible on many good weather days in the UK if flight was not permitted within 1,000 feet vertically of cloud.

I support the NPA for the introduction of an IMC rating. I believe that the minimum hours of instruction needed should be less than 5 hours for many glider pilots, some of whom already have an IMC rating or experience of flight in cloud.

I believe that there should be reconsideration of a restricted IMC rating for sailplanes permitting flight up to cloudbase but not in cloud. A restricted rating would allow gliders to continue to fly cross country as they do at present, without the need to fly in cloud.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

637

comment by: *Stephen CROWTHER*

Sailplane Flying Cloud Rating

I am a flying member of Edensoaring - a sailplane flying club in the North of England.

The unique geography of our site gives us flying conditions that are amongst the very finest in the UK.

The prevailing winds blow on to a ridge of hills extending for about 50 kms giving superb lift and wave-flying conditions.

As the air masses rises over the hills, it is inevitable that clouds form and indeed to a glider pilot they are indications of where the best lift is to be found.

Our site means that it is very often the case that we fly in proximity to cloud.

I would like to support the proposed SCFR.

Incidentally, having just reviewed the UK Airprox Boards Update of December 2nd, I note that none of the incidents investigated related to glider/sailplane proximity to cloud.

response

Noted

Thank you for your positive feedback.

comment

672

comment by: *MaureenWEAVER*

Section 1.2 Flight instruction

I recognise the reasons why TMGs should not be flown under the Sailplane Cloud Flying Rating but it is essential that TMGs be used for training pilots for the SCFR. Many gliding clubs in the UK have TMGs with pilots who are already sailplane pilots. Instrument flight training is most conveniently and cost-effectively carried out in a power plane and it would be much cheaper for

sailplane pilots attempting to get the SCFR to use aircraft based on site. In addition, the training received by TMG glider pilots will be more appropriate to pilots wanting to climb in cloud (which is the only reason for a glider pilot wanting to be in cloud) because experienced sailplane pilots appreciate the need to alter the bank and centre of a turn to stay in the rising air.

I propose that TMGs are used for training for the SCFR but not used under the privileges of the rating.

response *Accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment 676

comment by: *Richard Malam*

I fully support this NPA in particular the Sailplane Cloud Flying Rating (SCFR). I feel it is an essential rating for continued safe flying in Sailplanes as well as a logical developmental step for pilots who aspire to fly cross country.

I would like to offer the following proposals:

1. **Availability.** The SCFR will be, according to the NPA, a privilege available to both LAPL(S) and SPL. I concur that it is essential both licence holders have the opportunity to gain this rating
2. **Competency based.** I welcome the fact that the rating skills test is to be based on both theoretical knowledge but mainly practical ability. With the theoretical knowledge being aurally tested and a set skills test, the emphasis is on a pilot demonstrating competency and decision making in the cloud flying environment in a sailplane. I fully endorse this route, however I feel that the stipulated duration, at 5 hours, sets incorrect expectations, indeed whilst some pilots may be ready for the test in less time, others would require longer to reach the required standard. I would therefore propose that once the syllabus is complete, it is the pilots competence and readiness for the skills test that is important, as observed by their FI and not an arbitrary time.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(A)/5 hours training) were also identified by BGA.

comment 684

comment by: *Tony Cronshaw*

p11 section 3.2 Instead of "5 hours", from my experience as a BGA instructor, I feel that 3 hours would be far more suitable to achieve this training.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified

by BGA.

comment

685

comment by: *Tony Cronshaw*

p11, section 3.2 A TMG would be a very practical training aircraft, and for this be possible, the SCFR should be valid for TMG flights where the flight is being made for this training purpose.

response

Accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment

686

comment by: *Kate Byrne*

Page 11: I support the introduction of the sailplane cloud flying rating. Being able to fly in cloud is a necessary part of gliding in certain circumstances - especially in cloudy climes like the UK - and the pilot should be trained for it. The amount of training depends on previous experience and there should be no fixed number of hours - 5 hours will be too little for some, too much for others. Keep it simple.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

698

comment by: *George Rowden*

Sailplane cloud flying rating.

I fully approve of the issuing of a SCFR to allow glider pilots to fly in cloud as UK experience and practice has shown that this can be safely achieved and enhances the scope of gliding in the UK. Removal of this practice would seriously restrict gliding in the UK. As a UK glider pilot with many years of experience I do have a number of comments on the proposed requirements for the proposed licence.

Section 3.2 Flight Instruction.

The ability to fly safely in cloud is an acquired skill, one of a number of skills required by a sailplane pilot, including of course the skills required to go solo in the first place. However, none of these other skills, including that of going solo, have a prescribed minimum period of instruction. The attainment of the required skills is determined by a suitably qualified instructor. It therefore appears to me to be entirely consistent with the rest of gliding training to dispense with the minimum of 5 hours dual instruction suggested. For UK glider pilots who are current on cloud flying, a 5 hour training period is unnecessary. On the other hand, a pilot with no cloud flying experience may require more than 5 hour instruction or be deemed to be unsuitable for

	<p>undertaking cloud flying. I recommend therefore that the minimum requirement for instrument flying instruction is deleted. The skill test, carried out when the instructor is confident in the abilities of the pupil, would be the determinant of whether the pupil was competent to receive a cloud flying licence provided he or she had also previously passed the associated theoretical paper.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>704 comment by: <i>Aviation Services Koerpel</i></p>
	<p>"Crediting for third country rating holders" as proposed would enable me to continue to fly safe within EU Airspace under IFR as I do hold a FAA CPL/IR which I extensively use for my Business trips. To pass a skill test is a good way to make sure, the applicant has sufficient skills and knowledge of the EU specific regulations. An aural examination of the required demonstration of the appropriate knowledge of Air Law, Meterology, Flight Performance and Planning and Human Performance prior to the practical skill test with the examiner should be sufficient to satisfy the requirement and NO additional written exam should be necessary.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving several similar comments, the Agency and the Review Group discussed the issue. As a result, it was decided to allow the applicant to demonstrate an adequate level of theoretical knowledge during the skills test.</p>
comment	<p>706 comment by: <i>Jim Thomson</i></p>
	<p>The 5 hours dual flight instruction for the SCFR is excessive, given that there is a skills test required. If a minimum has to be set it should be 3 hours. (My own experience was that by 4 hours we had progressed beyond the SCFR syllabus to ground controlled descents and approaches).</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>710 comment by: <i>JMA Shannon</i></p>
	<p>3 Sailplane cloud flying rating</p> <p>The concept of continuous long time cloud flying is not part of sailplane flying.</p>

Sailplanes traverse clouds for very short time periods. So the extended 5 h. **flying** training time for cloud flying is overly onerous.

While it is not unreasonable to expect a minimum PIC time requirement to show a degree of experience in a range of conditions, the time taken for instrument flying training is irrelevant. The training time should be whatever is necessary to pass the skill test. Indeed perhaps the entry requirement to cloud training should be enhanced to require the skills of the cloud flying test to be shown first in ordinary VFR flight. The skill test should require demonstrated consistency – perhaps split between recorded training and the final skill test.

There should be a window for renewing the cloud flying rating before the end of its validity period. The training and testing needs to be done in aircraft with similar characteristics to ordinary sailplanes – some sort of powered sailplane must be permitted for this training and testing.

Computer simulation of glider flight is now quite realistic; some of the training period should be possible and credited in the common glider simulators, eg. currently (Dec 2011) Condor, SilentWings, with a considerable improvement in training safety and reduction in risk.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA. As the 5 hours training requirement has been reduced, the content of the skill test remains the same. A split of the skill test would be too burdensome.

In addition, the cloud flying rating only has a 24 month period recency requirement, but no revalidation date. Therefore, as long as a glider pilot has exercised the privileges of the SCFR for at least 1 hour or 5 flights as PIC within the 24 months period, recency is maintained. The privileges can be maintained also by performing a proficiency check or additional dual training.

Also, as long as there is no certified 'glider simulator' (FSTD) available, the training for sailplane licences and ratings has to be provided in a sailplane.

comment 730

comment by: *Tim Barnes*

Para 3.1 I support the proposed Sailplane Cloud Flying rating. Absence of the ability to fly close to or in cloud, in appropriate airspace, would severely curtail cross country and lee wave flights in sailplanes in the UK. Such a restriction would have a significant adverse impact on safety, concentrating glider flights in a narrower band of airspace and significantly increasing the frequency of outlandings.

Para 3.2

I do not support the minimum figure of 5 hours of dual flight instruction. This figure appears to be arbitrary and excessive. Throughout my training and my work as sailplane instructor in the UK, the basis has been competency, e.g. you go solo when you demonstrate to an instructor you are competent. Setting a minimum hours is overly onerous and places an unnecessary financial burden on for those pilots that can demonstrate they are competent in less time.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment

736

comment by: *David Chambers*

Page 7/Section 2.

I fully support the Agency in its choice of "the second route" and that the privileges of the CBM IR are not restricted in any way. The skills test and appropriate scope of theoretical knowledge meet the full requirements for the IR.

Page 9/Section 2.3

2.3 Learning Objectives

I fully agree with the proposed deletion of many of the current IR Learning Objectives. The present syllabus contains far too much irrelevant and inappropriate, even outdated material. This creates an unnecessary barrier for those studying for a PPL/IR, reducing the numbers who might otherwise take the exams, and resulting in fewer qualified IR pilots – effectively reducing safety.

response

Noted

Thank you for providing this comment.

comment

739

comment by: *Martin Roberts*

Page 11

3.

3.1. General

Paragraph 2; "The main reason for creating such a rating is to extend the operating range of sailplane pilots.....". This is misleading in that it suggests that creation *improves* the current situation. In those countries that currently do not allow cloud flying it may improve matters, but in the United Kingdom it will make no difference since we already enjoy cloud flying rights, the extended range it brings AND a historic perfect cloud flying flight safety record. It also does not make clear the downside - which is that UK pilots will become subject to expensive and time consuming training. Thus there is no "benefit" whatsoever to the UK sailplane pilot in the proposed Cloud Flying Rating, only increased regulation and worst of all increased costs in terms of time, money and materiel.

Paragraph 3; There is no need to take into account activities in any other Member States. The focus should be on the sailplane flight safety record of the United Kingdom, and in the case of cloud flying the record of the UK is perfect and cannot be improved upon. There is no need to look at any other model and no need for regulation. Indeed - the rest of Europe should consider following the UK model, given its exemplar track record.

3.5 Privileges of Instructors and examiners

Paragraphs 1 & 2; How much are these proposals for Flight Instructors (FI) and Flight Examiners (FE) going to cost? Who is going to pay? Here I also mean the cost of all the flying required to bring FI and FE up to the standards and then subsequent renewals. The Flight Examiner (FE) requirement of "at least 10 hours flight instruction" will be expensive on his/her time and financially. In a further comment I show that "5 hours of dual instruction" *will cost £1320 (1565Euro) and 15 days*. So, extrapolating, 10 hours is going to cost in the region of *£2640 (3130Euro) and 30 days* (30 days is more than most pilots fly in a whole year). Who is going to pay for this? And why would any amateur Instructor ever want to come forward to take part in such a time-consuming scheme? In the UK most gliding clubs have less than 200 paying members. Assuming that costs will be spread amongst the membership, in a club of 200 members this represents an additional cost of £13 (15Euro) per member. Most UK clubs are smaller than this. And this is *only* for the FE (which in most cases would be the club Chief Flying Instructor). Other Instructors FI will also need airtime and training and this too will produce costs that will have to be borne from the membership. I would estimate that an outlay of at least a further £5000-£7000 (6000Euro-8500Euro) each year would be necessary to cover costs of other Instructors (FI) and their renewals. Taken in the round the financial cost just for Instructors alone to a typical UK gliding club of 200 members might be above £10000 (12000Euro) per year (the cost of producing one FE and 3 Rated FI's and their renewals), bringing the total cost to be borne by each member up by £50 each year. 200 member clubs typically currently change £250 - £350 for Annual Membership, an additional £50 would put a 15-20% increase on fees. There are further costs in tying up valuable aircraft and Instructor time, which is unquantifiable, but nevertheless has huge impact. And all of this before the administrative costs are added on of the actual qualification itself. Assuming that there are 30 UK clubs of membership size 200 (it varies widely, but still gives the approximate number of active pilots as 6000, which is currently correct) - the £10000 per club additional cost multiplies out to £300000 (360000Euro). This huge cost is one that was not there before these proposals. It is a cost that the whole UK gliding movement has to bear and one for which it derives little, if any, appreciable benefit, since our cloud flying flight safety record is already perfect.

The financial and resource implications for what are basically small to medium sized, amateur run businesses, are immense. In a time of economic recession the impact of the costs I have described will be enough to deter and drive away marginal pilots, particularly young pilots who do not command large financial resources, but who nevertheless represent possible future participants in the European aviation industry.

OVERVIEW

Europe needs more people to take careers and shape their futures in the general Aviation Industry and economy; more pilots, more flight controllers, more aviation engineers, more designers, more people enjoying social interactions at clubs and in the air. The delights and majesty of powerless soaring flight - using only solar power - have to be encouraged as economically, socially and environmental desirable. But these proposals will add costs that do not meet these aims - indeed, they will drive away the very people that the future of Europe relies upon to ensure its economic prosperity. They will distort and derail the fragile micro-economies of every UK gliding club, with unforeseen outcomes.

Please consider my submissions very carefully. The impact of these proposals

	<p>on the UK gliding community and economy will be immense and add nothing to our perfect cloud flight safety record.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this feedback.</p> <p>The Agency has decided to amend the requirements for an FE(S). The privileges of an FE(S) are to conduct skill tests and proficiency checks for the cloud flying rating, provided that the examiner has completed at least 200 hours of flight time as pilot on sailplanes, including at least 5 hours or 25 flights of flight instruction for the cloud flying rating or at least 10 hours of flight instruction for the EIR or IR(A).</p> <p>Please see also response to your comment no 721.</p>
comment	<p>760 comment by: <i>Michael D Miskimmin</i></p> <p>I believe 5 hours training would generally be excessive. I believe 2-3 hours would be more realistic. I have been flying Sailplanes for over 36 years, been an Instructor for 25 years and a full (Dual) Instructor for approx 5 years.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p>
comment	<p>779 comment by: <i>Liz SPARROW</i></p> <p>pp11 3 Sailplane Cloud Flying Rating</p> <p>FCL830 SCFR - as a member of the British Gliding Team and a former Chief Flying Instructor, I strongly support the establishment of a sailplane cloud flying rating from both safety and sporting perspectives. Cloudbases are sufficiently low in the UK that preventing us from flying within 1000' of cloud would undoubtedly cause significant increase in field-landings (off-airfield) by reducing range, and this would equally certainly increase accident rates. On many days it would prevent us from flying cross-country. It would confer no safety benefit to any other air traffic group since both IMC flight clear of cloud and cloud flying have been well established practices in the UK throughout its gliding history and there is little or no adverse safety evidence as a result.</p> <p>However, as the huge majority of the training syllabus proposed is - rightly - about flying IN cloud, not IMC flight clear of cloud, it would also be appropriate and proportionate to enable pilots as part of their basic glider pilot's licence to fly IMC remaining clear of cloud where local airspace rules permit as in the UK. There is no additional competence requirement involved in doing this and so no requirement for additional training over and above that required for normal VMC flight. Failure to include this in the proposals, will have a significant adverse effect on safety for those who are unable to achieve the SCFR. This would include for example those whose sailplanes' flight manuals</p>

preclude cloud flying and who thus would be unable to practice and remain current on in-cloud procedures (whilst not wanting to use them! but just fly close to cloud), those who do not have access to instructors, TMGs or gliders equipped for cloud-flying training. I reiterate that IMC flight clear of cloud is currently universal in the UK and undoubtedly the practice also in other parts of Europe where I have flown, and removal of the general ability to do this will certainly compromise safety by increasing the number of field-landings through preventing us climbing sufficiently high to reach the next reliable source of lift. It is also likely to have a disproportionate effect on the UK regarding our competitiveness in international gliding as our comparatively low cloudbases mean that we will have significantly reduced opportunity to practice safe cross-country flying. **You should therefore reword the regulation in order to eliminate this unsafe situation by allowing this option or excluding IMC flight clear of cloud from the SCFR and acknowledging it as part of a normal VMC licence privilege where, as in the UK, this is otherwise permitted.**

See further comments on pp18/19, 190-192, p228-239

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific visual flight rules for sailplane operations.

comment 807

comment by: Peter BOYALL

Regarding the EIR :

While 15 hours training is easily sufficient to ensure the ability to fly an aircraft straight and level (or through small turns) in IMC, it does not seem to be proposed to teach anything else useful.

Most qualified pilots can be trained to fly in IMC within a matter of hours. Flying enroute from one point to another is simple; the difficult part of Instrument flying is entering the holds, flying the approach procedures and carrying out the let-down.

The "emergency approach" training seems insufficient. It is a way of putting people into a situation (enroute IMC) which they are then unable to exit (making a safe approach).

Add in to the mix Class A airspace privileges and there is a significant risk of disruption and danger to airline traffic (CAT).

I would suggest that the EIR be considered less as a rating in its own right and more as a stepping stone to full IR, as a means to protect CAT. The EASA proposal for a Competency Based IR is essential to achieving this goal and must be supported.

Regarding the CBM IR :

Reduction in theory requirements for the CBM IR is to be applauded. However, there does appear to be a danger that the door is open to adding all the removed theory back in, this will require careful monitoring.

Allowing previous instrument time is a huge step forward and essential to progressing people on from basic VFR qualifications. It will also give a strong driver towards people following the JAA route rather than the FAA one.

It is disappointing that there is still a strong focus on tightly controlled approved training organisations with rigid procedures largely designed around airline cadets. Since the Flight Test to be passed is the same, there does not appear to be any particular reason why a system of training by instrument instructors cannot be used.

This would also allow more appropriate training, tailored for the particular candidate. An airline cadet is often trained only to fly the large jets within an organisation where a captain, despatcher etc. will look after them. This is not appropriate for light aircraft where the pilot must be self sufficient.

In addition the rigid SOPs used by ATOs which do not ever expect their students to fly a light aircraft post-test are not necessarily appropriate - powering out of stalls for example.

Care must be taken to ensure the good work done so far is not lost in the implementation.

response *Noted*

Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

With regard to your comments on the competency-based IR, the Agency would like to highlight that, after a review, the theoretical training requirement has been further reduced to 80 hours. The Agency and the Review Group also strongly believe that the use of an ATO is appropriate and will ensure a minimum level of quality and standardisation throughout Europe.

comment *808*

comment by: *Peter BOYALL*

100 hours of ground instruction, for someone who has already passed the PPL exams, appears to be grossly excessive. Unless they are very slow learners they should require no more than 20-30 hours of tuition on IMC-specific weather, legal and human/aircraft factors for the EIR - which is basically a "fly in cloud" rating, not a full IR.

The intentions are good, but I fail to see why - given the amount of training proposed - it would not have been possible to simply lift the FAA FAR regulation

in its entirety. The USA has higher mountains, busier airspace, wider oceans, barren deserts and territory inside the Arctic Circle. There is nothing "special" about Europe.

While the intention to reduce incidence of Controlled Flight into Terrain is laudable, these incidents tend to happen to pilots regardless of whether they hold VMC or IMC qualifications. The EIR will be beneficial in this respect as it will prevent pilots feeling forced to descend under cloud in order to remain VMC; they will instead have the option of climbing above it.

Therefore, it is to be hoped that the incidence of *descent* into terrain will be reduced.

However, I do have a concern regarding pilots becoming "stuck" above cloud. Perhaps it could be mandated that pilots using the EIR ensure they are equipped with a GPS (by far the easiest "emergency" navigation tool). This will help to prevent those foolhardy enough to set off with inadequate instrumentation (e.g a single VOR receiver) from finding themselves in an emergency.

The training for CBM IR is a major step forward, care must be taken to ensure that it does not go the same way as the JAA IR with layers of gold plating and training organisations using their privileged positions to enforce rigid regimes which are not wholly appropriate.

response *Partially accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency decided to review the issue. As a result, the theoretical knowledge requirements were reduced to 80 hours. The Agency would like to clarify that the EIR is an EU rating only as it does not fully comply with minimum requirements of ICAO standards and recommended practises. The FAA regulations would therefore be more restrictive in the context of the EIR.

With regard to your comment on mandating equipment, the Agency would like to highlight that Part-NCO contains the minimum requirements for aeroplanes designated for the conduct of IFR flights.

comment *811*

comment by: *Paul Raisbeck*

I am writing with regards to the ongoing work on EASA proposal NPA 2011-16. I write as a pilot of both gliders and powered aircraft.

While I broadly understand and support the overall spirit and intention of the proposals there are a number of issues in the detail that I feel need to be addressed, if inadvertent/second order unintended consequences are to be avoided. In summary, they are as follows:

- **Flight within cloud must be made possible for suitably qualified pilots;**
- **Pilots not holding a SCFR should continue to be able to approach cloud to its base and only those with a SCFR rating should be entitled to enter cloud.**
- **Training for the Sailplane Cloud Flying Rating (SCFR) should be based on pupil experience and capability as opposed to a blanket time limitation;**
- **TMGs should be authorised for SCFR training.**

Background Comment.

Flight within cloud - and right up to the border of cloud - is an important aspect of gliding in the UK, due to our maritime climate. It allows gliders to maximise the weather conditions and (according to British Gliding Association - BGA), proximity to, or flying in clouds has not had any identifiable effect on accident/incident statistics.

While regular flying in cloud may only be practiced by a small number of pilots, every pilot I know will always wish to maximise a thermal climb by continuing to the base of the cloud. Any regulation to try and make this illegal will potentially make gliding less safe (by restricting gliders to the same airspace as powered aircraft and by limiting their performance during cross country flights) and is also likely to prove unenforceable as pilots will be unable to determine change in the height of cloud during a cross country flight of 3-6 hours from which they might then calculate a safe/regulatory margin).

I feel the proposed 5 hour training requirement is too rigid and prescriptive a rule to enforce from the safety perspective. Many glider pilots I know already hold instrument licenses and are unlikely to need 5 hours training to do the same thing in a glider. At the other end of the scale some people are unlikely to attain the rating regardless of the amount of training they undertake.

A more sensible approach for this instance would be to leave the amount of training required to the individual instructor who will be signing off the license. This solution works perfectly well in all other aspects of training and I see no reason why it should not also work for the SCFR.

Finally, the use of TMGs for training in the SCFR. It has been recognised for many years now that certain aspects of glider pilot training, from ab initio through to cross country endorsement, can benefit from the use of training in a TMG. Indeed, training such as field landing practice could not be carried out safely in anything but a TMG. A TMG provides a degree of continuity that cannot be guaranteed in a pure glider, whilst allowing the student to experience glider-like performance during the training (very different to if a normal SSEP were to be used, for example). This helps the student understand the training better and increases the learning speed. SCFR training without the ability to use TMGs is likely to prove disjointed and less than adequate.

It is therefore recommended that provision be made to allow TMGs to be used for training for the SCFR. If concerns exist that TMG use in IFR conditions were to grow as a consequence then legislation can be put in place to make it clear that TMGs may only be used in cloud by suitably qualified instructors for the specific purpose of SCFR training.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

819

comment by: *Patrick de Nonneville*

We strongly support the Agency in its choice of “the second route”, ie. to not restrict the privileges of the CBM IR to certain aeroplane classes or types on the following grounds We understand that FCL008’s proposals were developed on the basis of reviewing the training process for the existing EASA FCL Instrument Rating, and not the creation of a “restricted IR”. This is consistent with FCL008’s terms of reference.

Given there is no proposed change to the content of the IR Test or the syllabus for the flight training, we believe it is a fallacy to consider that there could be an appropriate “restriction”. What could be the possible upgrade examination for an IR holder who has completed Competence-based Modular training, since the training and test content are exactly the same as for the Modular or Integrated IR?

We note that EASA regulations already impose significantly greater requirements on advanced light aircraft than the ICAO norms or other regimes such as the FAA. The requirements for type-specific Class Ratings for the piston PA46 and for sub 5.7t single and multi-engine turboprops, the HPA examination, and the regulations for Complex aircraft operated Non-Commercially are already in place through the mechanism of Part FCL class rating privileges and Part OPS. There is no justification for a redundant extra layer of restriction on the Instrument Rating, since holding an Instrument Rating gives no concession to the Class Rating or Part OPS requirements Comment on 2.3 Learning Objectives We strongly agree with the proposed deletion of IR LOs.

The present JAR-FCL IR TK syllabus contains a very significant amount of depth and detail that cannot be considered relevant to the incremental privileges of the Instrument Rating. We believe that this has both discouraged pilots from undertaking IR training and harmed the “fitness for purpose” reputation of JAR FCL TK.

Comment on 2.4 Flight instruction, final para We believe that there should be a specific route for a competency-based course towards a multi-engine IR(A).

There is no reason for there not to be such a route. The relationship between the existing Modular ME and SE IR(A) should be mirrored in the CBM IR.

We have not commented further on paras 2.4-2.7 in this section of the CRT, all of our views on the content of these paras are detailed in our comments on the Draft Opinion section.

response

Partially accepted

Thank you for providing feedback.

The Agency and the Review Group further discussed the ‘ab initio’ flight instruction for the multi-engine competency-based IR(A) and, as a result, the requirements were added. A total of 45 hours of instrument flight instruction is required if no certain previous flight experience or training are credited. In any case a minimum of 25 hour dual instrument instruction of which at least 15 hours completed on a multi-engine aeroplane are required.

comment

826

comment by: *Timothy Nathan*

The EIR is a valuable addition to the armoury. Speaking as someone who has held a full IR for 35 years, and who has flown several thousand hours in GA all over Europe, I can say that the proportion of time that it is necessary to fly an instrument procedure lower than VFR minima is very small. In my opinion, there is a large body of pilots who will appreciate the safety and convenience of IFR flight on airways, but who will generally cancel flights in very poor conditions because of their mission profile, regardless of their qualifications. If

someone wants to go to a foreign country for the weekend for leisure, they would probably cancel for rain, snow, fog or low cloud, even if they were qualified to land in it, because it is not their idea of a fun weekend away. For such people the EIR will be ideal.

I have heard objections to the EIR on the grounds of people being caught out by unforecast bad weather. I consider this to be greatly overstated, in that anyone can be so caught out, whether they are VFR rated, Instrument Rated or even CATIII ILS qualified. There are minima for all types of flight, and it is up to the commander to work within those minima. One might as well not have an IR because the cloudbase might be 100' rather than the forecast 200', or not have VFR qualifications because conditions might fall below VMC unexpectedly.

Furthermore, we have to accept the unlikelihood of weather falling so far below EIR minima as to make a radar cloudbreak impossible anywhere within range. If the pilot sets off with a forecast of VMC over a wide area, there is no chance that weather will be dangerously below VMC everywhere in range. He might have to accept a radar vector to final at, say 800', but that will not be a problem. The thought that he would be forced to do an ILS to minima is ludicrous and should be rightfully ignored.

response *Noted*

Thank you for providing positive feedback.

comment 827

comment by: *Timothy Nathan*

The most important change in this proposal is the removal from Theoretical Knowledge a wide range of topics which are superfluous to General Aviation Instrument Flight and the removal of the requirement to spend an excessive period in a classroom setting (the single biggest hurdle in the way of private pilots acquiring an IR.)

response *Noted*

Thank you for providing this comment.

comment 832

comment by: *Timothy Nathan*

It is important that EASA create an achievable route to a full IR, not a lightweight route to a restricted IR.

response *Noted*

Thank you for providing this comment.

comment 833

comment by: *Timothy Nathan*

It is important to remove the previously arbitrarily raised requirement for the number of hours of training. If a pilot has a good deal of prior experience (such as a foreign IR, military IF or on a UK IMC rating) or is particularly skilled or able, there is no reason for them to waste a great deal of time and money burning holes in the sky to tick regulatory boxes.

response	<p>The granting of an Instrument Qualification should be based on knowledge and competence, not how long it has taken the applicant to gain that knowledge and competence.</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency decided that prior instrument flight time experience, such as military, UK IMC and foreign IR, will be credited towards part of the instrument training requirement for the EIR and IR courses. The Agency strongly believes that at least 10 hours are required at an ATO to ensure a minimum quality of training.</p>
comment	<p>857 comment by: <i>Philip Hall</i></p> <p>Given the proposed path from EIR or IR(A) it would be helpful if the TK examinations could be harmonised so that the ground study is only performed once.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>858 comment by: <i>Jeff WARREN</i></p> <p>In my view the requirement for a minimum period of dual flight instruction is inappropriate. 5 hours is entirely arbitrary, and would pose an unnecessary burden on those capable of mastering cloud flying skills in a shorter period. I am a glider pilot of 30 years experience, including cloud flying. The basis of cloud flying training in the UK has always been to continue until the pilot is proficient. This system has been entirely satisfactory, and the accident record in the UK does not show that cloud flying has been a material risk, and therefore does not indicate a safety based need for change.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.</p> <p>In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.</p>
comment	<p>860 comment by: <i>john cooke</i></p> <p>As a glider pilot, flying from a hill site, I use lift under cloud , right up to cloudbase, and ,rarely, into cloud. Glider pilots rely on this lift to make the</p>

most of flying, and to give maximum distances for minimum lift. This is a safety issue too. It is essential that any changes do the minimum to restrict sailplane operation.

I support, in principle, the proposals of the BGA. This should include a Restricted SCFR, which would restrict us least. This should be reconsidered. A SCFR is acceptable, but with a reduced training time.

It is vital that we retain the privilege of flying close to cloud. I accept that flying in cloud requires training and equipment

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 872 comment by: *BAKER*

Page 11, 3.1: I support the introduction of a SCFR. It is imperative to properly train pilots in cloud flying techniques"

Page 11, 3.2: I support both practical and theoretical training for the SCFR. However, stipulating a minimum of 5 hours of dual-flight instruction is unnecessary, for some pilots will be prohibitively expensive and training may often be impractical to provide for some clubs with few gliders. The rating should be awarded solely based on skills and theoretical testing, after sufficient training to reach the required standard. For someone who is already competent at cloud flying to have an enforced 5 hours training session is completely unfair and takes no account of their existing experience. I propose removing all references to "5 hours of dual instruction" and replace the text with wording similar to "pilots wishing to acquire the sailplane cloud flying rating must undertake sufficient dual instruction in controlling the sailplane by reference to instruments in order to pass the skill test".

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 883 comment by: *Andrew Davis*

To carry out the specified training to retain our existing right to fly in clouds will require 5 hours air training flying on instruments only. While the validity of the 5 hour requirement is debateable, the only realistic way to carry out this training is in a motor glider, so these regulations must make allowance for using motor gliders for cloud flying training in any dual control motor gliders.

More importantly these regulations must take into account gliding requirements to fly in clear air but within 1,000' of cloud. If a means of addressing this is not implemented there will be many days when gliding clubs

will be unable to fly because of cloud bases below 2000'. This will put many clubs out of business and potentially lose many people who currently participate in the sport.

In addition the requirement to remain 1000' clear of cloud is unenforceable as the glider pilot has no means of accurately ascertaining what cloud base is at any instant.

Option 1 is a sensible option for those wishing to fly in cloud but for those wishing to fly within 1000' of cloud but this should be implemented in conjunction with Option 2 which should apply to flying in any uncontrolled air space to address the points raised above. The reason why both of these options should be implemented is that there is no sensible reason why those wishing to fly within 1000' should be mandated to undergo 5 hours of instrument flight training.

A J Davis
on behalf of Needwood Forest Gliding Club

response *Partially accepted.*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Option 2 — restricted cloud flying rating/use of TMG) were also identified by BGA.

comment 891

comment by: *Roger STARLING*

3 Sailplane cloud flying rating
3.1 General

4. In addition to the proposed SCFR it would have been sensible to have a rating that would permit flying clear of cloud but in IFR - eg up to cloud base. Much of a glider pilot's cross country flying takes place up to cloud base and the inability to continue with this will decrease safety as it make field landing more likely as it will not be possible to gain as much height in thermal lift. The full training for the SCFR is an overkill for this type of flying.

response *Not accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 921

comment by: *Jim Lyell*

Sailplane cloud flying rating - Flight Instruction 3.2

Given that the rating requires a skills test I would have thought that the criteria for 5 hours dual instruction in cloud flying is excessive surely the criteria should be sufficient dual instruction to enable the applicant to pass the skills test. I would have thought that there should be no minimum hours requirement - simply that the skills test may be carried out to the required standard.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

966

comment by: *Mark Hawkins*

A competency based system is the correct route to be taking and I support it.

response

Noted.

Thank you for your positive feedback.

comment

968

comment by: *UK Light Aircraft Association*

Paragraph No: Section 2.2 - Possible restrictions to privileges

Comment: We agree with the proposal not to restrict the privileges of the IR(A) to certain aeroplane categories.

Justification: The inclusion of identified additional theory items in the class and type rating theory as set out in Part-FCL or as mandatory items (also for the VFR rated pilots) in the HPA course provide a proportionate separation between the skills required for IFR operation and the additional skills required for commercial operation and/or operation of complex or High Performance Aircraft.

Proposed Text: None

Paragraph No: Section 2.3 - Learning Objectives

Comment: We have carefully studied the AMCs containing the tables with the LOs for the seven required subjects and are generally content with the proposed content but would recommend that the LOs noted below be removed from the IR(A) list.

We offer no comments on whether some of the deletions proposed for the competency-based modular route should be taken over also for the existing IR other than to endorse the proposal that LOs aligned principally to the operation of High Performance Aircraft should be removed from the IR syllabus.

We offer no comments on content of the syllabus as published in Part-FCL for the HPA course.

Justification:

010 04 02 02 Not relevant to PPL IR operation.

010 09 03 00 Not relevant to IFR operation.

010 09 04 00 Not relevant to IFR operation.

062 05 04 06 Not relevant to PPL IR operation of non-complex aircraft.

Proposed Text:

AMC1 FCL.615 - Remove as noted above.

Paragraph No: Section 2.4 – Flight instruction

Comment: We are of the opinion that a specific training route for a competency-based course towards a multi-engine IR(A) is not required.

Justification: The proposed upgrade course of 5 hours in an ATO for the IR(A) holder who also holds a multi-engine class or type rating and wishes to obtain a multi-engine IR(A) for the first time would appear to provide a proportionate degree of additional training in the case of asymmetric operation of an aeroplane under IFR.

Proposed Text: None

Paragraph No: Section 4 - Changes to be addressed in Part-FCL

Comment: We are of the opinion that the LOs for the other IR routes should be amended as well.

Justification: A single rationalised IR(A) should form the basis for IFR operation of all aeroplane classes and types, with specific aspects associated with IFR operation of complex or high performance aircraft being linked to such specific class and type ratings.

Proposed Text: None

response

Not accepted

Thank you for providing your comments on different issues.

The Agency acknowledges your comment not to further restrict the EIR or the competency-based IR to certain aircraft categories and the support to move certain theory items to the HPA course indicating that you believe that this is a proportionate solution.

When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to do a thorough review and to perform this by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs have been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce some changes.

You proposed to delete more LOs on different subjects. The Review Group checked your input and came to the following decisions:

- 010 04 02 02: The Agency does not agree as this LO aims at a clear understanding where to find the IR or EIR related requirements in the future Part-FCL. As this will not be automatically covered in the PPL or CPL theory course, it should stay.

- 010 09 03 00: The Agency discussed this proposal with the Review Group experts and came to the conclusion that this LO should also be kept as some additional general runway information in addition to the PPL theory should be received since these IFR training flights normally lead to some flight to and from larger aerodromes.

- 010 09 04 00: same arguments as above. The experts involved in the drafting believe that a repetition of these issues under the IFR context could be very helpful. The Agency follows this logic and will keep the remaining LOs dealing with visual aids on the aerodrome.

- 062 05 04 06: The LO text is asking for the student to understand and state that modern FMS may use a range of sensors for calculating the position of the aircraft including VOR, DME, GPS, IRS and ILS. It is correct that a normal GA aircraft is not equipped but the experts involved believe that this basic understanding of an FMS is useful and should be kept.

The Agency acknowledges your comment on the upgrade course for the competency-based IR(A) holder for a multi-engine IR. However, based on the

feedback and strong request received from the industry proposing to develop a specific direct training route towards a competency-based ME IR, the Agency has included such an option in the resulting text for this CRD.

The Agency is in general in favour to also review the theoretical knowledge requirements for the existing IR. However, as this would also have influence on the other integrated courses (e.g. CPL/IR), it was decided to initiate this at a later stage with a future task.

comment 969 comment by: *Mark Hawkins*

RIA 2 -SCFR Primarily I support introduction of the SCFR (option 1). I would also support the RSCFR in appropriate areas.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 979 comment by: *Bob BOYD*

3.2 Flight Intruction
5 hours of flight instruction is unrealistically long and difficult to achieve.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 980 comment by: *Bob BOYD*

3.5 Need to explain more cleary what is meant by "at least 10 hours of flight instruction..."

response *Noted*

Thank you for providing this comment.

Flight instruction, in the capacity as a FI, during sail plane cloud flying, EIR or IR flight training.

comment 1005 comment by: *Robert GREEN*

Having read and digested this document my support is entirely for the reccomendations of the Agency and their conclusions

response *Noted*

Thank you for your positive feedback.

comment	1006	comment by: <i>Dr James WESTON</i>
	Section 3.2, Page 11, Flight Instruction:	
	I have been a sailplane for more than 40 years and my experience tells me that the requirement for at least 5 hours of dual flight instruction controlling the sailplane by reference to instruments should be removed. The essential requirement is that the student passes the skill test and, depending on background and ability, this may be accomplished in significantly fewer hours.	
response	<i>Partially accepted</i>	
	Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.	

comment	1018	comment by: <i>D Clarke</i>
	<u>Page 6 Section 1.1 General</u>	
	On longer flights, the difficulty will be getting sufficiently accurate weather information for the destination prior to departure such that the approach and landing at the destination can be done under VFR.	
	To mitigate some of that risk it is noted that there is to be some training in emergency approaches and landing. This should not be a problem for someone with a UK IMC Rating.	
response	<i>Noted</i>	
	Thank you for providing this comment.	

comment	1025	comment by: <i>D Clarke</i>
	<u>Page 5 section 1.2 Flight Instruction</u>	
	There will be some overlap in the skills learned for this training and the UK IMC Rating.	
	If the course student already has a UK IMC Rating, and during the 15 hours of flight training for the European rating the instructor(s) decide the course student has reached test standard in all aspects of the European course in less than 15 hours, is it really necessary to repeat aspects of the course to accumulate a total of 15 hours?	
	If a course student has such a demonstrable ability, it could reduce the cost of training for the European rating and encourage more PPL's to start the course.	
	This suggests some kind of potential course credit for having a UK IMC Rating but without having a fixed number of hours credit - it is on demonstrable ability with no guaranteed credit.	
	Similarly for a course student that has a lapsed IR.	

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.

comment

1028

comment by: *D Clarke*

Page 7 Section 1.3 Theoretical knowledge instruction

The minimum of 100 hours for the TK course sounds a long time to find for a non-professional pilot.

I do not know how representative my lifestyle is as a typical PPL interested in obtaining a EIR, but I would find it difficult to find the time for 100 hours TK study in a year.

I do not know how long it took me to read the Trevor Thom Volume 5 book on Instrument Flying before I did my UK IMC Rating course but it seemed a long time and I consequently ended up reading some sections more than once so the information would be fresh.

I have a very demanding job and work over 40 hours a week and spend another 12 hours a week travelling by road between home and work. Consequently it will be extremely difficult for me to find 100 hours in a year to do the TK course in addition to maintaining my PPL flying currency and non-aviation activities.

It would be less of a burden if the UK IMC Rating could have some credits towards some aspects of the TK course.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.

comment

1031

comment by: *D Clarke*

Page 7 section 1.6 Reasons for proposing this rating

I am supportive of the reasons given.

I am supportive of the 15 hours of dual instrument flight training for the EIR and in addition the flight time as PIC exercising the privileges of this rating will be credited against the instrument flight time needed for the competency-based modular IR.

However, there may be a number of pilots that have been exercising the

response	<p>privileges of the UK IMC Rating for many years that are disappointed that their UK IMC Rating course time and subsequent flight time exercising the privileges of their UK IMC Rating counts as nothing towards the competency-based modular IR.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>1036 comment by: <i>D Clarke</i></p> <p><u>Page 8 section 2.2 Possible restriction of privileges</u></p> <p>I would support the limitation of the rating to certain aeroplane categories.</p> <p>Unless I win the lottery I am unlikely to be flying High-Performance Aeroplanes. Therefore limitation of the rating to certain aeroplane categories ought to make the training cost more affordable and less time consuming.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency, in consultation with the Review Group of experts, has decided to keep the HPA category as proposed.</p>
comment	<p>1039 comment by: <i>D Clarke</i></p> <p><u>Page 10 section 2.5 Theoretical knowledge instruction</u></p> <p>The first paragraph states the course content and the teaching methods are the same as for the EIR.</p> <p>However, the privileges of the EIR and IR are going to be quite different.</p> <p>This suggests the TK for the EIR exceeds what is needed for the privileges of the EIR. If the TK was reduced to what was needed for the privileges, the TK course time would be reduced potentially making the EIR more accessible and affordable to more pilots.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to reduce the theoretical requirement to 80 hours for both the EIR and competency-based IR.</p>
comment	<p>1054 comment by: <i>Fédération Française Aéronautique</i></p> <p>III, 1. En-route Instrument Rating (EIR) French FFA approves this new qualification allowing the privilege to conduct flights under IFR and in IMC in the en-route phase of flight. However, the organisation of the French airspace and of the french Air Traffic</p>

	<p>Services should be a difficulty to implement this new qualification in France. Additionally, FFA thinks that the learning objectives, which are the same as the new competency-based modular IR (see AMC3 FCL 825(d) EIR theoretical knowledge, (a) - General. p.186) are too many items considering the limited privileges of this EIR qualification.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your comment.</p> <p>Regarding the first issue, the Agency acknowledges that your organisation is supporting the proposed EIR route. As no justification or example is provided for possible problems with ATC, the Agency is not in a position to comment on it.</p> <p>Regarding the question why the LOs for the EIR are the same as for the competency-based IR, it should be highlighted that the drafting group decided to do so to allow a full credit for the theory when going from the EIR to the full IR. To develop a separate theory syllabus and a question bank seemed to be too demanding. However, the LOs dealing with specific departure or arrival topics which are not directly relevant for the EIR pilot will help to understand the IFR operations when doing the required 2 approaches during training.</p>
comment	<p>1059 comment by: <i>Fédération Française Aéronautique</i></p> <p>III. 2. Competency-based modular course IR(A), p.7 French FFA <u>fully approves</u> this new access to the Instrument Rating - IR(A) About § III. 2.2 p.8 consideration, FFA is not opposed to limit the access to PPL(A) only.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1060 comment by: <i>Mirosław PITORAK</i></p> <p>3.2. To start training for SCFR glider pilot must be a licence holder with minimum 30 hours of flight time as PIC in TOTAL not only flight hours collected after issue a licence! There shouldn't be any minimum hours limit for dual flight, it should be left for FI discretion.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p> <p>In addition, the 30 hour requirement is an issue which will be resolved during the process of conversion of licences and ratings. The competent authority is asked to establish a conversion report in consultation with the Agency to convert existing licences and ratings into the new PART-FCL system.</p>

comment	<p><i>1061</i></p> <p>comment by: <i>Bob Grieve</i></p> <p>Regarding cloud flying training, 5 hrs in a sailplane may be very hard to achieve if awaiting soaring conditions, perhaps taking weeks. Therefore training must be allowed in a TMG for this purpose. Secondly 5 Hrs may be completely unnecessary with a suitable candidate. Surely sufficient training to become competent and pass the skill test is all that is necessary. Some pilots may require more than 5 hrs and some considerably less. Rather than granting dispensations for any previous experience surely this would suffice. i.e. instructor assessment.</p> <p>The training in a TMG and flying in cloud would only be allowable for training purposes and not used for any other purpose.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use TMG) were also identified by BGA.</p>
comment	<p><i>1090</i></p> <p>comment by: <i>John Milner</i></p> <p>The demand for 100 hours of Theoretical Knowledge training remains a significant and unnecessary barrier to the IR and for EIR is bordering on the ridiculous. For a PPL/IR there is a clear and simple requirement to understand :</p> <p>Human Factors (already covered in basic PPL so just a refresher needed) Flight planning and routing (largely missing from the current syllabus) IFR rules IFR Navigation especially GPS based BRNAV Meteorology</p> <p>In my own experience this could easily be accomplished in 50 hours of computer based training there is no need for any classroom based training though some pilots may wish to have it as an option.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving several similar comments, the Agency reviewed the issue and decided to reduce the hours required to 80 for the EIR and competency-based IR. In addition, a minimum amount of classroom teaching will be required in accordance with ORA.ATO.305.</p>
comment	<p><i>1117</i></p> <p>comment by: <i>Malcolm Baldwin</i></p> <p>The compulsory classroom element of the theoretical knowledge instruction should be waived for existing UK IMC holders. This will increase the rate of initial uptake and thus bring forward delivery of the safety benefits of the EIR.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.

comment 1120 comment by: *Robert grant*

This,or something like it,is essential if gliding is to continue in any practical way in the UK.

response *Noted*

Thank you for providing this comment.

comment 1123 comment by: *Roger CHAMBERLAIN*

As 600 hour PPL / IMC I think that if there are to be any differences to licencing between aircraft types that it should be between low altitude non-pressurised, and pressurised aircraft being used for potentially high altitude operation. The TK requirement should also be based on this same differentiation.

response *Noted*

Thank you for providing this comment. The Agency would like to clarify that the issue you raised has already been taken care of by FCL.720.A(b), (c) and (d) and is therefore not addressed in this NPA.

comment 1130 comment by: *Alex Green*

Flying gliders often requires the need to fly in close proximity to clouds for a short time at the end of a thermal climb or up the front of a wave cloud.

Weather condition can change quickly such that the knowledge and training gained from a sailplane cloud flying rating would be useful, however I think that 3 hours training in a touring motor glider would suffice rather than the 5 hours proposed.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

1134

comment by: *Patrick NAEGELI*

As an experienced sailplane pilot, instructor and examiner, and instrument qualified PPL holder, I am very supportive of the EASA proposal for an SCFR.

I believe that the case is clear from two perspectives:

- the ability to fly in IMC/clouds provides a significant additional opportunity for sailplane pilots to extend their soaring range in marginal conditions and thereby avoid potential land-outs. This benefit is safety-related.

- UK experience is that the risks associated with cloud flying by sailplanes are known, understood and do not represent a material flight safety risk. Furthermore, appropriate operating protocols can mitigate such risks thereby permitting safe operation in IMC.

The SCFR should be available to both LAPL(S) and SPL holders.

The amount of training that an individual pilot will require will vary, considerably, case-by-case and so it does not seem to make sense for a minimum amount of dual training to be specified along with the need to pass a skills test. I suggest, therefore, that the requirement is changed to "an appropriate amount of dual instruction within and ATO".

If the minimum specific number of hours dual instruction is to remain at 5 then I strongly recommend that an exemption be made, and no minimum specified, for current IMCR/EIR/IR holders.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/SPL and LAPL(A)) were also identified by BGA.

In addition, pilots holding a valid EIR or IR(A) will be credited towards the requirement to attend the SCFR training course. However, in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment

1142

comment by: *AOPA-Germany*

AOPA Germany remarks that the NPA text states under 2.7 Crediting for third country rating holders: "Nevertheless, the applicant has to pass the skill test and must demonstrate the appropriate knowledge of Air Law, Meteorology, Flight Performance and Planning and Human Performance." AOPA Germany is of the opinion that "must demonstrate appropriate knowledge" should be understood and accepted as a part of the skill test. The examiner covering these subjects before the skill test flight or during skill test flight.

AOPA Germany does not consider that there is a need for an additional written exam, as the majority of applicants will, in fact, be pilots that have already flown many hours within European airspace. Review of these subjects by the examiner, at the time of the skill test, will be sufficient to assess the competency of the candidate and for the candidate to "demonstrate" his

	appropriate knowledge.
response	<p><i>Accepted</i></p> <p>The Agency acknowledges you comment.</p> <p>The text has been amended to demonstrate knowledge requirements to the examiner during the skills test.</p>
comment	<p>1157 comment by: <i>AOPA Denmark</i></p> <p>AOPA Denmark strongly supports the competency based approach and the proposal that the competency based route will eventually lead to the same Instrument Rating as exists today.</p> <p>It is essential that the resulting full instrument rating is in no way inferior or limited compared to the existing rating.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1158 comment by: <i>AOPA Denmark</i></p> <p>AOPA Denmark agrees with the approach with more focused theoretical knowledge requirements and increased reliance on distance learning. These are are very important changes which add flexibility and removes some of the greatest barriers for private pilots to obtain an instrument rating.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1160 comment by: <i>AOPA Denmark</i></p> <p>AOPA Denmark regards the Enroute Instrument Rating itself is a very usefull stepping stone which will make it possible for GA pilots to gradually expand their qualifications and rights. However, the EIR is more to be seen as an extension of existing VFR priviliges to operate IFR during the enroute phase of flight rather than an instrument rating in the traditional sense. To reduce the risk of confusion and to not convey a false impression of the new rating AOPA Denmark proposes to rename the rating to "En-Route IFR Rating"</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency has decided to keep the EIR wording as the rating is a route towards the IR(A). The Agency therefore believes the wording should be in line with that of the IR(A).</p>
comment	<p>1161 comment by: <i>AOPA Denmark</i></p> <p>Preferably the proposal should be adopted in its entirety. However, if the EIR at the end of the regulatory process for some reason should not be become a reality it is important that the other proposed changes are still implemented. Particularly as regards revised theoretical knowledge requirements and the</p>

	improved possibilities for distance learning.
response	<i>Noted</i> Thank you for providing this comment.

comment	<p>1171 comment by: <i>General Aviation Manufacturers Association / Hennig</i></p> <p>GAMA notes the specific invitation from the agency to have stakeholder "study carefully the attached AMCs containing the tables with the [Learning Objectives] for the seven required subjects and invites [stakeholder] to provide feedback on the proposed deletion."</p> <p>In general, GAMA supports the steps already taken by EASA to remove material not relevant to your typical general aviation pilot and differentiating by simple, non-complex aeroplanes and high-performance aeroplanes (HPA). This differentiation provides a natural transition for those pilots who want to transition from simple aeroplanes to more complex to also transition from the EIR to an IR.</p> <p>There are, however, opportunities to further reduce the requirements - especially in the Theoretical Knowledge (TK) material. As part of the rulemaking group comment review, GAMA would challenge EASA and the members of the group to identify opportunities for further reducing the proposed 100 hours by at least 20 hours. GAMA is including select examples of targeted comments in the AMC where we believe opportunities exist (see CRT comment 1190, 1191, 1192 and 1195). In any case, GAMA supports the reduction from 150 hours to 100 hours as a starting point for the required Theoretical Knowledge requirements, especially when providing the undertake 90 percent of the training outside the class room.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing your positive comment on the reduction of LOs for the EIR and competency-based IR syllabus.</p> <p>Please see also the responses provided to your more detailed comments dealing with specific LOs.</p> <p>Regarding your proposal to further lower the amount of theoretical knowledge instruction to 80 hours, the Agency discussed the proposal with the Review Group and accepted it. Distance learning will be allowed as mentioned in your comment.</p>

comment	<p>1173 comment by: <i>Russ Francis</i></p> <p>I am in favour of the proposal for SCFR however I believe the requirement for 5 hours dual flight training is excessive as a minimum. It would be far preferable to have a skills oriented test with no minimum training requirement, but that if this were required 2 or 3 hours could be acceptable. It is an unnecessary expense for competent pilots to have to go through additional training when they can already meet the requirements of the skills test. I accept that some pilots are going to take longer than 2 or 3 hours, but this should be assessed on "as needed" basis</p>
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	<p>The is no recognition of any experience already gained as part of this proposal - for example the many hundreds of hours I have flow IMC and the many hours in cloud seem to count for nothing in preparation for this new rating. Clearly the same will apply to the majority of the UK gliding population.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p> <p>Previous national licence and rating may be converted into Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p><i>1174</i> comment by: <i>General Aviation Manufacturers Association / Hennig</i></p> <p>GAMA welcomes EASA specifically identifying the ability to credit Part FCL PPL or CPL holders (in section 2.7) that also hold a current ICAO-based third country IR(A). As the agency knows well, and discusses in NPA 2011-16, there are many European Community citizens who have obtained Instrument Ratings outside the Community, especially at training schools in the United States under the Federal Aviation Administration (FAA) requirements.</p> <p>GAMA reviewed Appendix 6, A.2 (Competency-based modular flying training course) and its stated requirements for the crediting, or one could say validation, of a non-European license and specifically focused in on the proposed requirement in 8. for the competency-based modular IR(A) holding a Part FCL PPL or CPL and a valid IR(A) issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country. EASA proposes that in order to be issued the IR(A) the applicant shall under (d) "have a minimum experience of at least 100 hours of instrument flight time as PIC on aeroplanes." GAMA believes that the agency needs to review the proposed 100 hours further and, if the agency elects to move forward with the proposal as is, provide the justification of the 100 hours which seems to an external observer somewhat arbitrary figure.</p> <p>As an example, could a hybrid approach be accepted that would only require 50 hours of instrument flying experience as PIC in combination of a short, say 5 hours, of flight instruction in the European airspace environment to review the differences between the pilot's experience and unique parts of the operating environment, if any. Our recommendation is to EASA to provide appropriate justification or alternatively additional flexibility to achieve the yet unsubstantiated experience level of 100 hours of instrument flight time.</p> <p>Additionally, in other NPAs (such as, NPA 2008-17) the agency specifically identified the opportunity for a streamlined path through license validation under a safety agreement. GAMA was unable to find similar references in NPA 2011-16 (apart from references to Annex III in Part FCL) that specifically discusses safety agreements and we would encourage the agency to review whether there would be value added from the perspective of specifically enabling validation by also referencing the use of safety agreements.</p>
response	<p><i>Partially accepted</i></p>

Thank you for providing this comment.

The Agency has changed the experience requirement to 50 hours flight time under IFR as PIC on aeroplanes in response to several other stakeholders also indicating that 100 hours would be too burdensome.

comment

1175

comment by: *Martin Gregorie*

3.2 Flight instruction

5 hours instruction seems like a lot, seeing that it took me under 16 hours to solo from a standing start and 72 hours for a full solo cross country rating.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by the BGA.

comment

1202

comment by: *Irv Lee (Higherplane Aviation Training Ltd)*

In comment to FCL.001, I proposed a cloud rating for powered aircraft as a formal safety skill enhancement beyond the PPL and provided suitable suggestions as to syllabus and testing. The formal reply to my FCL.001 cloud rating proposal for powered aircraft was that it would be passed to FCL.008 for consideration.

I note that the cloud rating proposed by FCL.008 is confined to sailplanes or powered sailplanes. Its use in certain areas of the EU (as permitted by local airspace regulations) is justified on grounds of extending the range of gliders under certain conditions, and this reason is then extended within the RIA Option 1 to try and make a safety case within the 23 member states where sailplanes cloud flying is not currently possible.

There is a much more pressing safety case for such a cloud rating to be extended to powered aircraft. Sailplane pilots become well practised at off-airfield landings, powered pilots do not, indeed some powered pilots have not even landed on grass airfields. In deteriorating meteorological conditions, without a cloud rating, all powered pilots are forced into a two-way choice between off-airfield landings or continuing to fly under cloud. This cuts off the extra safety option of being trained and tested on cloud flying, an option that may prevent injury or fatalities through either poorly executed off-airfield landings or continuation of flight under cloud in deteriorating conditions.

All the arguments expressed for justifying a cloud rating for sailplanes are equally valid to provide powered pilots with the same rating. I suggest that FCL.008 re-considers the idea of confining the cloud rating to sailplanes and powered sailplanes and extends the same rating to any aeroplane, under the same rules, training and testing already noted for sailplanes. If cloud flying is acceptable in sailplanes, it cannot be right to deny powered pilots the same option

response

Not accepted

Thank you for providing this comment.

The Agency and the expert working group have decided not to develop a cloud flying rating for powered aircraft. Instead, the En route IR (EIR) was proposed for a holder of a PPL or CPL.

comment

1203

comment by: CAA Finland

Page 8:

"One solution would be to limit the privileges to certain aeroplane types or classes (e.g. all aeroplanes except high-performance aeroplanes (HPA) or complex aeroplanes).

....

The Agency asks stakeholders to provide specific input on whether they agree with this approach or whether they would support the limitation of the rating to certain aeroplane categories."

FINLAND SUPPORTS AGENCY'S APPROACH = HPA ADD-ONS

response

Noted

Thank you for providing this comment.

The Agency and the expert working group have decided not to limit the EIR or IR and therefore both ratings will be accessible to all class and type ratings as proposed.

Please be advised that some type ratings already require an IR(A) prior to commencing the type rating course.

comment

1204

comment by: CAA Finland

Page 9:

"The proposed amendment of AMC1 FCL.725 therefore contains a new IFR section added to the existing VFR syllabus items. Based on this amendment, the Agency also proposes to raise the amount of questions foreseen (60 to 100 multiple choice questions) for the high performance aeroplane TK examination further detailed in FCL.725. Stakeholders' feedback on these proposals and on the content of the syllabus as published in Part-FCL for the HPA course is also expected."

FINLAND SUPPORTS. As the course includes additional items compared even to MPA, the increase on the number of questions is logical.

response

Noted

Thank you for providing this comment.

comment

1205

comment by: CAA Finland

Page 9:

"2.4. Flight instruction

The method of attaining an IR(A) following this modular course is competency-based. However, minimum requirements are stipulated to ensure that the IR following this route will be an ICAO compliant rating."

response	<p>FINLAND SUPPORTS. A rating on a PPL or even CPL licence, that would be known in ICAO-world but would not fulfil ICAO standards might be a risk outside Europe.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1208 comment by: <i>CAA Finland</i></p> <p>Page 10: "Stakeholders are asked to give their opinion on whether a specific training route for a competency-based course towards a multi-engine IR(A) should be developed. So far Appendix 6 A.2 proposes only an upgrade course of 5 hours in an ATO for the IR(A) holder who also holds a multi-engine class or type rating and wishes to obtain a multi-engine IR(A) for the first time."</p> <p>FINLAND WILL NOT SUPPORT COMPETENCE BASED TRAINING FROM SE-IR TO ME-IR. As the course content is totally only 5 hours, the evaluation of student progress in competence would have too much uncertainties.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that the upgrade course is the same as for the normal IR(A) course. In addition, the Agency and the Review Group discussed the competency-based multi-engine IR(A) and decided to add multi-engine requirements to Appendix 6 in line with the competency-based single-engine IR(A).</p>
comment	<p>1236 comment by: <i>Louis Dingemans</i></p> <p>Automatic conversion of an FAA instrument rating into an EASA IR (both PPL and CPL). Proposed modification; ANNEX III THE IMPLEMENTING REGULATION REQUIREMENTS FOR THE ACCEPTANCE OF LICENCES ISSUED BY OR ON BEHALF OF THIRD COUNTRIES Pilot licenses for non-commercial activities with an instrument rating. (b) Demonstrate that he/she has acquired knowledge of Air Law, Aeronautical Weather Codes, Flight Planning and Performance (IR), and Human Performance; -> Not required for the holder of a current JAR/PPL, JAR/CPL license. (c) Demonstrate that he/she has acquired knowledge of English in accordance with FCL.055; è Not required for the holder of a high school degrees/diploma or higher issued by US State school, college or university.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency has amended the prerequisites for the issue of an IR(A) to third-country-issued IR(A) holders by requiring the applicant to demonstrate an adequate level of theoretical knowledge to an examiner during the skills test.</p> <p>In addition, FCL.055 English language proficiency assessment shall be done</p>

through a method established by the competent authority (refer to FCL.055 (e)).

comment	1242	comment by: <i>D Clarke</i>
	<u>Page 11 section 3 Sailplane Cloud Flying Rating.</u>	
	I think a cloud flying rating would also be of interest to some powered pilots as well as sailplane pilots.	
	This gives everyone more flexibility if they do not have the time or money or flight profile to get an EIR or IR.	
response	<i>Not accepted</i>	
	Thank you for providing this comment.	
	The Agency and the expert working group have decided not to develop a cloud flying rating for powered aircraft. Instead, the en-route IR (EIR) was proposed for a holder of a PPL or CPL.	

comment	1272	comment by: <i>GregOHAGAN</i>
	Whilst supportive of the proposed rating I am concerned that 5 hours might be an excessive training requirement in some instances. Glider pilots rarely fly for significant periods typically only to climb, usually whilst turning and to descend, typically wings level. Perhaps a reduced requirement might be appropriate where sufficient skill can be demonstrated.	
	To achieve sufficient time in real cloud flying conditions I believe that training in TMGs should be allowed.	
response	<i>Partially accepted.</i>	
	Thank you for providing this comment.	
	Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.	

comment	1276	comment by: <i>Nils Wedi</i>
	Generally, I support the introduction of a cloud flying rating for sailplane cloud flying. I would prefer if option 1 was chosen and then amended to allow flying clear of cloud in class E airspace without a special rating. This is in particular important in countries such as the UK where weather conditions may quickly deteriorate and the safety of glider pilots without a cloud flying rating would be greatly enhanced if they were allowed to fly clear of cloud rather than with a vertical distance of 300m in such situations. From a meteorological point of view Europe has a wide variety of weather conditions, with typically lower cloudbases in the UK for example, and a single ruling would likely impair the goal of providing a level playing field for gliding with subsequent negative impacts on safety and establishing equality of flying conditions between different memberstates.	
response	<i>Not accepted</i>	

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

1277

comment by: *Mike Collins*

The requirement for 5 hours dual flight instruction is excessive and I am not sure a minimum training time should be decided. It all depends on the pilots ability and experience. I would suggest that the training time should be sufficient for the pilot to be able to demonstrate to an examiner, an ability to be able to control the sailplane in cloud.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1281

comment by: *John Strzebrakowski*

No mention is made of the possible need to be penetrate cloud layers in order to land after a period at altitude when wave flying. I have had to do this recently when a cloud gap closed while i was in decent and used my IMF flying competence to get down safely, penetrating about 7000 feet of cloud to do this. I have occasionally used a cloud climb in cumulus to traverse gaps in order to extend range and get back to airfields safely rather than risk damage in an outlanding.

My longest IMF flying was a cloud climb was a climb of around 7000 feet taking about 10 mins using turn and slip, and ASI instruments . I did this after teaching myself to fly on instruments over the preceeding 6 months or so total IMF flight time was probably in the region of about 15 minutes over this period when i had about 100 hours solo experience (i now have 900). It should be said that i did this in a Skylark glider which is particularly stable. I now fly a Vega sailplane which is not so stable but i still use the turn and slip rather than an 'artificial horizon' as my primary attitude indicator, although easier to use an 'artificial horizon' it takes too long to 'wind up'.

To subject myself to 5hrs of training would be a financial challenge and in my view unnecessarily excessive; although i welcome the principle of training with an instructor. However such instuctors are not generally available. If i had to pay for such instruction i would almost certainly not do it and probably not do it if instruction was free (due to costs of motorgliding).

I think it ought to be needless to say that to not be able to fly reasonably close if not up to cloudbase in order to make soaring (in Britain at least) viable. Without out this facility, which has been custom and practice in Britain since gliding began, i would reluctantly cease gliding and wish that i could afford (socially and economically) to emigrate to the southern hemisphere. I would have to try and sell my glider which given the conditions would be essentially worthless.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by the BGA.

In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment 1283

comment by: *Robert Stafford*

I do support the proposed Sailplane Cloud Flying Rating (SCFR) certification for glider pilots as I believe in good airmanship and safe flying, but with reservations. I do however think that the proposed 5 hours of dual instruction to be very excessive. Experienced Cross Country glider pilots have been cloud flying in the UK for many years without any major accidents. The proposed rule would also mean that UK instructors would also need the SCFR certification before being able to instruct others. 5 hours training in a glider flying in cloud does seem very extreme; I would think that 2 hours training is far more appropriate.

What I am strongly apposed to and what will be a major concern for me and other UK glider pilots is the proposal to restrict gliding to below 1000ft below cloud base for pilots without SCFR certification, this it will have a huge impact on the sport of gliding in the UK. On average the cloud base in the UK is 3500ft during spring and summer months. It will mean that cross country flights will be carried out at much lower levels, it will mean in practice far more out landings in fields which will increase the risk of injury, damaged gliders and property. The reduction of the flyable altitude range will have impact gliding competitions in the UK as task will have to be set in "Safe Areas" of flatter terrain, this will lead to serious congestion within these areas during the competition and soaring season.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment	1289	comment by: AOPA France
	AOPA France agrees that the EIR should be extended to the CPL(A).	
response	Noted	
	Thank you for providing this comment.	
comment	1290	comment by: AOPA France
	AOPA France considers that a different emphasis should be put on the reason for proposing the EIR. This is primarily a rating, which extends the privileges of a VFR-only pilot to include en-route flight under circumstances, which require mandatory compliance with IFR, whether in VMC or IMC, and as such we support it. However, only the instrument flight training appropriate to support such limited privileges is given and therefore the EIR should not be thought of as an 'instrument' rating in the true sense. AOPA France therefore proposes that the EIR should be re-titled 'En-Route IFR Rating'.	
response	Not accepted	
	Thank you for providing this comment. The Agency has decided to keep the EIR wording as the rating is a route towards the IR(A). The Agency therefore believes that the wording should be in line with that of the IR(A).	
comment	1291	comment by: AOPA France
	AOPA France agrees that, if used strictly within the associated rating privileges, the EIR can significantly enhance safety by reducing instances of inappropriate VFR flight.	
response	Noted	
	Thank you for providing this comment.	
comment	1292	comment by: AOPA France
	AOPA France strongly supports the Agency's very welcome initiative of proposing the C-B IR. AOPA France also supports the Agency's proposal to adopt the second option ('non-HPA') and not to restrict C-B IR privileges further. Additionally, the pragmatic proposal to relocate the requisite theoretical knowledge syllabus items pertinent to the operation of HPA under IFR is welcomed.	
response	Noted	
	Thank you for providing this comment.	
comment	1293	comment by: AOPA France
	AOPA France welcomes the Agency's proposal to reduce IR theoretical knowledge content to approximately 60% of its existing level, but would support any stakeholder who proposes further reductions. AOPA France does not consider that any of the Los, which have been proposed for removal or relocation should be retained in the C-B IR syllabus.	

response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1294 comment by: AOPA France</p> <p>AOPA France considers that, since the whole essence of the C-B IR is 'competency', the proposed C-B IR course will be adequate for a multi-engine IR provided that the following supplementary clause is adopted: 'Where multi-engine IR privileges are sought, the 25 hrs instrument instructional time shall also include a minimum of 5 hrs on multi-engine aeroplanes, of which 3 hrs may be may be in an FFS or FNPT II.'</p> <p>In other words, although the entire 25 hrs of instrument instructional time <i>could</i> be conducted on multi-engine aeroplanes, a minimum of 2 of the specified 10 hrs of flight time in aeroplanes <u>must</u> be conducted in a multi-engine aeroplane and a maximum of 3 of the remainder <u>may</u> be conducted in an FSS or FNPT II.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. After receiving several other comments, the Agency and the Review Group decided to review the issue. It was decided that 15 hours dual instrument instruction time shall be completed on a multi-engine aeroplane. In addition, a maximum of 20 hours, or 30 hours where an FFS is used, may be instrument ground time in an FNPT I or II.</p>
comment	<p>1295 comment by: AOPA France</p> <p>AOPA France welcomes proposals for straightforward conversion of existing ICAO-based third country IRs; our detailed proposals are in our comments on the Draft Opinion section of NPA 2011-16. AOPA France also considers that, although credit for military IRs is a national responsibility, generally similar credit should be granted to military IR holders as is proposed for ICAO-based third country IRs.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. For both the EIR and competency-based IR courses, prior PIC instrument time experience, such as military instrument time, can be credited to part of the course requirements.</p>
comment	<p>1296 comment by: AOPA France</p> <p>AOPA France remarks that the NPA text states : " Nevertheless, the applicant has to pass the skill test and must demonstrate the appropriate knowledge of Air Law, Meteorology, Flight Performance and Planning and Human Performance." AOPA France is of the opinion that "must demonstrate appropriate knowledge" should be understood and accepted as a part of the skill test. The examiner covering these subjects before the skill test flight or during skill test flight. AOPA France does not consider that there is a need for additional written exam, as the majority of applicants will, in fact, be pilots that have already</p>

flown many hours within european airspace. Review of these subjects by the examiner, at the time of the skill test, will be sufficient to assess the competency of the candidate and for the candidate to "demonstrate" his appropriate knowledge.

response *Accepted*

Thank you for providing this comment.

The Agency has amended the prerequisites for the issue of an IR(A) to third-country-issued IR(A) holders by requiring the applicant to demonstrate an adequate level of theoretical knowledge to an examiner during the skills test.

comment 1297

comment by: *AOPA France*

Although AOPA France welcomes the Agency's Option 1 proposals for the SCR and notes the particular need for such a rating in certain parts of the EU, we also note that the NPA does not address the parallel needs for sailplane towing in such areas, particularly in areas of significant elevation. NPA 2011-16 does not, in its current state, provide a proportionate solution for sailplane towing operations near cloud in most airspace categories; the only current solution being for the towing pilot to hold an EIR, which is clearly unreasonable for the average sailplane club tow pilot. AOPA France proposes an amendment to **FCL.600** in order to address this shortcoming. (See response to II. Regulatory Impact Assessment for the sailplane cloud flying rating 2.1 WHAT IS THE ISSUE AND WHO IS AFFECTED?)

response *Not accepted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. Therefore, a tow pilot will require an EIR.

comment 1298

comment by: *AOPA France*

AOPA France welcomes proposals to amend the rules identified in this paragraph and proposes an amendment to FCL.600 in the spirit of the EASA management board's call for greater rulemaking flexibility. We also note that the European Commission has already accepted greater flexibility in other areas of aviation legislation, notably SERA and EU-OPS1, in order to meet national needs and consider that similar flexibility may reasonably be applied to aircrew licensing regulation.

response *Noted*

Thank you for providing this comment.

comment 1317

comment by: *Professional Air Training*

NPA 16-2011 Response from Professional Air Training Ltd, ATO, Bournemouth Airport UK

**Competency-based modular course for the IR(A)
In relation to 2.4 (IR) 'Flight Instruction'**

'At least 10 hours of dual instrument flight instruction in an aeroplane at an ATO'

Existing industry figures show that it is very unlikely that the vast majority of pilots will be capable of passing the initial IRT with such a limited number of hours of instruction completed at an ATO. This will tend to lead to poor training delivery, as there will be (student) pressure to rush through the syllabus, followed probably by many more hours re-learning and practice to reach the required IRT standard.

In addition, the current structured method of completing the full course at one ATO means that the instruction is normally given on a full time basis in around seven or eight weeks. The new method of doing only 10 hours at an ATO and the rest with independent freelance instructor(s) is likely to lead to the course being done over a much longer period with the obvious lack of continuity in IFR flying and the subsequent probable requirement for additional training.

'To determine the amount of hours credited and training needs left, the applicant shall complete a pre course assessment flight at an ATO'

What is the point of formalising such a flight? In our experience, it is very difficult to forecast the training requirement of an individual from the first flight. It could encourage the student to undergo further instrument flying/instruction away from an ATO, which might appear the 'cheaper option' but in our opinion would not be beneficial. As an example, we are honest with potential students about how many hours a foreign licence conversion will take for a low hour pilot. Other schools are not so honest in order to obtain the business.

The commercial pressure will therefore be to underestimate the required hours. What is the comeback when the actual hours are very different from the forecast?

Is it expected that an individual training syllabus is created from this assessment flight?

Under the proposed arrangement, the training at the ATO, followed by IRT, is positioned as the latter part of the IR training, instead of establishing comprehensive and correct techniques in a structured environment. Retraining is therefore likely to be required when the student arrives at the ATO (maybe even 'going back to basics').

Relationship between the instructors within an ATO and those providing instrument instruction outside of an ATO.

We do not believe that this mix has been properly considered. To work well there needs to be a close relationship between the freelance instrument instructor and the ATO. There should be an agreement between the parties on such matters as techniques, SOPS and standardisation of instruction.

If there needs to be this close relationship, the 'freelance instructor' needs to work **very** closely with the ATO and **all** of the instrument training needs to be

monitored by the ATO.

It is well known that, in the UK, training for the IMC rating (which can be done outside an ATO) is of vastly differing standards, from excellent to very poor. We believe that it is vital that all of the training for an IR course is subject to the quality system integrated within an ATO.

How will a Quality System be applied to the freelance instructors?

How will the proposed Competency-Based IR sit alongside the established IR course?

If the proposed IR course is at least in theory shorter and less expensive, it is probable that it will largely take over the existing modular course. How does this leave the modular route CPL/IR student?

It is questionable whether this is the best preparation for the prospective commercial pilot. Will the airlines accept someone who has done the majority of their IR training in an unstructured manner? Will this make a modular course IR a 'lesser' IR than an integrated course IR?

Will it be accepted that the student could now gain the CPL/IR issue in less than 200 hours? Or will it just leave more hours completed away from an ATO, either with a freelance instructor or as P1 hours-building? This could only be beneficial if there were to be structured IFR hours with an instrument instructor but only **after** the IRT.

'Stakeholders are asked to give their opinion....on a competency-based course towards a multi-engine IR(A)'

Most commercial pilots clearly need a multi IR. It is not a good idea to encourage them (via an apparently cheaper path) to do a single-engine IR(A) followed by an upgrade course, rather than a full course of multi FNPT/flying. It is a mistake that the competency-based option only proposes a single-engine IR followed by an upgrade course to multi-engine? (5 hours as now).

There is no logic here since it is clearly better that a prospective multi IR has a continuous course in a multi-engine aeroplane/FNPT rather than doing just the 5 hours in the multi-engine.

Other points

1. Why is the syllabus for the competency-based IR different from the existing modular IR e.g. contains engine shut-down and restart (for the multi IR(A) training)?
2. 30 hours maximum in an FNPT I or II – shouldn't the number of FNPT I hours be limited?

response

Partially accepted

Thank you for providing this comment.

The 10 hours flight instruction time required is the minimum and means that a pilot may require more training to attain the required level of competency. This is for the ATO to assess. The competency-based training provides flexibility for private non-commercial pilots. However, to ensure some continuity, the competency-based IR(A) course has to be completed within a given time.

The pre-entry assessment should establish the basis for the subsequent training at the ATO and, in addition, if the pilot is not progressing as expected, more training should be given by the ATO. In general, this applies to all training.

The Agency developed a new AMC requiring the applicant upon arrival at the ATO to present a training record signed by the instructor and stipulating aircraft type used, total instrument flight instruction time and exercises completed. The Agency believes that any below standard instruction outside an ATO will be communicated via the existing link between the ATO and the competent authority. In conclusion, these items and the final skill test should ensure that an appropriate quality standard is achieved.

The main aim of any IR training and skill test is to train pilots to the level of proficiency necessary to operate aeroplanes under IFR and in IMC. The competency-based IR(A) merely gives more flexibility compared to the modular IR(A) course. Pilots can choose the best course that suits their situation and needs. In any case, this training leads to the same amount of hours of instrument time, although some time may be achieved outside an ATO.

The Agency and the Review Group further discussed the 'ab initio' flight instruction for the multi-engine competency-based IR(A) and, as a result, the requirements were added. A total of 45 hours of instrument flight instruction is required if no certain previous flight experience or training are credited. In any case a minimum of 25 hour dual instrument instruction of which at least 15 hours completed on a multi-engine aeroplane are required.

The Agency acknowledges that the structure of the syllabus is slightly different; however, this is more an editorial issue as 2 modules were combined into 1.

The Agency agrees with your comment and has decided to limit the use of FNPT I and II to 20 hours to fulfil the ICAO standard procedures and recommended practises.

comment

1321

comment by: *David Sandells*

Inconsistency in the proposal between "Section 3.5 Privileges of Instructors and examiners (Sailplane cloud flying rating)" & Section B.I.7 - Ammendment to FCL.905.FI

Section 3.5 proposes FIs will provide training for cloud flying if they "hold a cloud flying rating and shall demonstrate the ability to instruct for that rating..."

Section B.I.7 suggests that FIs will require "at least 200hours of flight time under IFR"

The proposal in Section 3.5 seems reasonable.

200hours IFR experience is unreasonable for glider FIs and would essentially prohibit the instruction of the cloud flying rating. There would be few (if any) sailplane FIs with this amount of IFR experience.

Generally for the same level of ability - sailplane hours are usually much lower than powered pilot hours. This is due to the fact that sailplanes need to be constantly 'flown' and training flights generally have shorter durations. There is no real concept of 'cruise' with a sailplanes and therefore 100% of the flight

time is spent monitoring and adjusting the flight path to maintain best height and follow lines of lifting energy.

Therefore despite fewer hours, the higher intensity of sailplane flight leads to the same competence in a shorter time.

The changes to FCL.905.FI should fall in line with the discussion in section 3.5. The 200hour IFR minimum should be **removed** for the cloud flying rating and replaced with "demonstrate the ability to instruct for that rating to an FI specifically qualified for this or to an FE.

response *Noted*

Thank you for providing this comment.

The 200 hours requirement refers to either the EIR or IR and not to the sail plane cloud flying rating. An FI(S) only requires demonstrating his/her ability to instruct for the sail plane cloud flying rating to a qualified FI.

comment

1323

comment by: *David Sandells*

Section 3.2 Proposes a minimum 5 hours instruction time for sailplane cloud flying rating.

This is excessive for a sailplane, it will be difficult to achieve (due to the short nature of sailplane flight and the weather dependancy) and will make the rating unnecessarily costly.

I believe that an average pilot with 30 hours flight time in sailplanes would require nowhere near this amount of training and the amount should be determined by the flight instructor.

Due to the intensity of sailplane flying - if a limit should be imposed I believe it should be no more than 1 hour.

response *Accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1325

comment by: *Sarah PLATT*

I support the Sailplane Cloud Flying Rating & think that this rating should definitely be made available to both SPL and LAPL(S) holders. Whilst I strongly support the SCFR, I suggest that the proposed requirement for 5 hours dual flight instruction be removed, and that this should be based purely on competence assessed by the instructor after an Appropriate instruction period. This is because I believe different glider pilots will need different amounts of instruction, and for many glider pilots 5 hours would be too onerous, expensive, and unnecessary. If a time requirement must be set, then can I suggest 3 hours. I consider that the option for train for the SCFR in TMGs should be added, as

	<p>this is an effective and beneficial method of training, however I would be content to see pilots prohibited from exercising the privileges of an SCFR in TMGs.</p> <p>I strongly recommend that EASA re-consider the option of including a Restricted Sailplane Cloud Flying Rating, to allow IFR flight outside of clouds (subject as always to appropriate airspace and other ratings etc), since many groundbreaking flights, both past and future, could not take place without it.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(A)/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>1327 comment by: <i>David Sandells</i></p> <p>Section 3.2:-</p> <p>Provision should be made for cloud flying in Simulators - given the nature of the activity (no visual references) a simulator environment could provide an excellent training tool for instrument flying at much better value. It would not be weather dependant and could provide students with longer 'flights' and improved consistency of learning.</p> <p>This could also reduce the amount of real cloud flying training required.</p> <p>Simulators are recently becoming available in the private pilot arena and could easily be approved by national organisations as suitable for training purposes.</p> <p>Use of simulators could improve teaching methods and therefore overall pilot safety.</p> <p>Use of simulators could reduce the economic impact of increased regulation.</p> <p>As a flying instructor I notice that students who use simple simulators at home generally have better skills, progress faster and more safety aware.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Unfortunately, as long as there is no certificated 'glider simulator' (FSTD) available, the training for sailplane licences and ratings will have to be completed in a sailplane.</p>
comment	<p>1329 comment by: <i>Erkki Soinne</i></p> <p>Testing of CRT</p>
response	<p><i>Noted</i></p> <p>No comment provided.</p>

comment 1345 comment by: *Glider Pilot - 3400hrs FAI Diamond Badge Full Rated BGA Instructor*

The following applies to paragraph 3.2

The recommendation requiring a minimum of 5 hours dual instruction in the SCFR syllabus is excessive and should be reconsidered.

A glider typically enters cloud purely to gain height and therefore range, the duration actually within the cloud is measured in minutes - climb rates of 800 to 1000 feet per minute within cloud are not unusual so a gain of height of 3000 feet will only take 3-4 minutes. The glider will then exit the cloud to cruise to the next likely thermal source en route. The only way to effect this is to view the clouds from outside in clear air. Therefore, a glider pilot will not cruise for lengthy periods within clouds by choice as lack of cloud/weather visual assessment is a distinct disadvantage. Hence 5 hours training for a 2-5 mins section of a flight is excessive and I consider passing the skills test should be the criteria rather than a minimum time requirement.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1385 comment by: *George Metcalfe*

Para 3.2

The 5 hours dual instruction requirement is excessive, especially for pilots with previous experience of Sailplane cloud flying, and given the requirement for a skill test.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1399 comment by: *EFLEVA*

Page 8, paragraph 2.2

EFLEVA agrees with the intention not to restrict the privileges of of an IR(A) to a specific category of aeroplanes.

response *Noted*

Thank you for providing this comment.

comment 1415 comment by: *FAA*

The proposed EIR (FCL.825), designed to be a first step in the instrument rating proficiency process, may not mitigate all unintended safety

	<p>consequences.</p> <p>Reason: All aspects of instrument flying are not fully covered within the EIR training environment that should be addressed prior to operating an aircraft in IMC/IFR weather conditions.</p> <p>Recommendation: Modify the subject matter an instructor must cover with an applicant in order to align the law with ICAO Standards and Recommended Practices in the IFR environment.</p> <p>Safety Impact: By lowering the hour requirements for a pilot to fly in IFR/IMC conditions, some unintended safety consequences may result.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that an EIR is an EU only rating and is therefore not required to be fully aligned with ICAO standards and recommended practises.</p> <p>The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete one during the skills test.</p>
comment	<p>1438 comment by: René Meier, Europe Air Sports</p> <p>Page No. 6 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 1. En-route Instrument Rating section 1.1 Comment: EAS supports the proposal for the EIR. A strong emphasis should be placed on pre-flight planning particularly alternative aerodromes in the destination area, fuel reserves and meteorological forecasts both en route and at destination(s).</p> <p>Justification: The EIR, used responsibly and with due caution, should increase safety for pilots compared with the practice of flying VFR at lower level in what might turn out to be less than ideal VMC.</p> <p>Proposed text: EASA to strengthen the relevant text as indicated above.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1439 comment by: René Meier, Europe Air Sports</p> <p>Page No. 7 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 1. En-route Instrument Rating section 1.3 Comment: We question what the basis of 100 hours for the TK course is. If a</p>

qualification is achieved by examination and is 'competency-based' why does the proposal specify a time factor? Surely a more appropriate approach would be rely on the TK content requirement; different people have different speeds for learning. In any case, bearing in mind the flexibility of e-learning and distance learning, how would the hours minimum be measured in practice?

Further, to align the wording with the IR, the words "competency-based" should be added to the text for the EIR. See proposed text below.

Justification: A competency-based approach should not specify a time factor.

Proposed text: Before taking the theoretical knowledge examination, the applicant for a competency-based EIR has to complete an approved course of instruction.

response *Not accepted*

Thank you for providing this comment. The Agency would like to highlight that, as a result of several other comments and a subsequent review by the Agency and the Review Group, the minimum theoretical hours required were reduced to 80. The minimum amount of hours serves to harmonise training given by different ATO's and to ensure a minimum level of training for a student. The Agency would also like to clarify that a minimum amount of classroom teaching has to be provided in accordance with ORA.ATO.305.

In addition, the wording for the 'competency-based' IR is used to distinguish it from the other IR(A). Since there is only one EIR, the Agency does not see the need to add 'competency-based' wording to EIR.

comment 1440

comment by: René Meier, Europe Air Sports

Page No. 7

Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA

1. En-route Instrument Rating section 1.6

Comment: EAS fully supports the rationale for the EIR as a valuable qualification which should reduce the risks of flight into terrain in marginal VMC and enable pilots to conduct safe flights providing pre-flight planning guidelines are adhered to.

Justification: As above

Proposed text: No change

response *Noted*

Thank you for providing this comment.

comment 1441

comment by: René Meier, Europe Air Sports

Page No. 7

Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA

2. Competency based modular course for the IR(A) section 2.1

response	<p>Comment: EAS observes that, from accident reports, there appears to be a higher frequency of flights into terrain by helicopter pilots compared with aeroplane pilots. Therefore any proposal to enable helicopter pilots to progress from a VFR to IFR qualifications should be a positive step, and that EASA should progress its proposal with the helicopter community.</p> <p>Justification: Safety enhancement</p> <p>Proposed text: Not applicable</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1442 comment by: René Meier, Europe Air Sports</p> <p>Page No. 8 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.2</p> <p>Comment: Although a subject which is of interest to representative associations beyond the scope of its members, EAS agrees with the comments submitted by EAS member PPL IR in regard to the IR for HPA.</p> <p>Justification: See PPL IR response</p> <p>Proposed text: See PPL IR response</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1443 comment by: René Meier, Europe Air Sports</p> <p>Page No. 9 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.3</p> <p>Comment: EAS recommends the response of its member, PPL IR, to the Agency on the question of the LOs.</p> <p>Justification: PPL IR is the expert body within EAS to comment on the LOs</p> <p>Proposed text: See PPL IR response</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1444 comment by: René Meier, Europe Air Sports</p> <p>Page No. 9 to 10</p>

	<p>Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.4</p> <p>Comment: EAS recommends the response of its member, PPL IR, to the Agency on the question of Flight Instruction.</p> <p>Justification: PPL IR is the expert body within EAS to comment on Flight Instruction for the IR(A)</p> <p>Proposed text: See PPL IR response</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

comment	<p>1445 comment by: René Meier, Europe Air Sports</p> <p>Page No. 10</p> <p>Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.5</p> <p>Comment: As commented for the EIR, we question what the basis of 100 hours for the TK course is. If a qualification is achieved by examination and is 'competency-based' why does the proposal specify a time factor? Surely a more appropriate approach would be rely on the TK content requirement; different people have different speeds for learning. In any case, bearing in mind the flexibility of e-learning and distance learning, how would the hours minimum be measured in practice?</p> <p>Justification: A competency-based approach should not specify a time factor.</p> <p>Proposed text: Before taking the theoretical knowledge examination, the applicant for a competency-based IR has to complete an approved theoretical knowledge (TK) course of instruction.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that, as a result of several other comments and a subsequent review by the Agency and the Review Group, the minimum theoretical hours required were reduced to 80. The minimum amount of hours serves to harmonise training given by different ATO's and to ensure a minimum level of training for a student. The Agency would also like to clarify that a minimum amount of classroom teaching has to be provided in accordance with ORA.ATO.305.</p>

comment	<p>1446 comment by: René Meier, Europe Air Sports</p> <p>Page No. 10</p> <p>Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.5</p>
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	<p>Comment: EAS supports the reduction in examination questions and the examination time, as it is commensurate with the proposed reduction in the LOs.</p> <p>Justification: Proportionality</p> <p>Proposed text: No change</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

comment	<p>1448 comment by: René Meier, Europe Air Sports</p> <p>Page No. 10 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 2. Competency based modular course for the IR(A) section 2.7</p> <p>Comment: EAS realises that the subject of pilots holding (valid and current) third country ICAO-compliant licences with an IR(A) is a contentious issue. It seems unnecessary for such licence holders to be subject to further tests to qualify for the issue of a Part FCL IR(A). If the third country licence holders are EU citizens and can demonstrate that their experience of flying in EU airspace, albeit in third country registered aeroplanes, then further tests are superfluous and place an undue imposition on such pilots.</p> <p>Justification: The proposal for holders of an ICAO-compliant third country licence with an IR(A) to be subject to further examination and tests is unnecessary, particularly if they are EU citizens with IR experience in EU airspace.</p> <p>Proposed text: Delete this requirement.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. After receiving several other related comments, the Agency and the Review Group discussed the issue. As a result, the Agency decided to keep the proposal, albeit with reduced requirements. An applicant will now need to pass a skills test, demonstrate an adequate level of theoretical knowledge during the skills test to the examiner and have 50 hours of flight time under IFR as PIC on aeroplanes. The Agency would also like to highlight that an applicant who does not have the minimum hours will be able to credit PIC instrument time towards obtaining an EIR or competency-based IR(A).</p>

comment	<p>1449 comment by: René Meier, Europe Air Sports</p> <p>Page No. 11 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 3. Sailplane Cloud Flying Rating section 3.1</p> <p>Comment: EAS strongly supports the recommendation for a SCFR, though it has some comments for improvement (see detailed comments).</p>
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EAS concurs with the Agency's approach which is interpreted as divorcing the proposed SCFR (and the associated licences) from the particular airspace rules in member states. The ability to fly sailplanes in cloud varies from state to state, and so no uniform 'right' can be catered for by EU standardisation. It is absolutely essential to preserve such rights where they are allowed, and indeed to encourage change in member states where currently those rights are curtailed.

Justification: Sailplane flying in cloud is necessary in certain meteorological conditions in order to (a) gain sufficient height to extend the glider range to the next available potential source of lift, or landing area and (b) enable access to wave conditions above the general cloud base, and (c) to descend from upper-air wave conditions should the lower cloud coverage prevent a VMC descent to a safe landing

Proposed text: No change

response *Noted*

Thank you for providing this comment.

The Agency would like to clarify that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace zones with specific visual flight rules for sailplane operations.

comment *1450*

comment by: *René Meier, Europe Air Sports*

Page No. 11

Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA

3. Sailplane Cloud Flying Rating section 3.2

Comment: Learning to fly a sailplane in cloud can be done by some pilots in much less than 5 hours dual flight instruction by reference solely to instruments. This comment is based on extensive evidence. It is appreciated that aeroplane pilots and other interested parties might not believe this, as the ICAO compliant IR(A) course requires 40 hours. Therefore the gliding fraternity see the 5 hours as a 'compromise' to gain acceptance of the SCFR.

In practical terms, even using a TMG for the training with the P2 'under the hood', 5 hours is usually more than enough, but it does expose the pilots to potentially greater mid-air collision risk, particularly in side-by-side TMGs with the P2 shielding his / her eyes from the view outside the cockpit. In tandem (one pilot seated behind the other) two-seat sailplanes the risk is less, though if the sailplane is unpowered then reliance is on finding lift to stay airborne during the training. There are few if any tandem TMGs on which to train.

On the balance of risk therefore EAS considers that airborne time spent training for the SCFR with an instructor should be minimised. It would be far better overall if the training was 'competency-based', signed off by the instructor, without a minimum time required.

	<p>Justification: See above.</p> <p>Proposed text: Change the requirement to 'competency-based' without a minimum airborne training time with an instructor.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>

comment	<p>1451 comment by: René Meier, Europe Air Sports</p> <p>Page No. 11 Explanatory Note - III Overview of the changes proposed in this NPA 1. Sailplane Cloud Flying Rating section 3.2</p> <p>Comment: Sailplane pilots wishing to qualify for the SCFR should be given credits for other instrument qualifications such as an IR(A) and / or, for example, the UK IMCr</p> <p>Justification: This would be consistent with the principles of credited other relevant experience in other areas of Part FCL, and with the proposed FCL.1005.FE (4) where the examiner for the SCFR can have 'other instrument ratings' as an alternative to 10 hours of flight instruction for the SCFR.</p> <p>Proposed text: Add after FCL.830 a section on crediting: "Applicants for the SCFR may be credited with an appropriate amount of experience as holder of a current IR(A) or a relevant current national instrument rating such as the UK IMCr, at the discretion of the instructor for the SCFR, subject to completing a SCFR skill (and proficiency) test."</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>FCL.830 has been amended and foresees that pilots holding a valid EIR or IR(A) will be credited towards the requirement to attend the SCFR training course. However, in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.</p>

comment	<p>1452 comment by: René Meier, Europe Air Sports</p> <p>Page No. 11 Paragraph: Explanatory Note - III Overview of the changes proposed in this NPA 3. Sailplane Cloud Flying Rating section 3.4</p> <p>Comment: EAS finds the requirement for a revalidation or renewal of the SCFR every 24 months to be over-prescriptive and burdensome, particularly for those pilots who have used the SCFR reasonably regularly. It would be a considerable burden on the volunteer instructor community in gliding, committing sailplane / TMG time away from other uses. It would be far better to allow pilots to self-</p>
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certify through their log books that they are in current practice.

EAS proposes that the revalidation criteria should allow for pilots to self certify a certain amount of time flying in cloud (successfully!) in the 24 month period - say a minimum of one hour in total during the period - to count as revalidation.

Justification: As described above, and proportionality for sailplane pilots

Proposed text: Amend text to allow self-certification of practical experience over the relevant 24 month period.

response *Partially accepted*

Thank you for providing this comment.

The SCFR has only a recency requirement, but no revalidation date. Therefore, as long as a glider pilot has exercised the privileges of the SCFR for at least 1 hour or 5 flights as PIC within the 24-month period, recency is maintained. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 1472

comment by: *Julian Hodgson*

I agree with the British Gliding Associations view on the requirement for a minimum of 5 hours dual flight instruction for the SCFR. This would seem excessive for experience pilots. What matters is that competency is demonstrated.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1483

comment by: *Sally Hill*

For the dual flight training requirement, I feel that the proposal for 5 hour minimum training is too much. The training should be based on assessing the competency of a pilot and helping them to achieve the skills required for a set standard. This is not necessarily achieved by focussing on a set number of hours spent training as this can vary from one individual to another. If a minimum number of hours is required, then a minimum requirement of 2 hours dual flight training would be more flexible. This would be fairer to pilots with more experience and are capable of passing the test in much less than 5 hours whilst enabling pilots who required more training to have instruction based on their own requirements.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

A. Explanatory Note - IV. Options considered and major impacts identified p. 13-15

comment 4 comment by: *Spare Chan*
As a private pilot resident in the UK, I am happy to go for Option 3.
Very much looking forward to the EIR and IR.

response *Noted*
The Agency acknowledges your positive comment opting for Option 3.

comment 21 comment by: *Peter Reading*
I am a sailplane pilot with 3,400 hours in sailplanes and I am a Full Category Instructor (British Gliding Association qualification). I am also an Airline Training Captain and Type Rating Examiner, and so qualified to revalidate Instrument Ratings. So I feel appropriately qualified to comment.
In the UK, we have not historically held sailplane licenses and are self regulating. Cloud flying is permitted. This did not mean that 'anything went': it meant that we exercised appropriate control methods to maintain an appropriate level of safety.
Although, there is no formal cloud flying qualification, training was given, although it was performance based and not specified by the number of hours. Our safety record speaks for itself.
The proposed rating is not substantially different to what we already do, it just adds more regulation and paperwork to what we already successfully achieve.
However I disagree with the is statement on page 14: "As cloud flying increases the operational range of sailplanes, this option would increase safety risks due to a greater risk for out-landings".
This is an illogical statement and demonstrates a lack of understanding of the issues.
Cloud flying is normally performed in convective cloud. Let us assume that cloud flying is NOT permitted. The sailplane is restricted between the ground and cloudbase and so must find a source of raising air before the ground intervenes.
There is tactical benefit to cloud flying:
1 In the morning when the cloud base is low, it allows you more options to find lift before the ground intervenes.
2 On showery days when there are large gaps between the available climbs due to the shower activity killing the lift. The cloud climbs allows one to get across these gaps to the next available lift.
In my 34 years experience of cross country sailplane flying, I have only flown in cloud to REDUCE the potential for out-landings.

Although we train people to provide the initial skills to be able to cloud fly, in the UK, we don't continue to revalidate people. We have this old fashioned notion of trust and self preservation. This is not a public transport operation when unsuspecting third parties need to be protected. This is a activity of consenting adults, cognisant of the risks.

We should not be employing the techniques required for regulation of public transport operations to this leisure activity. There is no safety justification for this.

response *Noted*

Thank you for your comment.

The Agency agrees that the statement on page 14 may be confusing if seen on its own, but in conjunction with NPA Annex C.II. page 234 it should be clear.

To clarify this issue: if Option 0 (no cloud flying rating foreseen) is chosen, the current UK 'cloud flying' and 'flights in IMC' privileges for sailplanes would cease to exist. In turn, this would lead to an increased risk in terms of outlandings and reduced operational range in the UK and other Member States.

comment 61

comment by: *Timmy SCHWARZ*

It is a very good decision to recommend option 3 which will definately enhance safety and allow European private pilots to become an even more professional part of Airtraffic particularly as air traffic will increase in the coming decades. The board did an overall very great job with the stated proposals and it would be quite fantastic if the suggested ratings and ways to gain them could be introduced!!

response *Noted*

The Agency acknowledges your positive comment opting for Option 3.

comment 75

comment by: *PPL/IR Europe*

Comment on 2. RIA 1 – Instrument ratings for aeroplane licence holders

We strongly support the Agency's recommendation for "Option 3". We are in favour of the CB-M IR training method for all the reasons the Agency has outlined in the NPA. We also favour the EIR on the following grounds

- In principle and in "an ideal world", any pilot wanting any IFR capability would get a full ICAO IR
- However, we have to recognise that even the CB-M IR will still involve a time and financial commitment that may be difficult for most private pilots
- Additionally, pilots who operate to and from VFR airports may not require the full privileges of the IR

On this basis, we think the EIR is an important part of meeting the overall objectives of the NPA. It will provide both a "stepping stone" that may make eventually completing an IR more accessible for some pilots, and it will provide some pilots with all the capability they need, if they intend operating at VFR airports only. We fear that without the EIR, the greater accessibility of instrument qualifications will still be limited to a small minority of private pilots.

response	<p>Comment on <u>3. RIA 2 - Sailplane cloud flying rating</u> We strongly support the Agency's recommendation on Option 1, and the reasoning behind that recommendation</p> <p><i>Noted</i></p> <p>The Agency acknowledges your positive comment opting for Option 3 (CB IR and EIR) and Option 1 (SCFR).</p>
comment	<p>81 comment by: P Thornton</p> <p>I support the choice of Option 3 in section 2 of A IV. The EIR is a natural stepping-stone to the Competency-based modular IR(A).</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your positive comment opting for Option 3.</p>
comment	<p>114 comment by: Irish Aviation Authority</p> <p>In relation to the comment "<i>Increase the level of safety by allowing pilots to better handle unforeseen weather conditions</i>" -</p> <p><i>This statement is not accurate as the intention of this proposal is to encourage pilots with limited experience and privilege to fly in IMC enroute and therefore they are more likley to take off and enter IMC deliberately. While flying IMC enroute, a pilot cannot tell if there are 'unforseen weather conditions' at surface level.</i></p> <p><i>Additionally, it is questionable to suggest that there is an "increase the level of safety to better handle unforeseen weather conditions" if the proposed EIR rating will only allow a pilot flying in IMC to make an IFR approach by declaring a 'Mayday', if there is unforeseen IFR weather conditions at either the destination or any emergency enroute alternate. NC 21/11/11</i></p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.</p>
comment	<p>124 comment by: London Gliding Club</p> <p>As a UK cross country glider pilot I would like to support the proposition for a sailplane cloud flying rating, (Option 1). I can see no reasonable safety grounds</p>

	<p>on which to oppose this. In fact the opposite would seem to be true- that a rating would provide specific training and test competencies - thus improving levels of safety.</p> <p>Either of the other options would have a profound effect on cross country gliding - a sport in which European countries compete most successfully at the highest international levels and without which much European economic activity would be severely prejudiced.</p> <p>Regards Roger Rhodes</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots.</p> <p>Please also see the responses provided to the BGA comment No 121.</p>
comment	<p>129 comment by: <i>Alastair MacGregor</i></p> <p>The SCFR must be introduced and be accessible to LAPL(S) pilots.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots.</p> <p>The NPA text proposed already to attach this rating to an LAPL(S) licence.</p>
comment	<p>134 comment by: <i>Robert John</i></p> <p>RIA 2Sailplane cloud flying rating - Options</p> <p>I support Option 1 as amended by my suggestions, i.e. no minimum instructional time, skills testing only.</p> <p>I also support Option 2 as an ADDITION. It is eminently sensible to provide a simple, legal structure for pilots who have no desire to obtain a cloud flying rating to fly close to cloud in the same way as they now do in ALL countries, regardless of what the legal regime may apparently permit. Local laws will always provide further limitations and this fact should have no relevance to the common, overarching structure.</p> <p>Option 0 would be disastrous to sailplane flying in the UK and, if actually enforced, in many other countries. Legally flying cross country would become considerably more difficult to achieve on all but the best days and significantly more dangerous due to the inevitable increase in out-landings caused by the range compression. Most damage to sailplanes is done in field landings and the cost of insurance, already substantial, would become prohibitive. Competition flying would cease as the number of days that cross-country flying would be possible in a typical week's competition would dwindle. THERE IS NO SAFETY CASE WHATEVER for such wilful destruction of a sport and industry and I urge most strongly against its consideration.</p>
response	<p><i>Noted</i></p>

The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this through a specific rating. Please also see the responses provided to BGA comment No 121.

comment

154

comment by: *Robin Birch*

There has not been an option considered that includes IMC flight outside of cloud above the cloud base level. Not providing such an option restricts existing flight possibilities such as wave flying where this is a common mode of flying. In fact the removal of this would probably result in a big reduction of people wanting to go beyond solo into soaring as it is also a common mode of flight in the UK given the generally lower cloud bases when compared to Mainland Europe.

This could be offered as a sub part of Option 1 with an instrument appreciation rather than the full training.

response

Noted

The Agency acknowledges your supportive opinion regarding a restricted cloud flying rating for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this through a specific rating. Please also see the responses provided to BGA comment No 121.

comment

158

comment by: *Steve BARBER*

A provision to enable sailplanes to fly near and in cloud is essential to gliding in the UK, given the limited operating height band otherwise dictated by typical cloudbases experienced in the UK. I therefore support Option 1 in section IV 3 - RIA2.

However, it is far more frequent that sailplanes need to fly in IMC near to cloud, but without actually entering the cloud (see note * below). This is similar to Option 2 and offers many of the advantages of increasing the operating height band, and using the updraughts associated with the clouds, without losing visual reference and necessitating the skill of flying by reference solely to instruments. A rating permitting flight in these conditions would be far more easily achieved and would satisfy the majority of the requirements of glider

	<p>pilots. EASA should consider provision of such a rating.</p> <p>[*ie in conditions like VMC as defined for 3000ft and below, but applied above 3000ft: "For fixed wing aircraft operating at 140kt or less 5 km flight visibility Clear of cloud and in sight of surface"]</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots.</p> <p>The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.</p> <p>Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this through a specific rating. Please also see the responses provided to BGA comment No 121.</p>
comment	<p>173 comment by: <i>Oscar Tjernberg</i></p>
	<p>Option 3 provides clear substantial advantages and is therefore strongly recommended.</p>
response	<p><i>Noted</i></p>
	<p>The Agency acknowledges your supportive opinion regarding Option 3.</p>
comment	<p>201 comment by: <i>Joe Walsh</i></p>
	<p>I fly in Ireland, where cloud base is often 3000feet or less. Option 0 would have a serious impact on gliding operations in this country. Option 2 is better but would impact negatively on cross country flying. I agree with the Agency that Option 1 would yield the highest benefits overall.</p>
response	<p><i>Noted</i></p>
	<p>The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots.</p> <p>The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.</p> <p>Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this via a specific rating. Please also see the responses provided to BGA comment No 121.</p>
comment	<p>202 comment by: <i>David Fogden</i></p>
	<p><u>Comment on sections 3 and 7 - Sailplane cloud flying rating</u></p>

Option 1 and Option 2

In the UK, there are two main groups of sailplane pilots:

- Group 1: pilots who climb into and fly in cloud,
- Group 2: pilots who climb to cloud-base but do not climb into or fly in cloud.

The proposed Option 1 requires sailplane pilots in both Group 1 and Group 2 to have a full cloud-flying rating to fly a sailplane in normal UK cross-country conditions where cloud-base may be 4 – 5,000 feet. This will impose an unnecessary expense on the pilots in Group 2, who have no wish to climb into cloud so will never gain any benefit from the training for the rating.

Option 2 is all that is needed by the Group 2 pilots, who are also probably the majority of sailplane pilots in the UK. Requiring them all to undertake the training required for the rating would have severe economic consequences for gliding in the UK. Clubs would be overwhelmed by the training requirements and many pilots would probably decide gliding was no longer worth all the effort and cost.

Proposed amendment: Combine options 1 and 2. Provide Option 2 as the basis for the sailplane license for all sailplane pilots and make Option 1 an additional cloud-flying rating for the Group 1 pilots?

Training and requirements for cloud-flying rating

To ensure maximum value from a cloud-flying lesson, most clubs will make use of a TMG since there is no value for experienced sailplane pilots spending time thermalling to a safe height before undertaking the lesson. Also, the training is most likely to be done when strong thermals are not available.

To ensure at least some of the training is undertaken in 'live' conditions, it will be necessary for the TMG to enter cloud yet this is currently prohibited in the TMG so a dispensation is required to allow cloud-flying training flights in a TMG to enter cloud. Otherwise, pilots will achieve the necessary rating yet they may never have actually experienced flying in cloud and the associated potential for disorientation.

Many sailplane pilots have current experience of cloud flying or may have held instrument ratings in the past. Enforcing a fixed minimum of 5 hours flying for all will entail considerable unnecessary expense for many.

Proposed amendment: Set a standard to be achieved that can be evaluated by the examiner in a flying test as the basis for the rating with no minimum training requirement. This would allow the experienced pilot to decide when to take the test rather than be forced to have 5 hours of unproductive and costly training.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (option 2 — restricted cloud flying rating/use of TMG/5 hours training) were also identified by BGA.

comment 209

comment by: *guy Corbett*

RIA2 Option 2 (restricted sailplane cloud flying rating) is my favoured option and the reasons stated for rejection do not make sense. I wonder if the agency actually understand the nature of sailplane flying as the reason for rejection appear more appropriate for touring motor gliders. There can be no significant economic impact from a rating purely applying to gliders. This option would only be for use in uncontrolled airspace so there would be no conflict with air traffic management.

response

Noted

The Agency acknowledges your supportive opinion regarding a restricted cloud flying rating (Option 2) for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and understands the nature of sailplane flying. It took these circumstances into account when developing the proposed requirements based on intensive debates with sailplane experts but also with ATC experts and commercial IFR-rated pilots.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2) issue, the Agency agrees that there is no specific economic impact. However, as this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories), the Agency regards it as a safety-related issue and is not in a position to solve this problem via a specific rating. It should also be mentioned that this rating (and the restricted rating as proposed in the comment) will not be used in uncontrolled airspace only as none of the ratings in Part-FCL is restricted to a certain airspace category. Please also see the responses provided to BGA comment No 121.

comment

211

comment by: *Richard Slater*

3. RIA 2 - Sailplane cloud flying rating. Page 14.

Option 2 should be reconsidered because it will increase the ability and frequency to access wave systems which, particularly at lower levels, up to about 6000 ft, require flying close to but not in cloud.

Including Option 2 does not mean that option 1 is excluded. Indeed, it would be a good stepping stone to option 1.

response

Noted

The Agency acknowledges your supportive opinion regarding the cloud flying rating (Option 1) for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency agrees that there is no need for special training. However, as this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue, the Agency is not in a position to solve this via a specific rating. Please study also the responses provided to BGA comment No 121.

comment

219

comment by: Alex Hippel

I would like to submit my personal response to NPA 2011-16.

I applaud your regulatory work to improve both the safety and level of activity in the air.

However I feel that although regulation is a vital part of safety, it can not work alone.

High levels of safe aircraft activity also requires competent, well trained pilots with the correct mental attitude regarding safe flying.

I feel it is therefore important to submit my thoughts regarding NPA 2011-16 from the perspective of an average sailplane pilot.

SCFR in general

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It is vital that the SCFR is available to sailplane pilots.

Without this, sailplane activity is likely suffer a serious decline, especially in the UK where airspace restrictions already limit activity under many weather conditions.

Further more without the SCFR available some pilots that continue to fly, despite the restrictions may expose themselves and others to additional danger that would be unnecessary were the SCFR available.

Dual flight training requirement

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Within days of my first glider flights, 20 years ago, I recognised that as a pilot, the safety of myself, my fellow airmen and those on the ground required skill and knowledge but also, critically, the correct mental attitude towards safety and responsibility.

One of the key drivers for this belief, which has become core to my flying, was that gliding in the UK, under the control of the BGA, focused on meeting standards of competency rather than meeting "hours" requirements.

This focused everyone from the top of the BGA, down through the instructors, to the novice pilots, on the fact that achieving a target does not make one a safe pilot now or in the future. But rather that flying requires a continuous focus on safety especially between retests required to maintain a rating.

This led to a number of changes in how I train and fly.

1) Rather than try to meet targets as I would in the rest of my life, In aviation I choose to exceed any standards regarded as normal and indeed strive to achieve the standards of those I most respect.

2) I recognise that once I have "passed" a requirement and have been cleared for an activity I should be able to perform it safely the next day but there is no guarantee that I can perform it safely for the entire period until my rating lapses and regulations require me to retest. Thus if I have not practiced a skill or used knowledge recently I am compelled to evaluate my competence and practice/study/receive instruction even though regulations don't require it.

3) I can focus my time and money on training where it will have the greatest

impact on safety. Sometimes I exceed required standards quickly, at other times I must work harder on some skills/knowledge. Making the demonstration of safe flying the focus, allows me to focus my time, energy and money on those activities which will improve the safety of my flying the most. Training for 5 hours to achieve the SCFR may not be enough for me. But perhaps I may convince myself, my instructor and the instructor performing the competency test that I am very safe to cloud fly within 2 hours. At that point I should focus the remaining time with an instructor on whatever they and I consider will have maximum effect on safety. Preventing me from doing this by insisting on a 5 hour minimum will add additional risk to myself, my fellow aviators and those on the ground.

TMGs

As a pilot that prefers to exceed any competence requirements placed on an aviation activity, I feel that it is vital to allow training for the SCFR to be conducted in TMGs.

If this is not allowed then the cost and time required to achieve the SCFR will be significantly higher and as a result many pilots will stop training as soon as they achieve the minimum standard of flying plus the required training hours.

Furthermore pilots will be discouraged from performing regular additional training outside of that required by regulations.

Allowing SCFR training in TMGs will greatly improve safety both at the time a pilot achieves their rating but more importantly during the periods between retests required by the regulations.

Please don't make it hard for us to train to fly safely! Allow TMGs to be used for SCFR training.

Regards
Alex Hippel, London UK.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 234

comment by: *Peter Kynsey*

I support the proposal for a sailplane cloud flying rating for both the LAPL(S) and SPL.

However I believe that the proposal for a restricted SCFR should be revisited and not abandoned as it will prove useful in the future and allows operations that are already taking place safely to continue. I am sure it is not the intention to prevent any currently occurring operations that have a good safety record.

The minimum amount of training requirement should not be 5 hours. Many of the pilots applying for this qualification will already be competent and qualified instrument flying pilots either in gliders or other classes of aircraft. They will require minimal training, if any at all, before taking whatever test is envisaged.

	<p>The wording should be "training as required to reach the test standard". Some pilots will require none, others more than 5 hours, but most will require far less than 5. This requirement will therefore put an unnecessary burden on pilots for no safety gain.</p> <p>It will not be practical to carry out most of this training in a pure glider. The efficient way to train will be using TMGs. There would be no intention of flying the TMG in cloud but it must be catered for in the rules that training can be carried out in a TMG or in a ground based simulator. The amount of training should be left to the discretion of the instructor.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (LAPL(S)/SPL/restricted cloud flying rating/5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>236 comment by: <i>J burrow</i></p> <p>3. RIA 2 Option 1 is the best. It reflects what we currently have in the UK and provides a safe option for extending glider flights to avoid out-landings, safely letting down through cloud when using wave lift for long flights, avoiding bad weather that would otherwise result in an out-landing.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding the cloud flying rating (Option 1) for sailplane pilots.</p>
comment	<p>241 comment by: <i>Kevin Neave</i></p> <p>RIA 2 - Sailplane cloud flying rating</p> <p>Of the proposed options I support the introduction of the Sailplane Cloud Flying Rating</p> <p>The ability to occasionally fly in cloud is important for safe gliding operations especially in a country such as the UK that frequently has relatively low cloudbases during the summer months.</p> <p>However I do not feel that it is necessary to require an additional rating to allow this, simply allowing gliders to fly near, or in cloud, where other airspace restrictions do not apply would be sufficient.</p> <p>This is how gliding has operated in the UK for many years and I do not believe that the safety record in the UK is significantly worse than in other member states where a cloud flying rating already exists.</p> <p>The amount of training (5 hours) required to obtain the SCFR also seems completely out of proportion to the amount of cloud flying likely to be carried out in practice.</p> <p>We do not spend extended periods in cloud, flying on a constant heading. Our best rates of climb are achieved when the sailplane is flown accurately and slowly, and this is easier to achieve with reference to the real horizon. We only need to enter cloud when an obvious large gap to the next cumulus presents itself.</p>

What we need to be able to do is establish a stable thermalling turn in VMC, continue climbing for only a few minutes, then be able to straighten up and make minor adjustments to the resulting heading.
Any cloud flying is likely to be done in isolated cumulus clouds, and having left the thermal the glider is likely to exit the cloud into VMC in just a few seconds.
5 hours practicing these skills seems excessive.
If the option of training for the SCFR in a TMG is not available then it will be virtually impossible to obtain 5 hours training in a pure sailplane anyway
The options proposed in the NPA shown a fundamental lack of understanding by the rulemakers of the way that sailplanes operate.
We need to be able to fly up to cloudbase, occasionally into cloud, and in lee wave conditions close to the leading edge of the cloud.
None of the above requires a special rating or extra training/testing.
Simply extend these privileges to ALL sailplane pilots as has been the case with the BGA with no adverse effects in the past.

response *Partially accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 270

comment by: *Robert Purdie*

My name is Robert Purdie and I have been a soaring pilot on and off since 1976

This entire subject seems quite leap into the dark for anyone who has been involved with soaring for any length of time. I personally came to the sport in 1976 so in considering the proposals it leaves me wondering about how this will add to the already well established and documented contribution that the actual individual has made to aero progress and safety.

Taken that flying must be safe, will stopping near-cloud flying going to enhance this or should safety devices be used instead to WARN of danger? Especially considering that there has not been any instances, accidents or incidents since soaring began those aeons ago.

The only way forward provided it doesn't get revised further is

Option1. Sailplane cloud flying rating (SCFR)

However, the subject of cloud safety is not beyond those already practicing it, (if practicing near-cloud fly at al), and can be easily taught and learned so a max of 2-3 hours training in ground school with motor-glider assistance would

be shortest and safest method to employ. The impracticalities of actually attempting to train already experienced pilots in a glider speak for themselves since they are subject to conditions on the day and will serve to only delay the end of training.

The ongoing test could take the form, after initial training, as a 3-5 year retest. Soaring is totally dependant on what causes clouds in the first place and is an integral part of the sport much in the same way that water supports sailing and a yacht.

Additionally, option 2 is in great need of reconsideration. It is without doubt untenable in its form and will not get the support of intelligent-thinking aviators whilst option 0 is completely untenable because if gliding became restricted to VMC it would mean the end of gliding in the UK.

The loss to aviation would then become incomprehensible.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG/Option 2 – restricted cloud flying rating) were also identified by BGA.

The Agency should clarify that after the initial skill test the SCFR only has a 24-month recency requirement, but no revalidation date.

comment 278

comment by: *Christopher MORRIS*

As an active and reasonably experienced cross-country glider pilot (some 2,200 hours) and an IMC-rated PPL, I would like to take the opportunity to comment on ESAA NPA 2011-16 with regard to the proposed Sailplane Cloud Flying Rating (SCFR).

In general, I support the idea of introducing the SCFR for UK glider pilots, introducing a clearly defined regulatory structure to cloud-flying within the gliding movement. Whilst I am not aware that this area of activity has been one that could be deemed to be 'unsafe' to date - indeed I believe there have been very few IMC-related incidents or accidents involving sailplanes in the UK - there nevertheless should be a properly-managed and regulated training and licensing protocol to protect sailplane pilots and their fellow airspace users in the future. I thus support the SCFR proposal in NPA 2011-16.

response *Noted*

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.

Please study also the responses provided to the BGA comment No 121.

comment 291

comment by: *Andrew Sampson*

I am an active glider pilot and instructor based in the UK, with over 1200 hours experience, much of which has been cross-country flights, using thermals, ridge, wave and/or convergence lift.

I strongly support the recommendation of a Sailplane Cloud Flying Rating available to SPL and LAPL (S) holders (option 1) as set out in the document.

Indeed I believe the absence of such a rating may severely restrict the possibility and safety of cross-country flight in gliders.

I believe there should be a form of Restricted License for Glider pilots, holders of which can fly up to cloudbase, but not into cloud. Without this privilege glider pilots would not be able to conduct safe cross-country flight.

response *Noted*

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency agrees that there is no need for special training. However, as this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue, the Agency is not in a position to solve this via a specific rating. Please see also the responses provided to the BGA comment No 121.

comment 298

comment by: *David Crowson*

I agree with the proposals for option 1 with a few reservations;
1, I understand that it may be a requirement to file a flight plan as is the case in Europe, this is neither practical nor of any use in uncontrolled airspace
2, The training time seems excessive, a system that requires only that the pilot reach a skill level that leaves him capable of practising safely on his or her own; the difference in difficulty between twin and single seat cloud flying is considerable using a turn and slip
3, For the training of straight and level descent a TMG would be useful (though not for thermalling) and it is this relatively simple technique that has the greatest implication for safety

response *Partially accepted.*

Thank you for providing this comment.

Several Member States already have well-developed ATC procedures for sailplanes. These explicit procedures, among others, may include filing a flight, ATC clearances and traffic advisory. Thus far feedback from Member States having such procedures in place has not indicated any safety issues.

In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

308

comment by: *Mike Armstrong*

Page 14 3. RIA 2. Sailplane Cloud Flying Rating. I strongly support Option 1 for a cloud flying rating but I would also support Option 2 as an additional restricted rating for flying close to cloud.

Page 15 RIA 2. Option 2. This would not have any negative economic impact if it was considered as an additional licence rather than being instead of Option 1. The issue of differing airspace regulations in Member States can be addressed by additional Member State restrictions locally so should not have a negative impact.

response

Noted

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base (Option 2), the Agency would like to highlight that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this via a specific rating. Please see also the responses provided to the BGA comment No 121.

comment

325

comment by: *Julian RICHARDSON*

The following response applies to two segments, as follows:

Page 14, section 3: Regulatory Impact Assessment 2: Sailplane cloud flying rating

AND

Page 237, Sailplane Cloud Flying Rating: Conclusions and preferred option

I strongly support Option 1, which is the preferred option for the Sailplane Cloud Flying Rating.

However, this does not preclude also allowing a Restricted Sailplane Cloud Flying Rating (Option 2) in addition to the full rating of Option 1.

The creation of these two levels of Sailplane Cloud Flying Rating (SCFR) would be highly beneficial for the following reasons:

- It is a current privilege in a number of countries for appropriately-trained sailplane pilots to operate under conditions where the flight remains clear of cloud but occurs under IFR conditions - precisely the privileges of the Restricted SFCR. Removal of current privileges, or requiring more advanced training to exercise these privileges, is a very serious matter and is not the stated intent of this NPA.
- Best practice in flight training, like all learning, requires the student to progress through levels of assessed competence. This approach has many benefits, including providing the opportunity to consolidate learning in stages through practical experience between the levels. This is one of the best ways to ensure retention of learning.

This multi-level approach would also benefit sailplane cloud flying training. The Restricted rating requires the theory of the SCFR, but not the practical elements since cloud is not entered and is an excellent intermediate step towards the full SCFR.

The restricted SCFR will improve the learning process, increase knowledge retention (because learning is practiced between the stages) and thereby enhance safety.

- In many countries, weather patterns mean that sailplane flight which remains clear of cloud but occurs under IFR conditions is very frequently encountered. Therefore, this Restricted rating would be particularly relevant to practical sailplane flying.
- The Restricted SCFR will encourage pilots who do not wish to pursue the full SCFR to take the theoretical test; the knowledge gained will further improve flight safety.

Other considerations: The primary objection to the Restricted Sailplane Cloud Flying Rating (Option 2) cited on page 237 of the NPA is that this may not be accepted by some member states due to airspace regulations and procedures.

If this is the case, the simple solution is to allow this only in those countries which ratify this Restricted rating. This approach would demonstrate sensitivity to the specific needs of individual countries for whom this is beneficial and an existing privilege, while also meeting the needs of countries for whom it is not suitable - a win-win situation.

Finally, while I understand the approach to using the scoring system on page 237 to determine the preferred option (i.e. an overall winner), I don't feel it does justice to the Restricted rating (option 2) when this is considered as an additional option.

For example, the restricted rating has a positive safety impact (though not as large as the full SCFR) because it increases range and reduces field landings over Option 0. Also it has a positive economic impact as it allows sailplane flying to continue with current privileges without requiring an advanced and costly additional qualification to be obtained. Also it has a positive social impact, as pilots not wishing to undertake the full SCFR would be excluded from current privileges and may therefore give up flying.

Therefore I strongly recommend that a Restricted SCFR be made available in addition to the full SCFR.

response

Not accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

In addition, the Agency would like to clarify, that the reasoning for the common rules is the harmonisation of licences and ratings across all EASA Member States. In other words, all Member States must implement the same rules without less or more restrictive measures.

comment

337

comment by: *Dick Dixon*

RIA 2 Sailplane cloud flying.

I strongly support option 1. Sailplane pilots need to be able to cloud fly in certain circumstances in order to

- a) Get enough height to have the range to contact the next area of lift, and
- b) to legally descend from height, for example following a flight in wave when the cloud gaps close below them - which has happened to me on a number of occasions.
- c) Avoid frequent outlandings with their attendant risks of damage, cost and inconvenience.

Option 0 would be completely impractical in the UK and would in effect bring about the end of sport gliding as it has been enjoyed with safety for many decades.

Option 2 has merits and I suggest that it is included in addition to option 1. Many glider pilots would be prepared to accept the limitation of not actually entering cloud - except in an emergency - so long as they could legally climb up to cloudbase, and above, keeping clear of cloud. Again this would minimise the outlanding risk with its disadvantages mentioned above.

response *Noted*

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.

The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and it took these circumstances into account when developing the proposed requirements.

Regarding the mentioned additional issue of climbing close to the cloud base, the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this via a specific rating. Please see also the responses provided to the BGA comment No 121.

comment 362

comment by: *Buckminster Gliding Club*

As an experienced sailplane pilot (350hrs; FAI Gold; Instructor rating; PPL) I support the introduction of a cloud flying rating.

Gaining high altitude using wave soaring techniques often requires flying above cloud and out of direct sight of the surface, the idea being to descend in gaps. However, the dynamic nature of the system is such that a pilot is always at some risk of finding himself locked above cloud and faced with a decent on instruments to re-gain sight of the surface. Most glider pilots have had little or no formal training in flying on instruments so the introduction of structured training must improve safety.

With or without a rating, instrument descents through cloud (over high ground) will not become a standard operating procedure in gliders and such descents will continue to be semi-emergency, nerve-racking situations - there is no option of aborting and diverting in a sailplane! The training syllabus needs to reflect this reality and must be geared to limited panel operations (ASI, T&S, Compass and GPS). 3 hours in a motor glider should be more than enough for the experienced pilots who will need this rating to demonstrate a level of basic competency in flying controlled descents.

	<p>It is also important to recognise that general soaring activity requires pilots to routinely climb to within touching distance of cloud - there is no evidence of any requirement for additional training or regulation for this activity which is an integral part of the sport.</p> <p>Andrew Rattray</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.</p> <p>The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and took these circumstances into account when developing the proposed requirements. The training syllabus (see related AMC) contains already the training items for limited panel training and the option to use a TMG for the training. The instructors will decide on the maximum amount of flight time in a TMG. At least one hour of flight training must be flown in a pure sailplane (not TMG).</p> <p>Regarding the mentioned additional issue of climbing close to the cloud base, the Agency agrees that there is no need for special training. However, as this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue, the Agency is not in a position to solve this via a specific rating. Please study also the responses provided to BGA comment No 121.</p>
comment	<p>367 comment by: <i>Philip James Warner</i></p> <p>Whilst Option 0 is currently the case in the Member state where I reside, in order to harmonise it is clearly desirable to change. However Options 1 and 2 do not seem mutually exclusive. Would it not be possible to offer both the restricted rating (option 2) for those pilots who regularly fly close to but not in cloud and option 1 for those pilots who wish to fly in cloud.</p> <p>This is particuclalry relevant to a UK environment, where cloud bases are oftern in the region of 4000 feet and to increase the distance flown and reduce the chance of outlanding it is desirable on both economic and safety grounds to fly close to cloud.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.</p> <p>The Agency is aware of the typical operational needs during wave flying or in specific meteorological conditions and took these circumstances into account when developing the proposed requirements.</p> <p>Regarding the mentioned additional issue of climbing close to the cloud base, the Agency would like to point out that this is not only a licensing- but mainly an airspace-related (VMC minima in different airspace categories) issue. The Agency is not in a position to solve this via a specific rating. Please see also the responses provided to BGA comment No 121.</p>

comment

379

comment by: *David Crisp*

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RIA 2 – Option 2-‘Restricted sailplane cloud flying rating’

This is my preferred option as it allows a sailplane to fly close to cloud base in IMC where airspace regulations permit, and is particularly relevant to UK weather when summer cloud base is frequently no higher than 4000 feet.

Many sailplanes will have a glide angle of about 1:40 or less, when flying cross country the ability to climb to near a 4000 foot cloud base, instead of 1000 feet below, greatly increases the distance that can be flown before encountering the next usable thermal, which in turn greatly reduces the risk of a pilot being forced to ‘land out’ typically in a farm field.

While experienced glider pilots are well used to selecting suitable fields for an out landing there is inevitably a greater risk of damage to the glider or even pilot injury than landing on a proper airfield.

Because not all glider pilots would hold a sailplane cloud flying rating as outlined in option 1, those that did not (probably the majority) would be less likely to damage their glider or themselves in an out landing.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

389

comment by: *Trevor HILLS*

I commend EASA for proposing a sailplane cloud flying rating, but in RIA 2 (page 14) there should be an Option 3 encompassing both Option 1 and Option 2.

The majority of sailplane pilots do not enter cloud, but those that do will find Option 1 (full sailplane cloud rating) meets their needs. But all sailplane pilots would expect to climb in thermals closer to the base of cloud than 1000 feet whether above 3000 feet AMSL or not. Therefore Option 2 (restricted sailplane cloud rating) should also be available to meet the needs of all sailplane pilots.

For the avoidance of doubt, I recommend that both a ‘full’ and a ‘restricted’ sailplane cloud flying rating be available.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

394

comment by: *C Crocker*

From my 23yrs experience of flying sailplanes in the UK I feel a Restricted Cloud Flying Rating would improve safety through decreasing land outs away from airfields. Landouts in conditons that are good for lee wave can be more

	<p>dangerous due to high winds and turbulence. In lee wave flying close to cloud can be the safe thing to do at times.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>404 comment by: <i>Ian Carrick</i></p> <p>The major impact analysis of the three options successfully covers the negative aspects of options 0 and 2 and the positive aspects of option 1 which should be recommended. However a restricted rating which allows flight close to cloud but not in cloud, would retain the current safe practices, reducing the impact on the sport.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>429 comment by: <i>Roger Mcaree</i></p> <p>I am a Glider pilot/Instructor and PPL SImg flying from the London Gliding club Dunstable.</p> <p>I would strongly support Option 1 (SCFR Available to LAPL (S) and SPL holders) as this I believe allows us to continue to train and practice cross country flying and spin training in our area. The limitation of flying within 1000ft of cloud would severely limit the possible cross county flying from Dunstable to only very high cloudbase days which sadly, even in Summer are only too rare.</p> <p>I also support the sailplane cloud flying rating not being exercised in TMG (this would of course restrict me) as my Motor glider (Grob 109) like most others I know is resrticted to VMC.It will be vital for training though that training can take place in motor gliders for the SCFR rating, glider flights often being of only short duration.</p> <p>I feel 5hrs "instrument flying" is too long and would support cutting this to 3 hrs. I would also recoment that the restricted SCFR is reconsidered for the many pilots who fly close too but not in cloud.</p> <p>Roger Mcaree (PPL 326156E)</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.</p>

comment	432	comment by: <i>John SAVAGE</i>
	Option 1 is the most sensible.	
response	<i>Noted.</i>	
	The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.	
	Please see also the responses provided to BGA comment No 121.	
comment	433	comment by: <i>John SAVAGE</i>
	Option 1 is the best, but the additional provision, in line with Option 2, of a lesser rating allowing sailplane pilots to fly clear of, but not in clouds would also have great merit.	
response	<i>Noted</i>	
	Thank you for providing this comment and your support for Option 1.	
	In addition, the Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.	
comment	440	comment by: <i>Warwick HORNE</i>
	Although Option1 (Full Sailplane Cloud flying Rating) would be the level to aim for, there may be some pilots who would only ever aspire to a requirement covered by Option 2 (Restricted Sailplane Cloud flying Rating). It is dissappointing that this has not been included in the NPA.	
response	<i>Noted</i>	
	The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.	

comment	449	comment by: DC-AL
	I agree that the Competency based Modular Instrument Rating will provide a cost- and time-efficient route for a private pilot to achieve an Instrument Rating without compromising safety.	
response	<i>Noted</i> Thank you for providing this comment.	
comment	536	comment by: P Williams
	Section IV 3 RIA 2- Sailplane cloud flying rating This, as proposed, would severely restrict flying because the main need is to be able to fly close to clouds, and the proposed training syllabus and skill level are far too demanding, being based on the assumption that pilots wish to fly for long periods in cloud - they don't. In the UK we merely wish to be able to continue to do what we have always been able to do, and have done safely. Please see my general comments for more details. The requirement for 30 hours prior experience is excessive for pilots who only wish to fly close to cloud. The requirement of 10 hours flying solely on instruments seems high for a Flight Examiner, given my assumptions above.	
response	<i>Partially accepted</i> Thank you for providing this comment. The Agency would like to clarify that the proposed rating has not been specifically developed for pilots to fly close to clouds, but mainly to enable flight in clouds. The 2 hours of training and testing is deemed to be appropriate. In addition, the Agency believes that a minimum of 30 hours after licence issue is necessary to commence cloud flying training and to fly safely into clouds. Finally, the Agency agrees that the examiner minimum instrument time requirement was excessive. After reviewing it, the Agency has decided to reduce the requirement to 5 hours.	
comment	541	comment by: Ray Partridge
	I am re-starting this comment as an attempt to check the original document took me out of this response tool. If I am repeating myself I apologise. My comments are all under this heading as the document is too small to read which means I am unable to place comments alongside the relevant section. I comment as a glider pilot with 35 years experience from more than a dozen UK sites and a handful of sites in France and Spain. I am an Asst Cat Instructor and have 3 diamonds. Applicability of SCFR. I understand this will be available to both LAPL(S) and SPL holders. For continued safe glider flying it is my view that it is essential that this should be the case. Regarding the options considered. I believe Option 2 has scored poorly	

because too little account has been taken of the reduction in flying which will happen as a result of implementing Option 1. The social and economic impact will be much more than the scoring suggests. Many pilots will be put off by the difficulty of obtaining the SCFR qualification and will stop gliding. There will also be a substantial reduction in the amount of training and introductory flights because a proportion of the people giving their services to provide these flights will not want to acquire the SCFR.

Advantages of a Restricted SCFR. Without this qualification it will be very difficult to control glider flying activities close to cloud. For example, how is a glider pilot to know whether he is more or less than 1500 M horizontally from a cloud or more or less than 300 M below a cloud? In all soaring conditions (ridge, thermal or wave) clouds are constantly changing in size and shape. Their base typically rises during the day and as the height of the ground below them increases. A glider pilot who does not have the SCFR rating cannot prove that he was complying with the Laws of the Air regarding separation from cloud. Availability of the RSCFR will overcome this difficulty. I would strongly ask that you reconsider this option.

Dual flight training. As an objective standard of competence has been set, compliance should be the only requirement. Adding a set period of dual training will not improve competence but will put off some who are already experienced. For example if an airline pilot with many hours of instrument flying comes to gliding and wants to obtain the cloud flying rating he should certainly be required to demonstrate his competence in an aircraft with limited instrumentation and no engine, but he may well only need 5 or 10 minutes dual before meeting the set standard of competence. Please set a standard but do not set a minimum period of dual instruction.

TMGs. I have little experience of motor gliders apart from flights during my own training. They accelerate and increase flexibility in training by offering extended flights when weather conditions do not allow soaring. Please allow them to be used for training for the SCFR rating by making it clear that the privilege of the rating does not extend to motor gliders. This will allow them to be used in training (out of cloud) without the risk that the qualification will be used to take TMGs into cloud.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/restricted cloud flying rating/5 hours training/use of TMG) were also identified by BGA.

comment 544

comment by: *David Evans*

In Section 3 RIA2 the writer notes and supports EASA's intention to proceed with Option 1.

Option 1 will be appropriate for the most experienced pilots. Personally the writer would also welcome the parallel existence of a restricted rating that would permit flight close to but not entering cloud as this would make training and experience gaining much more practical and would minimise overall cost. It would fit in well with the established glider pilot training arrangements that have been in place for many years.

response

Not accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

555

comment by: *TOM SAGE*

Ref: 3. Sailplane cloud flying rating: Option 2 would have been my preferred choice since it would be less disproportionate and have less impact on existing practices in the UK. I do not necessarily agree with the significance of the impact assessment first and third bullet points.

response

Not accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

582

comment by: *Cairngorm Gliding Club*

I hope this is the correct area to make this comment as it is the most important item of my response.

I gather that the proposal to have a Restricted SCFR rating to allow glider flight close to cloud is not part of this. This is folly. If not implemented then the ability to perform simple hill soaring flying will be massively reduced. Hill soaring is for many clubs a major element of training and having to conform to power type cloud separation will have a huge negative effect.

What evidence do you have that such restriction is needed. I have instructed on hill sites for nearly 30 years and cannot think of one incident that would justify this.

How the hell would such a restriction be policed? A vital element of any regulation is that it can be effectively and easily managed? This piece of nonsense fails that test immediately

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

601

comment by: *Bill LONGSTAFF*

For reasons already given earlier I endorse the Option 2 restricted cloud flying rating and think this should definitely be available alongside option 1.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

602

comment by: *Bill LONGSTAFF*

To restrict the legislation to option 1 would be a great pity for the reasons already given above. I can see no reason not to have option2 as well as option1 whatever is said here. There are many pilots who would never be able to attain option 1 but could significantly increase their operational freedom & safety within this option. In Britain this option has existed for many many years and a huge number of pilots use it regularly who never normal fly in cloud at all.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

626

comment by: *PPL holder*

Part IV
Para 2:

I don't think that "all in all a clear positive safety impact" IS to be expected from the rating. I can see no evidence as to why you do, or any reason why it should!!!

Paragraph 2.2

In trying to make the rating as "one size fits all", you have failed in your stated ambition to make a (significantly) more accessible IR rating, that will be taken up in GA

Part IV
Para 2:

Option 1 does NOT "cut the cost of obtaining" etc etc because it IS NOT an instrument rating. the "limited privileges" make it useless!!

It is still too expensive, time consuming and onerous. YOUR projections on take up are wildly optimistic

Since when is it the responsibility of Private Pilots to help create a pool of future commercial pilots??

Option 2 Is a MINOR improvement (20%) in the cost of obtaining an IR. Again, I think your estimate of take up is optimistic Tyhe costs are still much more than Ab-initio training, and very few FBO will have sufficiently sophisticated simulators to allow the projected reductions in actual flying time, so it may well end up MORE expensive!!!

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

For your information, Option 2 is sensitive to the simulator-usage assumption: if simulators are not used at all, the decrease in cost is just 6 % instead of 19 %.

comment

635

comment by: *john harter*

Option 2 ('restricted sailplane cloud flying rating')

I believe that introducing a RSCFR would not have a significant negative economic impact on the Member States where a full CFR currently exists, but would create an increase in the level of safety and sailplane activity and thus a positive economic effect in those 23 Member States where this is not currently possible.

Flying sailplanes, outside controlled airspace, in IMC but clear of cloud and in sight of the surface has been practised in the UK for decades, without detrimental effect on safety levels.

Therefore, this option should be reconsidered.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

641

comment by: *British Gliding Association*

Option Considered. Although we fully support the proposal for an SCFR, we are disappointed that EASA were unable to develop an option that resulted in a SCFR and a RSCFR. We believe the two ratings would be complementary, would reflect current safe operating practices in at least 8 member states, with the RSCFR providing a stepping stone to the SCFR, given appropriate credit against SCFR training requirements.

We believe EASA should reconsider the RSCFR, noting the evidence and advice supplied through FCL008.

response

Noted

Thank you for providing this comment. Please see the response provided to your comment No 121 addressing also this issue dealing with an additional restricted rating.

comment 657 comment by: *Finnish Aeronautical Association - Kai Mönkkönen*

A. Explanatory note
IV. Options considered and major impact identified
3. RIA 2 Sailplane cloud flying rating

Page 14

Comment:

The Finnish Aviation Association strongly support the proposed "Option 1", full sailplane cloud flying rating. We are also of the opinion that inclusion of the sailplane cloud flying rating into FCL shall be made independent from any possible question related to airspace limitations in certain areas.

Justification:

We see this is necessary to ensure continuation of sailplane cloud flying activity in Finland also in the future. We have already several tens of years experience about sailplane cloud flying activity. We also agree fully with those major impacts as identified by the EASA.

response *Noted*

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots (Option 1) and your agreement with the impacts identified by the Agency.

comment 670 comment by: *MaureenWEAVER*

RIA 2 - Sailplane Cloud Flying Rating

Sailplane flying in the UK has been successfully regulated by the BGA for many years. The CAA has been happy with the arrangement largely because the safety record in flying sailplanes has been so good. The BGA emphasise strongly the responsibility of each glider pilot to be aware of regulation and safety issues and in this environment sailplanes have flown close to, but below cloud, with an excellent safety record.

I urge EASA to reconsider their recommendation in section 7 and consider instead option 2 (restricted sailplane cloud flying) where pilots could fly near to cloud (as they do at present) but require no instrument training as they would not need to use instruments. Glider pilots are experts on assessing weather conditions and as such would not 'accidentally' find themselves in cloud.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 678 comment by: *Richard Malam*

1

	<p>Restricted Sailplane Cloud Flying Rating (RSCFR). This rating was muted in the NPA but discounted as a recommendation. I would propose that such a rating would also be a great boon to gliding safety. It would be a stepping stone for the aspiring cross country pilot and enable their competency and awareness to be assessed by their FI at a key stage in their flying career. I would advocate that all pilots be so rated prior to flying away from the airfield.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>683 comment by: <i>Rob Faulkner</i></p> <p>Agree entirely ~ it would be a very good idea to introduce a Sailplane Cloud Flying Rating as proposed</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.</p> <p>Please see also the responses provided to BGA comment No 121.</p>
comment	<p>707 comment by: <i>Jim Thomson</i></p> <p>The adoption of Option 1 for the SCFR is supported. However the addition of Option 2 - the "restricted sailplane cloud flying rating" is also recommended. The two options are NOT mutually exclusive. In the area where I fly the combination of terrain altitude and prevailing cloudbases makes the use of the 1000ft/300m band below cloud most important to provide an adequate safe height operating band. A pilot who has no interest in actually flying in cloud should have the option of qualifying for flight near cloud.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>714 comment by: <i>George Rowden</i></p> <p>Section IV. 3. RIA 2 Sailplane cloud flying rating.</p> <p>Option 2 - restricted cloud flying rating.</p> <p>In the UK, a significant number of glider pilots never deliberately fly in clouds and are unlikely therefore to undertake the training to receive a cloud flying licence as described in this document. However, all glider pilots necessarily fly close to cloud on occasion and according to the strict letter of the law cease to</p>

fly in VMC. Indeed, if the strict definition of VMC conditions were applied, gliding would virtually cease to exist as a sport. I would therefore suggest that a Restricted Sailplane Cloud Flying licence be made available to all glider pilots to remove this current anomaly related to the strict application of VMC conditions. This would have no adverse effects on the safety of general aviation as all the award of the licence would do would be to legalise current practice across Europe. The award of this licence could be subject to a theoretical test along the lines of a simplified version of the test suggested in the NPA as part of the requirements for the award of a full cloud flying rating.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

715

comment by: *Andy Balkwill*

I support Option 1 as recommended by the Agency in IV paragraph 7 on page 15. I agree that this appears to have the highest level of benefits including to the safety of glider pilots by reducing the chances of a field landing.

response

Noted

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots.

Please study also the responses provided to BGA comment No 121.

comment

717

comment by: *richard starling*

I support the SFCR rating but this rating must be available to SPL and LAPL(S) holders. Also I believe the RSCFR should be reconsidered by EASA.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(S)/SPL/restricted cloud flying rating) were also identified by BGA.

comment

743

comment by: *Martin Roberts*

Page 14

3. RIA 2 - Sailplane cloud flying rating

Options 0 and 2 are completely unacceptable.

"Option 1 ("Full sailplane cloud flying rating") is expected to;

Page 15

- * Have little to no impact on the eight Member States where some form of cloud/IMC flying is currently practiced...
- * Create an increase in the sailplane activity and thus induce positive economic impact".

These are GROSSLY misjudged expectations in the case of the UK for the following reasons;

Through reason of costs the impact of introducing Flight Instructors (FI) capable of training pilots to cloud fly and introducing cloud flying Flight Examiners (FE) in the UK will immense - £7000-£10000 (8500-12000Euro) per club. In addition - the cost of receiving "5 hours of dual instruction" will be in the region £1000-£1300 (1200Euro-1500Euro) per pilot. Clubs, Instructors and pilots will have to absorb these costs both in time and money. Each individual pilot, as well as having to spend sums in excess of £1000 (1200Euro) will also have to put aside up to 15 days in order to build up the 5 hours. Clubs will need to restructure their activities to accommodate these new costly and unnecessary demands - creating the "new industry" of training for cloud flying. And these are costs for which little or no benefit will be derived since UK cloud flight safety is already exemplar. "Have little to no impact..." this is utterly wrong. The effects will have a HUGE impact on a fragile UK gliding community;

"Create an increase in the sailplane activity and thus induce positive economic impact". This is also utterly misguided and wrong. The effect of introducing this cloud flying rating as proposed - with its "5 hours of dual instruction" and FE and FI requirements will be to depress sailplane activity through reasons of increased cost, as described, and will actually drive pilots away from this socially, economically and environmentally desirable sport. The exact opposite of what is intended.

In Member States where currently cloud flying is not permitted - there will be an appreciable gain for those pilots. They will get something for their money. In Member States where cloud flying ratings are already in place there will indeed be no impact. But in the UK, where we already enjoy cloud flying freedoms we will, as a result of these proposals, have to pay a very high price for something we never had to pay before, with no possible net gain to flight safety since UK cloud flight safety is already exemplar.

United Kingdom sailplane pilots are getting a remarkably poor offer, a deal where we literally have to pay for something we already have, a deal where we literally have to pay something for nothing.

I object in principle to the idea that the UK somehow "needs" cloud flying regulation in order to fall into line with other states. These poorly researched proposals are not based on any evidence made public or agreed with the United Kingdom gliding movement - on whom it directly impacts in a most detrimental way. If there is going to be regulation then Option 1 - with *major* modifications to reduce the impact, is the least unacceptable route. Options 0 and 2 would effectively mean the end of the United Kingdom gliding movement, and are WHOLLY UNACCEPTABLE.

response *Noted*

Thank you for providing your comment on the sailplane cloud flying proposals and some specific items addressed in the RIA section of the NPA.

For specific technical answers on the reasoning why the Agency is not in favour of introducing a restricted cloud flying rating, which would allow not complying with the ICAO airspace specifications and VFR definitions, please see the responses provided in the different segments dealing with the requirements. An overall response is provided to BGA comment No 121 as most of the UK-related cloud flying issues have already been addressed in this comment.

The question of grandfather rights of existing cloud flying rating holders (how can a restricted cloud flying rating be converted into the future full cloud flying rating) can only be answered with the specific conversion report to be established by the Member State. This is not part of this NPA/CRD.

Regarding the RIA data you mentioned, the Agency would like to provide the following data:

The Agency estimates the following costs for the sailplane training:

- €30–€50 per sailplane hour (dual)
- €60–€100 per TMG hour (dual)
- €45–€60 per launch to 1 000 m (which will allow 20 minutes flight time)

Therefore:

- 5 hours dual instruction: €150–€250
- 5 hours dual TMG instruction: €300–€500
- 15 launches to 1 000 m: €675–€900

The total cost of 5 hours of dual instruction without the use of TMG is €825–€1 150. The Agency's estimate was that 5 hours of dual instruction would be carried out within 4 flying days which is a realistic figure checked with the Agency's gliding experts. The issue of having enough FI(S) being able to provide that kind of training cannot be shared as the requirements to become an FI(S) and to be able to provide training for cloud flying rating are based on long debates and discussions with gliding experts from all over Europe (including the UK).

However, when addressing the comments received and discussing the proposals again with the experts, the Agency decided to further reduce the minimum amount of training required to 2 hours and leave it to the instructor and ATO to decide when the trainee is ready for the skill test and has completed all the exercises successfully.

The Agency does not share the view of the commentator that UK glider pilots will get 'a remarkably poor offer' as this compromise solution will allow them to continue with cloud flying operations. Having discussed the impact of these new requirements with sailplane experts from all over Europe, the Agency cannot see why this Regulation will 'mean the end of ... gliding movement' in any of the Member States. If a specific airspace structure or ICAO regulations which have been introduced based on the system of 'see and avoid' leads to operational problems for sailplane flights under certain weather conditions, this should not be solved via the licensing rules.

comment 752

comment by: *Colin Cownden*

The case for not selecting Option 2 or not including the restricted sailplane

cloud flying rating privileges is not made clear. However there is a clear case that, where airspace restrictions allow, glider flight in IMC conditions whilst still remaining clear of cloud, should be possible. This option should not be dismissed but instead reconsidered by EASA.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 786

comment by: *Shaun McLaughlin*

I agree Option 1 out of the 3 is the most suitable for implementation, however existing privileges should be honoured (in my case for UK glider pilots) as privileges should not be removed. More suitable testing should be developed for glider pilots to attain the new rating where existing privileges do not exist.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that existing licences and ratings may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment 790

comment by: *Allan ARTHURS*

As regards restricted SCFR: I suggest that provision is made for sailplanes to be allowed to fly under IFR but clear of cloud - as this is the very essence of the sport of soaring our safety record (in the UK) is very good.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 799

comment by: *David WILLIAMS*

The proposal of a RSCFR seems highly appropriate in the context of gliding, since without this, soaring will be highly restricted and concentrated into a smaller volume of airspace, hence increasing markedly the potential for degrading safety.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was

also identified by BGA.

comment 820 comment by: *Patrick de Nonneville*
I support the EIR as a key feature in the road to the new CB-M IR, with great safety benefits.

response *Noted*
Thank you for providing positive feedback.

comment 828 comment by: *Timothy Nathan*
I wholeheartedly endorse the adoption of Option 3, for the reasons given in the text. This is the only way to repatriate General Aviation licensing from the FAA.

response *Noted*
Thank you for providing this comment.

comment 836 comment by: *Vic Blaxill*
I fully support Option 3 for PPL and CPL holders and Option 1 for Sailplane pilots.
As a point of clarification are all ratings attached to pilot licences renewable every 24 Months with specific proficiency checks or is the SCFR an exception.
If the SCFR is an exception perhaps this should be made clear and the justification detailed.

response *Noted*
Thank you for providing this comment.

The Agency can confirm that several other ratings attached to a Part-FCL licence, such as the sailplane/banner towing and mountain rating, also have a 24-month period. Please note, however, that the SCFR only has a recency requirement and no revalidation date.

comment 859 comment by: *Jeff WARREN*
RIA 2 Option 0 would be restrictive for sailplanes flying in typical UK conditions, and would be highly restrictive for wave flying, where it is sometimes necessary to let down through a layer of cloud.

RIA 2 Option 1 is reasonable and proportionate, and I support it.

response *Noted*
Thank for providing your support for option 1.

comment 874 comment by: *BAKER*
Page 14, Item 3, RIA 2: Options 1 and 2 are not mutually exclusive. Where permitted by national regulations a large majority of sailplane pilots will fly in

	<p>IMC conditions but clear of cloud. Only a small minority of those pilots will also fly in cloud. Introduction of a SCFR is ONLY relevant for flying IN cloud, and should <u>not</u> also be used to permit IMC flying clear of cloud. The two scenarios require very different levels of skill - the latter needing very little additional skills beyond that for VMC flying. Option 1 SCFR should be re-evaluated and not include IMC clear of cloud in its remit - it should only be required for flying IN cloud. The cloud-flying training is not relevant for flying in IMC but clear of cloud.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (option 2 – restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>896 comment by: <i>Roger STARLING</i></p> <p>3 RIA 2 - Sailplane cloud flying rating</p> <p>Option 0 This option is unacceptable. It is totally impractical for glider pilots and impose unnecessary restrictions on them. It would have a severe negative impact on the levels of gliding activity leading to close of gliding sites. Safety for remaining activity would be adversely affected.</p> <p>Option 2 This option makes the most sense, with flying in IMC possible where airspace regulation permit. However if option 2 is not possible then Option 1 is an acceptable compromise</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (option 2 – restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>916 comment by: <i>alan eckton</i></p> <p>The BGA has operated very succesfully in this respect for a great number of years without incident, there is no need to force a 5hr minimum for IMC training for sailplane pilots, 3 hrs is more than sufficient for dual training and this could be done in a motor glider.</p> <p>It is essential that UK gliding continues to have its cloud flying policy.</p> <p>A restricted SCFR for flying under or near but clear of cloud is what is really needed for sailplanes and Light G/A aircraft.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p>

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 924

comment by: *Jim Lyell*

RIA 2 - Sailplane cloud flying rating

I strongly support the creation of a sailplane cloud flying rating (option 1) for both LAPL(S) and SPL holders for the reasons given in this NPA.

However this does not preclude the adoption of the restricted sailplane cloud flying rating (RSCFR) (option 2) in addition to the full SCFR (option 1). Given that the RSCFR would not allow the holder to fly in cloud - just fly closer to cloudbase that current VFR flight rules permit it should be available to sailplane pilots with much reduced training and revalidation requirements.

I recommend that both the full SCFR (option 1) and the restricted SCFR (option 2) are implemented.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(S)/SPL/restricted cloud flying rating) were also identified by BGA.

comment 950

comment by: *John Simmonds*

The cloud flying rating as defined by the proposal is an essential need in the British Isles as the prevailing cloud base is much lower generally than countries with larger land mass. Without the cloud flying rating proposal gliders would be forced to fly below 3000ft in order to comply with the vertical 1000ft clear of cloud rule. This would bring them into conflict with other GA traffic all compressed into a smaller volume of airspace significantly increasing the risk to all air users. In addition the landout incidence will increase substantially resulting in higher damage and injury as well as nuisance to land owners and users. Competitions would become a higher risk and nuisance to other GA where a large number of gliders would be funnelled into a small area of airspace. I believe that if this proposal is not taken up the sport of gliding in Britain would be fatally damaged, the impact would be hugely negative to the sport. The sport has a record of safety comparable to anywhere else and is well regulated, standard solutions apply well to standard problems and with a more limited cloud base cloud flying is an essential need in the British sport.

It is regrettable that a restricted IFR clear of cloud rating was not included in the current recommendation. I have been flying for over 20yrs and have never felt the need to enter cloud but do need to fly nearer the 1000ft over 3000ft.

The requirement for 5hrs dual instruction seems excessive for a pilot of silver standard but may be appropriate for less experienced pilots. A standards based assessment would seem a better system.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

961

comment by: *EJC Parker*

The UK has a relatively low cloud base. Restricting flying to 3000' or 1000' below cloud base would gravely hamper cross country flying forcing, as it will crowd gliders into a smaller volume of airspace and increasing the risk of land outs. This latter creates irritation with land owners and also raises the risk of damaging aircraft.

It is a pity that the BGA's original recommendation that the status quo be maintained with minor alterations was not accepted.

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

986

comment by: *Bob BOYD*

Option 1 on its own will certainly severely curtail gliding activity in the UK.

Currently most gliders spend most of their time in the upper band of airspace below cumulus clouds. In the UK, a cloud base of 4000 to 6000 feet would be considered a good soaring day. To restrict gliders from the upper 1000 feet would seriously limit the ability to remain airborne to achieve any significant and enjoyable flight.

On cross country flights, gliders try to maintain height as much as possible to avoid the dangers of field landings. Reducing the available altitude will definitely increase the number of outlandings, which significantly account for more damage to gliders than most other events.

By adding Option 2 (RSCFR) would retain the ability of UK glider pilots to enjoy our current freedoms without the necessity of all to obtain the full SCFR.

There should also be consideration for "grandfather rights" for those of us that have been safely cloud flying for many years.

Other considerations must include a good understanding of how gliders use lee waves to achieve great altitudes. This involves flying at and into the upwind edge of lenticular clouds. The proposals will significantly curtail high altitude flying for most glider pilots.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

In addition, the Agency would like to highlight that existing licences and ratings may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment

1026

comment by: *Norwich Gas Centre*

Please reconsider option 2.

Cross country glider pilots MUST fly very close to clouds IN ORDER TO STAY AIRBORNE! Without this ability, gliding ceases to exist as a sport.

It is well accepted that flight within a cloud is an extra skill and therefore needs a training and test regime to add this privilege to the licence.

Training for such a skill would be done in a TMG, but exercising the privilege would only apply to GLIDERS, not TMGs except for instructors doing training for the rating.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (option 2 — restricted cloud flying rating/use of TMG) were also identified by BGA.

comment

1032

comment by: *Michael Thorne*

RIA 2. Sailplane cloud flying rating.

Your three considered options appear to me to be biased towards achieving increasing regulation and solving a problem which does not need solving. Regulators invariably tend towards greater regulation, and this seems evident in your analysis of the three options.

The analysis criteria may be suitable for commercial aviation, but we are dealing purely with recreational aviation here. Most of this takes place outside of controlled airspace, and I suggest that more relaxed rules can and should be in place for VFR outside of controlled airspace. The following comments all relate to uncontrolled airspace.

The economic impact of killing off gliding through over-regulation would be relatively small in global financial terms. A few glider manufacturers would go out of business in Germany and Poland, many gliding clubs would have to shut down and lose their members' assets, and the thousands of gliders owned by individuals across Europe would become virtually worthless. It would not shut down the EC in financial terms of course but it *would* negatively affect the rights and enjoyment of the thousands of amateur pilots who enjoy the freedom of the air in their chosen sport. You have no measurement criteria in your analysis for this human side of the equation, and I suggest that you should.

You propose three options. You do not propose a "do nothing" option. Why do all countries have to do exactly the same thing? I fail to see an advantage in

fixing a non-existent problem by damaging the liberty and enjoyment of thousands of glider pilots across Europe.

Option 0 would significantly reduce the height band which most gliders are currently able to use and would cripple gliding across Europe. Many people have made large investments in gliders, and many clubs exist to facilitate the needs of glider pilots. I contend that the financial, social and political impact of imposing a blanket restriction, and of limiting glider pilots to the strict definition of VFR flight, would kill off the gliding in European countries. If this is what EASA wishes to achieve it would be the most direct way of doing so. It would, at best, be an unintended consequence of adopting Option 0.

Option 1 proposes a "Full sailplane cloud flying rating". Implicit in this option is the restriction on flying near cloud in VFR above 3000ft, which I suggest is something practised by glider pilots in every country where gliding takes place, irrespective of whether the country has a "no cloud flying" regulation.

I suggest that your analysis of the increase in operational range and safety in the 23 member states is fallacious as pilots already fly up to cloud, but rarely in cloud. Gliding in cloud is sometimes done by a very small percentage of glider pilots for strategic reasons, but most fly regularly up to and near cloud.

Imposing this option 1 would add significantly to the cost and complexity of gliding, and would drive people away from the sport in large numbers. The proposed conditions for obtaining and maintaining such a licence would add significantly to the burden on clubs already over-stressed by increasing regulation, rising energy costs and would increase the load on the hard-working volunteer instructors and club officials.

If a licence is to be required for cloud flying it should be only for flying IN cloud, not up to and near it. Those relatively few pilots who wish to exercise the in-cloud flying option can then take the licence test and have the requisite rating.

Option 2 proposes a "restricted sailplane cloud flying rating". This is effectively what we have in the UK now. Despite the existence of laws in some EU countries which permit no cloud flying, I contend that most gliders fly up to and close to cloud in all of these countries, but only a few ever enter cloud and remain in it. This occurs irrespective of any national restriction on cloud flying. Glider pilots have, and need, no specific cloud flying training to do this, but they do remain clear of cloud and in sight of the surface. Has this caused significant problems I ask? I contend not. I suggest that no licensing should be needed for this type of flying.

Where glider pilots wish to fly actually within clouds then a rating of some type may be appropriate.

Your analysis of Major Impacts suggests that it would have medium negative impacts on the eight member states where a full cloud flying rating already exists. It is hard to see what those negative impacts might be. Why not just remove the restriction on flight in or near cloud in all countries?

response

Not accepted

The Agency acknowledges your comment.

In response to your comment stating 'Why do all countries have to do exactly

the same thing?', the Agency would like to clarify that the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

In addition, the Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1038

comment by: JMA Shannon

AMC1 FCL.830, 1.4 (.3) & AMC2 FCL.830 2 (.6)

Use of DR is not really applicable to sailplane flights which are never intended to be simple longtime cruises through cloud. Sailplanes will not enter and have no use for entering wide area cloud except to pass through it as quickly as possible and basically over the same spot on the ground. Cloud is only used as a means to gain height at a particular spot over the ground.

Impact Assessment 2.2, p231

The accident statistics create a wrong impression of the effect of clouds in mid-air collisions.

Most sailplane mid-air collisions occur in 3 situations,

- in the circuit
- circling during thermal turns
- high speed running along ridges or well under cloud streets

in all 3 the presence of cloud is not a safety factor, so clouds will not have been a factor in the accident analysis. Even the case labelled 'proximity to cloud' could be as much as 1000' from cloud by the definition in this document.

3 Objectives, p231

There is no evidence to suggest that there have been any safety problems due to a lack of training, and so no demonstrated proportional need to increase the amount required.

4 Identification of Options, p231

Of these, option 0 should never have been included by a group set up to enhance safety as it clearly reduces safety.

Only option 1 creates a viable operating practice.

Sailplane cloud flying rating

The concept of continuous long time cloud flying is not part of sailplane flying. Sailplanes traverse clouds for very short time periods. So the extended 5 h. **flying** training time for cloud flying is overly onerous.

While it is not unreasonable to expect a minimum PIC time requirement to show a degree of experience in a range of conditions, the time taken for

instrument flying training is irrelevant. The training time should be whatever is necessary to pass the skill test. Indeed perhaps the entry requirement to cloud training should be enhanced to require the skills of the cloud flying test to be shown first in ordinary VFR flight. The skill test should require demonstrated consistency – perhaps split between recorded training and the final skill test. There should be a window for renewing the cloud flying rating before the end of its validity period. The training and testing needs to be done in aircraft with similar characteristics to ordinary sailplanes – some sort of powered sailplane must be permitted for this training and testing. Computer simulation of glider flight is now quite realistic; some of the training period should be possible and credited in the common glider simulators, eg. currently (Dec 2011) Condor, SilentWings, with a considerable improvement in training safety and reduction in risk.

response *Partially accepted*

Thank you for providing this comment.

The Agency would like to highlight that DR navigation is essential to cross-check GPS information.

The information used in the Impact Assessment states that ‘... in the information available, there are no instances of collision in clouds, however at least two cases have been in the ‘proximity to clouds’ with one fatality each’.

The Agency agrees that only a limited number of collisions happened near clouds as stated in the RIA. However, flying close to clouds with reduced visibility might lead to collisions. In addition, several Member States already had specific training or rating requirements for sailplane cloud flying. This proposal will lead to a harmonised approach to sailplane cloud flying across all EASA Member States.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA. While the 5 hours training requirement has been reduced, the content of the skill test remains the same. A split of the skill test would be too burdensome.

In addition, cloud flying rating only has a 24-month period recency requirement, but no revalidation date. Therefore, as long as a glider pilot has exercised the privileges of the SCFR for at least 1 hour or 5 flights as PIC within the 24-month period, recency is maintained. The privileges can be maintained also by performing a proficiency check or additional dual training.

Also, as long as there is no certified ‘glider simulator’ (FSTD) available, the training for sailplane licences and ratings has to be provided in a sailplane.

comment 1065

comment by: *Mirosław PITORAK*

3.

From all of these option 1 is the most reasonable but not the ideal or the best - I will support this because there is no other choice. Most of the gliding pilots do not entering clouds and only flying close to cloud's base (IMC) - so if there have to be more regulations (I hardly see any reason for that except using more paper) to keep current practice it should be some choice given to the pilots between SCFR and SCFR-R.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1079

comment by: *Edwin Leach*

I would like to endorse the BGA response for option 1 but I believe that 5hrs minimum training seems excessive and would like to see the minimum reduced to 2hrs in some cases 2hrs would be sufficient for pilots who are used to cloud flying and depending on ability the training could be over a longer period which would be controlled by the IR Instructor.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1084

comment by: *Danish Powered Flying Union*

Danish Powered Flying Union support Option 3.

response

Noted

Thank you for providing this positive feedback.

comment

1125

comment by: *Roger CHAMBERLAIN*

I would vote for option 3 - both the EIR and Competency based IR

response

Noted

Thank you for providing this positive feedback.

comment

1128

comment by: *neil mcaulay*

I wish to support the proposal for a Sailplane Cloud Flying Rating (option 1), in order to continue the existing U.K. privilege and to extend this to other E.U. countries.

I also would support a restricted IFR (non-cloud) rating (option 2).

I feel that the 5 hours dual training is excessive for existing Pilots with experience of cloud flying, as the Rating is gained by skill test.

Neil McAulay (U.K. Glider Pilot/Instructor).

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/5 hours training) were also identified by BGA.

comment *1138*

comment by: *Patrick NAEGELI*

My comments are restricted to the considerations and major impacts identified for the SCFR:

- I agree with your assessment for option 1 other than to state that in the UK, the absence of an SCFR would have a high level of negative economic impact given the generally poor nature of UK soaring conditions.

- Option 2 is dismissed without any proper argument against it. On the basis of the profile of UK glider flying, for example, the ability to fly up to, but not in cloud, would be a major benefit to those pilots that fly sailplanes not properly equipped for cloud flying, or are not current in cloud flying.

The negative economic impact of Option 2 is, as for Option 1, high in the UK.

Furthermore, it is true to say that Option 2 would also create "an increase in the sailplane activity and thus induce medium economic impact".

I urge EASA to implement both options 1 and 2 - with the latter subject to national protocols.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment *1146*

comment by: *Andrew Cunningham*

Although I fully support the proposal for an SCFR, I am disappointed that EASA were unable to develop an option that resulted in a SCFR and a RSCFR. I believe the two ratings would be complementary. I would urge EASA to reconsider introducing the RSCFR.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment	<p>1162</p> <p>comment by: <i>Guttery</i></p> <p>I have thirty years experience as a gliding instructor, and was Chief Flying Instructor at my club for a number of years. I support the Agency's decision to recommend Option 1, the Sailplane Cloud Flying Rating.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots (Option 1).</p> <p>Please see also the responses provided to BGA comment No 121.</p>
comment	<p>1169</p> <p>comment by: <i>Peter BUSHILL</i></p> <p>I am disappointed that a further option was not considered, a extension of the licence to allow an 'IR' only as it applies to clearance from cloud. There is almost no cost here and little increase in the number of true IR rated pilots.</p> <p>If this is not possible then option 3 seems to be the most attractive and could perhaps be integrated with which allows cloud approach but not entry.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The EIR will allow aeroplanes to conduct flights using IFR en-route. IFR is required when visibility and separation from clouds is less than the prescribed requirements for VFR, i.e. when flying in clouds or when within 1 000 ft of a cloud above 3 000 AMSL. The Agency believes that a Part-FCL licence cannot allow an IR privilege for IFR flights near clouds only, and not in clouds.</p>
comment	<p>1176</p> <p>comment by: <i>Mike BROOKS</i></p> <p>Although I support the proposal for an SCFR, I feel the ability to climb to cloudbase above 3000 feet would address many of the needs of cross country glider pilots.</p> <p>Remaining clear of cloud and in sight of the ground is considered a safe practice below 3000 feet (where it constitutes VFR), so the extension of the practice to altitudes above 3000 feet represents minimum risk to flight.</p> <p>The permission to do this could form a Restricted version of the SCFR requiring a minimum of additional training, and just additional theoretical knowledge, making such regulation proportionate to the requirement.</p> <p>I therefore encourage EASA to reconsider its position on such a Restricted Rating.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was</p>

also identified by BGA.

comment

1177

comment by: *Martin Gregorie*

3 RIA 2. Concur with preferring Option 1 (sailplane cloud flying as an additional option). This is pretty much how I use cloud flying at present. However, my original motivation for learning to cloud fly was as a means for making a safe descent from mountain wave if a lower level cloud layer was to develop and prevent a descent to the airfield in VMC. Such cloud can develop quickly - sometimes faster than the glider can descend from high altitude wave.

response

Noted

The Agency acknowledges your supportive opinion regarding cloud flying rating for sailplane pilots (Option 1).

Please study also the responses provided to BGA comment No 121.

comment

1217

comment by: *Don BROOKMAN*

Option one is clearly desirable since it offers the greatest benefits.

However, in addition to this, it would be extremely valuable to enable IMC flight clear of clouds for those without a full SCFR. In the UK, this is particularly important where flight close to cloud is normal practice, and essential - with low cloudbases - to be able to complete flights without an out-landing.

Flight clear of cloud does not require the ability to fly on instruments.

EASA could consider, in addition to the full SCFR, provision for a restricted level, with minimal instrument appreciation which would:

- permit flight clear of cloud in IMC, hence reducing outstanding risks and improving safety
- form a stepping-stone to a full SCFR

If appropriate, this might be something that could be implemented at a national level, depending upon the different circumstances of each nation.

Current UK safety figures reflect flying close to but clear of cloud as frequent practice by most sailplane pilots. There is a significant risk that, should this be prevented (because only some pilots will have an SCFR), accident rates will increase.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

With regard to your statement '... something that could be implemented at national level...', please be advised that once EU regulations are applicable, EASA Member States cannot apply additional requirements (less or more restrictive).

comment	<p>1225 comment by: <i>Greg Corbett</i></p> <p>RIA2 Sailplane Pilots</p> <p>From my view, option 2 would be the most suitable, but option 1 would be acceptable. It is almost impossible to fly a sailplane or glider in the uk avoiding 1000ft of cloud. I don't personally want to fly in clouds, but want to fly within 1000ft.</p> <p>Greg Corbett</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 – restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1245 comment by: <i>Richard LANCASTER</i></p> <p>Sailplane cloud flying rating:</p> <p>I support the creation of a "Full sailplane cloud flying rating" (option 1), as I believe it provides a sensible framework for permitting and standardising sailplane cloud flying.</p> <p>However I would recommend that a "Restricted sailplane cloud flying rating" (option 2) is created in parallel with the "Full sailplane cloud flying rating" (option 1).</p> <p>This is because the operation of sailplanes up to the base of cloud above 3000ft AMSL, but not into it, is often required to sustain sailplane flight. However flying up to the base of cloud does not require the pilot skill set or cockpit instrumentation required to fly in cloud. Therefore, while the "Full sailplane cloud flying rating" provides a sensible framework for the regulation of flight in cloud, it would appear to be an overtly demanding and expensive rating for those pilots who only wish to fly up to the base of cloud but not into it. Hence I would recommend the creation of both the "Full sailplane cloud flying rating" (option 1) and the "Restricted sailplane cloud flying rating" (option 2) in parallel.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1257 comment by: <i>Michael CLARKE</i></p> <p>My first comments were not saved, so briefly:</p> <p>I have been gliding since 1968, I got my gold height badge in 1976 climbing in cloud on a turn and slip to 12,000ft. I got my diamond height badge</p>

subsequently in Scotland climbing to 24,500ft.

I strongly support the creation of a sailplane cloud flying rating to enable glider pilots in the UK to use cloud climbs in order to make significant flights in this country. My longest distance flight in the UK was 750kms.

My current glider has an artificial horizon, turn and slip, mode S transponder, VHF radio, dual GPS moving map displays and a Flarm collision avoidance system. Gliders today can be very sophisticated and there are many pilots like me with over 1,000 hours in gliders. Not being able to use cloud climbs would severely limit our possibilities.

response *Noted*

Thank you for your support for Option 1.

comment

1268

comment by: *GregOHAGAN*

RIA 2

I would like to express support for Option 2 the addition of the Sailplane Clud Flying Rating.

response *Noted*

Thank you for providing this positive feedback.

comment

1284

comment by: *Robert Stafford*

I would like EASA to consider how safe the sport of Gliding has been in the UK over a period of many years. As glider pilots we are well trained and briefed. Because of the UK's weather conditions we are trained to keep a good look out at all times, both in level flight and more so when flying in thermals. I therefore request that EASA does not impose the restriction on flying a glider within 1000ft of cloud for none SCFR rated gliding pilots. Gliding is a safe and thrilling sport in the UK, one that is controlled to the highest standards of safety by the BGA in association with the CAA.

response *Not accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1338 comment by: *Glider Pilot - 3400hrs FAI Diamond Badge Full Rated BGA Instructor*

The following applies to the options outlined in section 3

OPTION 0 is not an option! and I fully support the NPA to reject this.

OPTION 1 I fully support the introduction of the SCFR for the facilitation of safe and continued gliding operations.

However, I disagree that it will lead to an increase of sailplane activity for the following reason. The proportion of time spent in cloud and numbers of pilots actually entering cloud is extremely small in comparison to the durations and number of sailplanes operating within 1000 feet below the cloud base outside VMC but clear of cloud. The extra expense and effort required for the majority of pilots to qualify for the SCFR would not be viable particularly if they have no intention of actually entering cloud. A pilot without the rating would be severely restricted and be forced to accept an increased risk of outlanding and reduction of safety that entails.

OPTION 2 I believe that the restricted sailplane cloud flying rating allowing flight outside VMC but clear of cloud should not be isolated and rejected as a separate option. The SCFR-R should be incorporated into option 1 as a natural intermediate step towards the SCFR. Without the availability of a restricted rating many UK pilots who are currently flying outside VMC but clear of cloud and who also have no intention of entering clouds will be severely restricted until they obtain the full SCFR. This will have a serious effect on the numbers of pilots currently enjoying our sport and in my opinion would lead to a significant downturn in the number of pilots as the extra expense and effort to acquire the full rating (which they would need to fly under IMR but clear of cloud) would appear to be an unnecessary burden for that class of pilot just to maintain their existing flying privileges. The restricted SCFR offers a sensible and economic alternative for these pilots and would enable them to continue enjoying our wonderful sport.

The Agency must consider combining Options 1 and 2.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (option 2 — restricted cloud flying rating) was also identified by BGA.

comment

1339 comment by: *Bruce Duncan*

I support the implementation of option 1 for a full sailplane cloud flying rating. I have reservations about the cost of such a rating and the availability of training, however. The number of gliding instructors available to provide field landing practice in motor gliders is already limited and I foresee that extra demand for 5 hours of cloud flying training would stretch this valuable resource to breaking point.

It also seems to me that the most useful parts of cloud flying in a glider could be covered in a much shorter time. The primary cases where cloud flying is

important are climbing in a thermal and descending through wave cloud. In the first case, reference can be made to turn/slip and airspeed indications and most gliders are stable in the shallow turns required. This could be simulated in dual flying in a descending turn. In the second case, it is sometimes necessary to descend through cloud, often when a more humid airmass causes gaps in wave clouds to close. Again, a shallow banked turn is required to maintain a safe position with the added benefit that the need to descend will probably necessitate the use of airbrakes which makes the glider more stable yet. However, simulating this technique will be very expensive, necessitating high aerotows followed by fast descent. 5 hours of this would be prohibitively expensive.

I hope that some mechanism will be put in place which allows pilots who have used these techniques to transition more easily.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment *1344*

comment by: *Bill Murray*

As a PPL holder I support the introduction of the proposed en-route IR rating. Therefore Option 1 is accepted. Option 3 is accepted providing it does not overbear on the gaining of the basic en-route rating.

response *Noted*

Thank you for your support for Option 3.

comment *1355*

comment by: *David Booth*

3. RIA 2 - Sailplane cloud flying rating.

I fully support having a cloud flying rating as proposed by Option 1.

If only Option 1 is adopted, pilots without a cloud flying rating would be significantly adversely affected in their ability to fly cross-country safely in the UK, where their maximum flying height on most soaring days will be reduced by 1000 feet due to the VFR rules.

Currently in the UK all soaring pilots regularly fly in IMC but clear of clouds. It would help maintain current amenity and safety levels if this privilege could be maintained in the new rules. I would therefore support a rule change where both Option 1 and Option 2 were adopted. This would allow pilots with a cloud flying rating to fly in cloud and those without to fly in IMC conditions but clear of cloud.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issue you raised (Option 2 — restricted cloud flying rating) was also identified by BGA.

comment 1387 comment by: *George Metcalfe*

Additional impact of Option 0.
If cloud flying were not permitted, flight at levels above the cloud base for the day, as would often be the case in lee-wave flying would be severely curtailed. This is an important part of Sailplane flying, especially in mountainous areas, which must be allowed to continue.

response *Noted*

The Agency acknowledges your supportive opinion regarding the cloud flying rating for sailplane pilots (Option 1) and would like to confirm that the impact of Option 0 was taken into account when developing these proposals.

Please see also the responses provided to BGA comment No 121.

comment 1390 comment by: *George Metcalfe*

Option 2.
This would have a negative impact on the member states where a full cloud flying rating currently exists only if it were mutually exclusive with the Full cloud flying rating. I see no reason why it should not coexist, and if it did, then it would be an improvement in operational range and safety for everyone.
Also, it would have no effect in counties where regulations and procedures did not require it.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 — restricted cloud flying rating) was also identified by BGA.

comment 1408 comment by: *H James*

Gliding in the UK has been a popular for both young and old for many many decades. I started when I was 16 and I am now 51. For so many of us, Gliding is an important part of our lives. With regards to restricted SCFR, this will severely and negatively impact our ability to glide as we need to fly close to clouds (and always have done with a good safety record) Provision needs to be made to allow sailplanes to continue to fly close to clouds

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1418

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1419

comment by: *Robin Wilson*

IV. 3. RIA 2 - Sailplane cloud flying rating: I support the British Gliding Association who ask for SCFR for those that want to fly IN cloud.

a)However, the **ECONOMIC** outcome will be that most UK glider pilots will not be able or wish to undertake 5 hours dual instrument training, and there will be reduced gliding in the UK as a result. 5 hours seems grossly excessive for the limited cloud flying that most will ever do.

b)In the SouthWest of England near Dartmoor where I fly a glider the cloud base is often at 1500 feet above the airfield. Using the present UK 'Visual Flight Rules, this is high enough to allow training flights with an instructor, and also flights by solo pilots who just wish to keep current, using the present UK 'Visual Flight Rules.' Stopping this will adversely affect **SAFETY**.

c)Our cloud base is usually not higher than 2,500 feet. Under the changes being proposed we will be unable to climb above 1,500 above ground - this will make us fly only immediately around the airfield (making more congestion there and so less safe) or give up gliding altogether (negative economic outcome).

Please do put into action the Full sailplane cloud flying rating as the British Gliding Association are requesting.

Also please allow Visual Flight Rules as currently allowed in the UK. We do keep clear of cloud and cloud wisps for safety, and the very few Cloud Flyers do not dive out of a cloud, but leave through the side of the cloud. The safety record speaks for itself. RW

response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment and support for the SCFR. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>1454 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Page No. 13 Paragraph: Explanatory Note - IV Options considered and major impacts identified 2. RIA 1 Instrument ratings for aeroplane licence holders</p> <p>Comment: EAS strongly supports the Agency's conclusion to recommend Option 3.</p> <p>Justification: It is proportionate and provides, through the EIR, a path to the full IR(A)</p> <p>Proposed text: No change</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your support for Option 3.</p>
comment	<p>1455 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Page No. 13 Paragraph: Explanatory Note - IV Options considered and major impacts identified 3. RIA 2 Sailplane Cloud Flying Rating</p> <p>Comment: Type in line 5 under Option 2 "were' should be "where".</p> <p>Justification: Typo</p> <p>Proposed text: Change "were" to "where"</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1456 comment by: <i>René Meier, Europe Air Sports</i></p> <p>Page No. 14 to 15 Paragraph: Explanatory Note - IV Options considered and major impacts identified 3. RIA 2 Sailplane Cloud Flying Rating</p> <p>Comment: Option 0 - An additional very important reason for the SCFR is that it enables sailplane pilots to access higher level wave conditions above the lower cloud layer, by climbing - usually very briefly - through the lower cloud layer in order to access the wave lift. Without the SCFR, sailplane pilots would suffer a reduction in their experience and activity. Wave flying is a very</p>

important part of many gliding clubs' attractiveness to pilots, where those clubs are situated in areas of wave activity. The absence of such activity, without the SCFR availability, would have serious economic impacts on those clubs.

Justification: Maintenance of wave flying

Proposed text: Add "providing the continuance of one of the means for sailplane pilots to access wave conditions above the lower cloud level" as a justification for the SCFR.

response *Accepted*

Thank you for providing this comment.

comment

1457

comment by: *René Meier, Europe Air Sports*

Page No. 15

Paragraph: Explanatory Note - IV Options considered and major impacts identified

3. RIA 2 Sailplane Cloud Flying Rating

Comment: Paragraph numbering incorrect. Item 7 should be un-numbered. Paragraph 8 should be 4.

Justification: paragraph numbering correction

Proposed text: Change paragraph numbering per above.

response *Accepted*

Thank you for providing this comment.

comment

1458

comment by: *René Meier, Europe Air Sports*

Page No. 15

Paragraph: Explanatory Note - IV Options considered and major impacts identified

3. RIA 2 Sailplane Cloud Flying Rating

Comment: Whilst the Agency's reasoning with regard to the preferred option (1) is understood - because of differing application of airspace rules in member states affecting option 2 - nevertheless EAS believes that option 2 (RSCFR) should be recommended as an additional qualification to the SCFR, for application limited to those member states where the airspace rules allow its use.

The reasons behind this comment are well known at, and have been rehearsed with, the Agency through FCL.008. The RSCFR is the most appropriate rating for sailplane pilots who do not want or need to fly in cloud, and its acceptance would be a strong signal by the Agency that it understands the needs of a significant number of pilots in the air sports world. It would also provide a stepping stone to the SCFR, in a similar way to the Agency's proposal for the EIR as a step towards the IR(A). Lastly, the precedent is already established in terms of 'where national law allows' with the GP medical in the Basic Regulation 216/2008.

	<p>Justification: Maintain current practice in many member states, and to allow gliding to continue and develop as it has done in Europe for 80 years. There is absolutely no evidence-based safety case not to allow the RSCFR.</p> <p>Proposed text: Agency to recommend the SCFR <u>and</u> the RSCFR</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>

comment	<p>1473 comment by: <i>Julian Hodgson</i></p> <p>I would ask EASA to consider the option of a restricted SCFR in addition to a full SCFR. Without it an SCFR would be almost madatory for operating from certain flying clubs regardless of whether one intends to actually fly within cloud.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>

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comment	<p>478 comment by: <i>Lemmy Tanner</i></p> <p>In response to the proposal in NPA 2011-16 I would wish to support the EASA recommendation of Option 1, which allows sailplane pilots to operate in cloud if in possession of a cloud flying rating. I have for many years been able to fly in cloud in many different types of aircraft and this ability is not one that I would wish to lose, hence my support. I should voice concern however on the Theoretical Knowledge proposals. A minimum number of hours study will not necessarily produce a working knowledge of the requirements, and many pilots will have the knowledge without having to study. The benefits of the rating will not change the way many glider pilots fly and will not contribute to a greater range of operation. The compilers of the above proposal are singularly lacking in knowledge about the way sailplanes are operated. Sincerely, L. Tanner</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p> <p>With regard to the theoretical knowledge instruction, the Agency would like to highlight that the Implementing Rules do not require a certain minimum amount of theoretical knowledge instruction. It is up to the gliding instructor to decide how detailed the revision or explanation of the subjects listed in AMC1</p>

FCL.830 should be. For certain more experienced glider pilots this might be only a short repetition of the 6 subjects contained in the syllabus, for more inexperienced pilots this might result in a few hours of theoretical detailed instruction.

In addition, please be advised that the proposal was prepared in close cooperation with experienced sailplane instructors.

comment

489

comment by: *John BRIDGE*

RIA 2

I am an experienced (30 years/6500 hours) cross-country sailplane pilot based in the UK.

1) Option 1: Sailplane Cloud Flying Rating

In the UK, with its relatively damp air mass and modest cloudbases, cloud flying often may be the only way that cross-country flights may be achieved. Additionally, when flying in wave, the clear-air slots beneath may close rapidly and without warning, leaving descent through cloud as the only option for a safe landing. I therefore support the proposal for a Sailplane Cloud Flying Rating.

I do not agree with the regulatory element of the proposal. Glider pilots who choose to fly in cloud have been trained to BGA standards in specialised thermalling techniques that are not relevant to general aviation. Many pilots who fly in cloud will do so for perhaps a total of one or two hours PER YEAR, so the proposed requirement for a 5-hour training program every 2 years is wholly disproportionate and is itself not without risk. I therefore do not support the training and continuation requirements.

2) Option 2: Restricted Cloud Flying Rating

Glider pilots often fly within 1000ft of cloud. In cross-country gliding, altitude is king.

Altitude allows greater distances to be flown before needing to search for more lift.

Altitude eases the stress of looking for fields to land in whilst flying over unfamiliar territory. Typically in the UK, glider pilots flying over unfamiliar country will look for suitable landing areas when below 2000ft agl, and will be committed to a landing at around 800ft, all depending on the nature of the terrain. In the Alps, limits are far higher, due to the scarcity of usable landing fields.

Under the proposed rules, in the UK, under a typical cloudbase of 3500ft, pilots would have effectively no more than 500ft available to search for the next source of lift before starting, at 2000ft, to look for a landing area. This would kill cross-country soaring for most current pilots.

Cloudbases vary with the time of day, with terrain, proximity of the sea and approaching weather fronts. It is difficult to understand how a pilot is expected to know what cloudbase is at a given time and place - forecast cloudbases

cannot be relied on for accuracy and aerodrome reports only apply to the local area and, from personal experience, are frequently inaccurate.

Option 2 is NOT the same as Option 1 in terms of necessary acquired skills: there is no requirement for developing blind-flying techniques when flying in clear air. A comprehensive briefing on lookout techniques when near to cloud, and of the dangers of flying at actual cloudbase, would be perfectly adequate.

Based on statistics provided by the BGA, it is clear that mid-air collisions close to cloudbase are very rare, despite the volume of traffic in the UK and the cloudy nature of its climate. The safety argument has not been demonstrated.

The above arguments suggest that **Option 2 should be reconsidered as a viable, additional alternative to Option 1.**

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

610

comment by: *Graham Morris*

Option 2 Restricted Sailplane Cloud Flying Rating.

I am surprised that this option has not been recommended and suggest that not only should it be, but that it is made a standard part of any sailplane License and Option 1 be required for deliberate operation in cloud.

In practice it would cover the way in which sailplanes are currently operated Europe wide, regardless of current legislation.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

744

comment by: *Martin Roberts*

Page 15
V. How to comment on this NPA

I have commented on NPA before, but I never found it to be so technical and laborious.

Please make it less difficult and more user friendly.

response *Noted*

Thank you for providing this comment.

comment 943 comment by: *Dennis Westgarth*

In order for gliding to continue as a sport, it is vital that the ability to fly in, and in close proximity to cloud is retained. As cloud is generally an indicator of air currents with verticle components, having to maintain VMC distances would virtually exclude soaring flight. I therefore wish to support the initiative to introduce a restricted Sailplane Cloud Flying Rating (**Option 2**).

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 977 comment by: *Chris Ellis*

CLOUD FLYING IN SAILPLANES FCL008

As a glider pilot who has been flying for 55 years I am very concerned by the restrictions which could severely limit the conditions under which my club, the Midland Gliding Club, and my syndicate of 12 members of the Falke 2000 Group, could operate.

I support the position of the BGA on the cloud flying rating but would ask that there be "grandfather rights" for those of us who have been flying in and around clouds of many years and have the necessary skills and experience to do so safely.

I would also ask that the possibility of a "restricted" rating to allow pilots to fly within 1000' of clouds to be re-examined. Our airfield is 1450' above sea level and has a west facing ridge which we soar all year round. On days when cloud base is 3000' asl we would be limited to flying at 500' agl in conditions where being higher would be safer and more enjoyable. In order to launch by winch it would be necessary for cloud base to be over 4000 feet.

response *Noted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and the issue you raised (restricted cloud flying rating) was also identified by BGA.

An existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency..

comment 1007 comment by: *Dr James WESTON*

Option 1, Page 15:

I disagree with the conclusion that the selection of this option would create an increase in sailplane activity. In fact I think that the opposite would be true. A

restricted sailplane cloud flying rating with the ability to conduct flights in IMC but clear of clouds is more in line with what most sailplane pilots desire. Consequently I would suggest that Option 2 should be re-visited.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1392

comment by: *Jon Hart*

My following comments are based on my background - I have been gliding for 47 years, (2,000+ hours and 2,000+ launches) and was an instructor for over 25 years and probably have been cloud flying for over 40 years, completely self-taught.

I am very pleased that cloud flying is to be allowed to continue and rightly so. However, I am not at all happy that ratings should be required; this seems to me just to add unnecessary bureaucracy and costs when in fact cloud flying is self-regulating.

Those who are like me will happily enter cloud and fly safely and competently, whilst those who don't like cloud flying will stay out. Not having a rating won't stop a pilot entering cloud but fear will!! The same applies to swimming; someone who can't swim isn't going to jump into deep water. But if they want to learn, then they will start where it is shallow and progress accordingly. Similarly with gliding, once solo most pilots teach themselves cross-country flying, keeping local at first then gradually going further. The same applies to cloud flying, using instruments in clear air then entering cloud for short periods until experience and confidence build up.

By all means allow novices to be trained as probably many now are but to insist on a minimum figure again seems totally unnecessary. An instructor can easily determine when a pilot is fit to cloud fly, applying a fixed minimum does not take in to account the ability of the pupil. Similarly, instructors know when someone is ready to go solo, they don't have a fixed minimum hours/launches which they apply so frustrating the quick learner. Conversely, a slow learner would be expected to continue instruction beyond this so called minimum until the instructor deemed them competent.

What will all this cost? How much will a rating be? Then it has to be renewed every 2 years! (N.B. It now costs £62 just to change ownership details on a glider, culminating in 5 documents with 3 different signatories). Then there is the cost of 5 hours flying, unlikely in one flight so added costs of launches and on many days it is not possible to fly in cloud, so frustrating delays.

What about all the experienced pilots like me? Will we all have to undergo 5 hours tuition? Even a check flight every 2 years is yet another cost and again the conditions are not always right to fly in cloud.

I strongly believe that the implementation of a rating system and 5 hours tuition will have a minimal effect on benefits in terms of safety and be totally outweighed by the additional bureaucracy and costs.

Please allow common-sense to prevail and let pilots decide for themselves whether they want to enter cloud and choose how to avail themselves of the skills, just as they do when flying cross-country.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, it should be clarified that the sailplane cloud flying rating only has a recency requirement, but no revalidation date. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

An existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.

Finally, the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

A. Explanatory Note - VI. Next steps

p. 15

comment 68 comment by: *Sean Paul*

I support option 3

response *Noted*

Thank you for providing feedback.

comment 462 comment by: *peter CLARK*

I wish to support the option 1 given - the full sailplane cloud-flying rating. However, I feel that the requirement for 5 hours minimum training is excessive, and that it will in practice prove excessively expensive and highly impractical to do such training in a sailplane. I support the British Gliding Association's view that the minimum should be 3 hours and not 5.

I support the British Gliding Association's view that this training should be allowed will need to be done in TMG's. I believe that the use of TMG's will be necessary: I do not believe that the required training could be done in sailplanes without significant safety hazards. Such training would of necessity have to be conducted relatively close to the launch site and would therefore present a hazard to all other sailplane traffic.

The ability to fly close to, but not in, cloud does not require extensive instrument training, or indeed any special instruments at all. I give this opinion based upon more than 20 years and 1200 hours experience in sailplanes. (I

	hold a Gold C badge).
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.</p>

comment	<p>1349 comment by: <i>Graham PURSEY</i></p> <p>I write in my personal capacity as a glider pilot with some 600 hours' flying time and holding an Assistant Instructor rating.</p> <p>I support such moves as will be necessary to ensure that UK pilots continue to be able to enjoy the privilege of flying within cloud and I am thus broadly in favour of the proposed Sailplane Cloud Flying Rating. I note, however, that this rating - quite correctly, in my opinion - is a competency-based rating but that the proposal specifies a minimum of five hours' dual instruction. Surely, , since a competency-based assessment necessarily requires those seeking to achieve the cloud flying rating to demonstrate competency, is it necessary to specify a minimum of five hours' instruction?</p> <p>I accept that, in order to demonstrate competency, there will be a requirement for pilots to undertake some dual flying, with instruction as required but a blanket, five-hour minimum seems unnecessary and may deter some pilots from pursuing a rating that is designed to support safe flying. Given the vagaries of UK weather, I would also wish to see that training could be undertaken in training motor gliders as part of the instruction process.</p>
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response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG) were also identified by BGA.</p>
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comment	<p>1429 comment by: <i>steve pearce</i></p> <p>Qualifications for flying in Instrument Meteorological Conditions NPA 2011-16</p> <p>It is my opinion that the B.G.A. does a very good job of managing the safety aspects of gliding in the British Isles and has done so for many years, all with an excellent safety record. I am in favour of new rules that will make gliding a safer sport and therefore support most of NPL 2011-16. However I would make the following comments..</p> <ol style="list-style-type: none"> 1. The SCFR. Should be included within the regulations that result from this NPA. and that it is available to both LAPL(S) and also S.P.L. holders. 2. I think training for cloud flying is a good idea and as such support this part but think that 5 hours may well be excessive for many pilots and would not be necessary for them, this would be a waste of their time and money. I think the training should be until the pilot is competent to cloud fly safely
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- as decided by his instructor. This may well be more than 5 hours or it could be less.
3. I think training should be available in T.M.G. 's. They are without doubt the best way to train Glider pilots how to fly in cloud safely.
 4. I also think you should reconsider including an RSCFR. in the regulations. It is particularly important in the British Isles and I feel we would be unfairly treated if this was left out just because most of the other countries are not interested in it. Regulations should be of benefit to every one and take into account and accommodate any special circumstances peculiar to any one country.
 5. I am in favour of regulations that will improve safety but feel we have a very good safety record in this country and any new regulations should reflect this and they should not impose new rules that will completely spoil our sport with little or no benefit. We should be encouraging more people to take up sport. Gliding is a sport for every one of almost any age. It gets them out in the fresh air at all times of the year, very few sports can say that. Please do not spoil it for us.

Thank you for taking the time to read my comments. I hope you will take them into consideration. S. Pearce.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/TMG/restricted cloud flying rating) were also identified by BGA.

B. Draft Opinion and Decision - I. Draft Opinion

p. 16-22

comment *1* comment by: *Michael Davies*

Can this new EIR be automatically be given to ATPL holders who also hold a valid PPL(A)? An IMC rating for PPL(A) is currently automatically granted if you have a CAA issued ATPL.
Can the normal retraining/checks done for an ATPL licence automatically revalidate any EIR for PPL(A)?

response *Noted*

Thank you for providing this comment. The Agency would like to highlight that the applicant having passed the ATPL theory (JAR or Part-FCL) examinations will be credited in full towards the EIR or IR(A) theory requirement for the same aircraft category. In addition, the Agency has so far not included credits from full IR to EIR as this is seen as an unlikely situation.

comment *2* comment by: *Colin Hampson*

It is important that those with valid passes (i.e. within 36 months) in JAA/Part-FCL ATPL theory are exempt from the IR theory exams/requirements. I believe that this is already stated in Part-FCL Subpart A FCL.035 (1).

response *Noted*

Thank you for providing this comment.

The Agency can confirm that FCL.035(b)(1) will allow ATPL theory passes to be fully credited towards the IR theory requirements.

comment 5 comment by: *Champion Flight Training*

Paragraph 2 states that the applicant for a competency based modular IR(A) must have a PPL or CPL which includes the privileges to fly at night. This requirement will exclude a large number of pilots who, like myself, are CVD and are therefore not permitted to fly at night. There should be provision for a competency based modular IR(A) restricted to daytime only by the holder's medical certificate. Night privileges should not be a requirement for attaining this rating.

response *Accepted*

Thank you for providing this comment. The Agency reviewed the issue and decided to allow an IR(A) to be restricted to day only, unless a night rating in accordance with FCL.810 is held.

comment 26 comment by: *Spare Chan*

Why does an applicant for an IR require the privileges to fly at night?

If the pilot has no night-rating, they should still be able to obtain an IR (restricted for daytime-use).

response *Accepted*

Thank you for providing this comment. The Agency reviewed the issue and decided to allow an IR(A) to be restricted to day only, unless a night rating in accordance with FCL.810 is held.

comment 33 comment by: *NFLC*

In FCL 825 (a) (1) it states that the EIR is limited to day operations only. Why is the proposed rating not usable at night? There is no difference between day and night flight under IFR in the en-route portion of the flight so, provided that the weather conditions at the departure and destination airfields permit visual navigation below MSA (or below 3000 ft and in sight of the surface) the rating ought to be usable at night.

response *Accepted*

Thank you for providing this comment. The Agency has reviewed the issue and decided to enable the use of the EIR privileges during night provided that a night rating in accordance with FCL.810 is held.

comment 34 comment by: *Kai-Uwe Weingandt*

B.
I.
5) (c) (2) instrument flight instruction

response

to reduce training costs i woul prefer to do 10 hours under IRI or FI and 5 hours within an ATO.

Not accepted

Thank you for providing this comment.
The Agency would like to highlight that 10 hours will ensure a minimum training quality standard. Several Member States have this system in place without creating safety risks. The Agency and the Review Group experts believe that 10 hours is the minimum required.

comment

37

comment by: *George Knight*

FCL.830 Sailplane Cloud Flying Rating

(b) Applicants for a sailplane cloud flying rating shall have completed at least:

(1) 30 hours as PIC in sailplanes or powered sailplanes **after issue of the licence;**

The requirement to have 30 hours after issue of licence is reasonable in a steady state, once EASA rules have been in force for some time, but during the transition from national to EASA regulations it raises issues.

- Does this mean an EASA licence or does it include national licences?
- For countries, such as the UK, where even pilots with many years and thousands of hours fly sailplanes without the requirement for a licence this requirement as written prevents them applying for the rating until they have done a further 30 hours PIC after EASA rules have been implemented in their country.
- "3.2. Flight instruction" on page 11 only requires 30 hours PIC - not after licence issue. "The proposed new requirement FCL.830 will be included in Subpart I of Part-FCL containing additional ratings. In order to start the training for this sailplane cloud flying rating, the licence holders must have completed at least 30 hours of flight time as PIC on sailplanes. ..."
- It is inconsistent with "**FCL.825 En-route Instrument Rating (EIR) (b) Pre-requisites. Applicants for the EIR shall hold at least a PPL(A) and shall have completed at least 20 hours of cross-country flight time as PIC in aeroplanes.**"that makes no mention of 'since licence issue.'
- Elsewhere for instructors and examiners there is no requirement for the required hours to have been since licence issue - only as PIC.

May I suggest the wording be changed to either:

(1) 30 hours as PIC in sailplanes or powered sailplanes;

or

(1) 30 hours as PIC in sailplanes or powered sailplanes **after issue of a licence or equivalent;**

response

Not accepted

Thank you for providing this comment.

Previous experience may be credited towards a Part-FCL licence and/or rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. The Agency will support the UK CAA in finding a solution to this issue.

comment 40

comment by: Joerg H. Trauboth

Para 8.

After "...the applicant shall:" delete (a),(b),(c),(d).

Insert:

"The applicant has to pass an oral and flight check by an ATO instructor. The oral check will be concentrated on air law, meteorology, flight planning and performance, and human performance and the applicant will hereby demonstrate that he is able to read, speak, write, and understand the English language. In the flight check the applicant has to demonstrate in various approaches and tracking maneuvers that he is able to operate an aircraft safely in IMC".

Remarks:

Why this simplification?

1. Situation:

Most of the third countries licences are from the US. The FAA requirements (14 CFR 61.65) are:

An applicant for an instrument rating must have at least :

- a. 50 hours of cross country flight time as PIC of which at least 10 hours must be in airplanes
- b. 40 of actual or simulated instrument time
- c. 15 hours of instrument flight training from an authorized instructor
- d. 3 hours of instrument training appropriate to the instrument rating sought from an authorized instructor, in preparation for the practical test, within the 60 days preceding the date of the test
- e. 250 NM cross country, conducting under IFR, including 3 different kinds of approaches

To be eligible for a instrument rating, a pilot additionally must:

- a. Hold a current PPL with an aircraft rating appropriate to the Instrument rating sought
- b. be able to read, speak, write, and understand the English language
- c. Score at least 70 percent on the FAA Knowledge Test on the appropriate subjects.
- d. Pass an oral and flight check on the subjects and maneuver outlined in the Instrument Practical Standards

2. Assessment:

It is proven by statistics that an FAA trained student is well enabled to fly IFR everywhere. Any additional requirement for the conversion of the licence is an unacceptable (also financial) burden for the IFR licence holder. Also the requirement of having at least 100 hours of instrument flight time as PIC on aeroplanes, is nice to have (for flight schools) but not necessary for the concerned IFR pilot.

3. Conclusion

a. The conversion should be as easy as possible but reflecting the also the European requirements. The ATO instructor shall have the only and full power to confirm (or not) that the applicant has the expertise to fly IFR in the range of his licence.

b. The French government has fully accepted the FAA requirements for their national licence planning. **EASA should follow this course to avoid the loss of many European N licence holders who are not willing to go through an additional (even shortened) course and to pay for a something which is not necessary for flying safety reasons.**

c. Maintaining the licence:

(1) I also recommend to follow the FAA procedure to hold an IFR licence according to 14 CFR61.57 which requires

(2) a biennial flight review

(3) to carry passengers, 3 take offs and landings within the preceding 90 days (full stop at night)

(4) Within the preceding 6 calendar months, logged under actual or simulated instrument conditions...

- at least 6 instrument approaches

- Holding procedures and

- Intercepting and tracking courses through the use of navigational systems

If a pilot allows the instrument currency to expire the person has different options to become current again (14CFR61.57)

4. Summary

Generally, I welcome the EASA approach to make it easier for 3rd country license holders to fully convert the licence. But even the "minimized program is too much, because not necessary. Why has an trained IFR licence holder to fly 100 hours before he is accepted in Europe for further licence considerations? As N-licence holder, I have flown now 120 IFR PCI hours, the majority in European airspace. If not, I would feel safe without 100 hours flying and also without remarkable new theoretical training. As PIC I am always responsible for my knowledge and the individual criteria in the country, I fly. Additionally, those US citizens, living longer than 1 year in Europe, would also be concerned by the new regulation, which would for sure cause unnecessary court proceedings (and is against ICAO according to my understanding anyway).

Therefore, it is highly recommended

- to accept the FAA PPL/IR licence in the EASA approach without any additional requirements and to convert the FAA PPL/IR licence as it is intended to convert the JAR/FCL into an EASA licence.

- or to aim generally for an bilateral acceptance of the FAA/EASA licences before the NPA 2011-16 will result in EASA licences.

The comments (Para 8 and before) are written as fall back option in the understanding that a 1:1 mutual licence acceptance would not be achieved at time.

response

Partially accepted

Thank you for providing this comment.

After feedback received from stakeholders, the Agency in consultation with the Review Group experts has decided to reduce the minimum experience requirement to 50 hours flight time under IFR as PIC on aeroplanes. In addition, an applicant will now be able to demonstrate the acquired level of theoretical knowledge to the examiner during the skills test.

The demonstration of language proficiency must be done through a method of assessment established by the competent authority (FCL.055(e)).

comment

57

comment by: *Exec Flight*

FCL.830 Sailplane Cloud Flying Rating (b) (1)

It is not clear if flight time in sailplanes obtained under current UK BGA rules will count towards the requirement for 30 hours as PIC in sailplanes or powered sailplanes after issue of a licence. Within the UK, a sailplane licence will be granted for the first time according to conversion rules currently being developed by the BGA. In order to obtain a sailplane cloud flying rating at the earliest opportunity, flight time as PIC obtained under equivalent BGA rules should count towards this minimum requirement (eg 30 hours as PIC after issue of a licence or equivalent BGA rating).

response *Noted*

Thank you for providing this comment.

Previous experience may be credited towards a Part-FCL licence and/or rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. The Agency will support the UK CAA in finding a solution to this issue.

comment 58

comment by: *Exec Flight*

FCL.830 Sailplane Cloud Flying Rating (b) (2)

The NPA states that applicants for a sailplane cloud flying rating shall have completed a training course at an ATO. However, such ATOs do not currently exist.

Furthermore, under the revised Appendix 6 setting out the training requirements for a modular IR, an applicant may count up to 30 hours of the required 40 hours of training (ie 75%), flight instruction completed under the supervision of a suitably qualified instructor or prior experience.

Similarly, under the proposals for the EIR, in FCL.825(C) (2) (i), up to 5 hours of the required 15 hours of flight instruction (33%) may be completed under the supervision of a suitably qualified instructor outside of an ATO environment.

An equivalent concession to the above should also be applied to the applicant for a sailplane cloud flying rating. For example, many sailplane pilots will already have extensive experience of flying in cloud or may be able to receive instruction from a suitably qualified instructor outside of the ATO environment. I therefore suggest that the words "at an ATO" are deleted from this clause FCL.830 Sailplane Cloud Flying Rating (b) (2).

response *Noted*

Thank you for providing this comment.

The Agency is aware that there are currently no sailplane training organisations in certain Member States. However, in order to provide training for sailplane cloud flying rating, an ATO will need to be established by 8 April 2015.

With regard to previous experience, this may be credited towards a Part-FCL licence and/or rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. The Agency will support the UK CAA in finding a solution to this issue.

Finally, the Agency does not agree to remove the 'at an ATO' requirement, as the requirement to receive instruction at an ATO will ensure that a minimum training quality standard is achieved in all Member States.

comment 63 comment by: *Gerd Steinkamp*

First of all, thank you very much for the effort to increase the accessibility of the IR in Europe for private pilots.
So far, the use of FSTD for IR is common around the world and is widely accepted to increase the quality of training. I suggest, that FSTD are also allowed to be used for training towards the EIR.

response *Not accepted*

Thank you for providing this comment.

Several stakeholders commented on this issue and it was therefore further discussed by the Agency and the Review Group. It was decided, due to the low amount of training hours, that all training must be completed in an aeroplane to give the candidate maximum exposure to the real environment (ATC, weather, etc.).

comment 66 comment by: *LSV-Osterode*

I am missing regulations regarding pilots who train, validate, revalidate or renew currency instrument privileges on BOTH sailplane cloud flying rating AND an IR.
Given that both privileges require flying by the sole reference to instruments, at least a partial reduction of requirements for these pilots should be provided.

response *Accepted*

The Agency acknowledges your comment and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However, in any case, 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment 76 comment by: *PPL/IR Europe*

Attachments [#8](#) [#9](#)

General Comment: We submit "PPLIR Attachment 1" as material in support of the NPA reflecting our views and addressing potential concerns other stakeholders may have.

FCL.035 Crediting of flight time and theoretical knowledge, para (4)

In the penultimate line, the words "in another" appear to have been omitted prior to the words "category of aircraft.."

FCL.060 Recent Experience, para (b) (2) (ii) (there is no change to this in the NPA)

This para waives the requirement for night take-off and landing currency for the holder of an IR. We note that there may be some potential for uncertainty as to whether reference to "an IR" is in a more general sense (and includes the EIR) or is specific to the EASA Instrument Rating. We think it may be worth the

Agency inserting a clarification in Part FCL that reference to an IR or Instrument Rating is not a reference to the EIR unless specifically worded as such. This clarification may also be useful in Part OPS.

FCL.825 En-route Instrument Rating (EIR)

(a) Privileges and conditions para (1)

We recommend the following alternative wording with additional text in italics:
The privileges of the holder of an en-route instrument rating (EIR) are to conduct flights by day under IFR or in IMC in the en-route phase of flight, with any aeroplane for which a class or type rating is held, with the provision that a multi-engine EIR must be held in order to exercise these privileges on a multi engine aeroplane. These privileges are extended to flight at night for the holder of a Night rating issued in accordance with FCL.810

The first change is a clarification we feel is needed in several places in FCL.825 in respect of the single vs multi-engine EIR.

The second change concerns night flight. Having the "default" EIR privileges restricted to day time has the advantage that a pilot whose colour vision precludes night flight may qualify for the EIR. We support this. However, for pilots who do hold a Night rating, we do not see any reason to restrict the privileges of the EIR to day time. The combination of pilot skills resulting from night VFR training and day IFR training has been satisfactory for IFR operations at night under every FCL regime we are aware of. The benefits for a PPL holder of flying enroute IFR in poor conditions, rather than flying in marginal VMC or at undesirably low levels, are arguably greater at night. The NPA restriction feels arbitrary and unnecessary to us. We concur with the other privilege restrictions of the EIR because they permit a shorter and more accessible instrument training course than the IR. However, since the full IR includes no requirement for night training, we do not see the rationale for restricting the EIR to day time flight. We believe that privileges and training requirements should correspond to one another, and, in the case of the night restriction, there is no such correspondence.

(a) Privileges and conditions. para (3)

We consider the requirements of this paragraph to be unnecessarily onerous. The EIR privileges exclude all of the departure and approach phases of IFR flight which are the focus of multi-engine asymmetric training in the full IR course. Clearly, an EIR holder who subsequently qualified for an MEP Class Rating needs some specific training in managing an engine failure in IMC. Ideally, this training and the appropriate testing could be combined with the MEP Class Rating training and testing (essentially adding a module for EIR holders who wish to exercise their privileges on MEP aircraft). We would request that the Agency consider this. Alternatively, the training requirement in para 3 should be reduced to 1hr and the skill test abridged to include only a (relatively brief) test of managing a simulated engine failure in enroute flight under IFR (ie. Section 6 of AMC4 FCL.825(e)(f)). It is difficult to conjecture what the content of the 3hrs training stipulated in the NPA would be.

(c) Training course. .. (1) theoretical knowledge instruction in accordance with FCL.615

We support the view that the EIR TK shall be the same as that for the CB-M IR as per column A2 of AMC1 FCL.615. Firstly, we think that only a relatively modest number of LOs could be deleted in a syllabus tailored to the EIR,

because few of the LOs are specific to the departure and arrival phases of flight. Secondly, we think a single syllabus will reduce the administrative work for EASA, NAAs, ATOs and Instructors. Thirdly, we think it is an advantage to make the progress from the EIR to the IR more accessible by not having additional TK requirements.

However, this view depends on their being no material increase in the LOs in column A2 of AMC1 FCL.615 in the EASA final opinion. If the Agency is obliged to restore a significant number of LOs back into the IR syllabus, there will then be a much stronger case for a separate EIR exam, in order for the TK to be proportionate and acceptable.

(c) Training course. .. (2) instrument flight instruction (ii)

We recommend the following alternative wording

The instrument flight instruction requirements for a multi-engine EIR are the same as those for the single-engine IR, except that at least 3hrs of the instrument flight instruction at an ATO should be conducted on a multi-engine aircraft

The present wording does not make it clear how much of the proposed 18hrs must be conducted in a multi-engine aircraft. The intention, we feel, cannot be that it is the entire 18hrs. This makes no sense relative to the principle in Part FCL at present that a single engine IR(A) holder may upgrade to a multi-engine IR(A) with 5hrs training, of which only 2hrs must be in an aircraft (as opposed to a FFS or FNPTII). We feel that 3hrs is an appropriate requirement for multi-engine aircraft training, to ensure the candidate is both prepared to take the EIR flight test in that aircraft and is trained in enroute IFR engine failures. Furthermore, we feel that these 3hrs can be combined with the rest of the EIR syllabus, and that there is no reason to make them incremental to the 15hr course. The nature of the multi-engine IFR training is well suited to being combined with the basic instrument flight and enroute training of the single-engine EIR, and we would point out that the multi-engine part of the EIR test in Section 6 of AMC4 FCL.825(e)(f) contains only 2 items.

Naturally, some candidates will need more than 15hrs to reach the test standard on the single engine EIR. It may be correspondingly harder to achieve that standard in 15hrs for the multi-engine EIR. It may also be that some candidates for the ME EIR have greater experience than SE EIR candidates and are better able to reach the standard in 15hrs. It is in the spirit of competence-based training to allow for these possibilities.

(f) Validity, revalidation and renewal....paras (1) and (2)

On this subject, we refer to Annex III para 1.c.2 of the Basic Regulation: *"An appropriate level of competence in practical skill must be maintained. Compliance must be demonstrated by regular assessments, examinations, tests or checks. The frequency of examinations, tests or checks must be proportionate to the level of risk associated with the activity."*

We think there is a case that the appropriate level of competence for the EIR may be maintained with a less stringent requirement than an annual revalidation. Firstly, we have to recognise the economic and logistical difficulties that an annual Proficiency Check with an Examiner imposes, these will be a significant barrier for many of the pilots the EIR is intended to appeal to. Secondly, and more importantly, we should consider what is appropriate relative to the privileges of the EIR. Whilst recognising the importance of currency in instrument skills, we submit that the currency needed for IFR departures and, in particular, approaches is much more demanding than the need in terms of enroute IFR.

We suggest the Agency consider 2 options:

Either changing para (1) to read **An EIR shall be valid for 2 years**

Or changing para (2) to add the sentence: **On alternate years, the requirement for a proficiency check may be substituted by undertaking at least 1.0hrs of instrument flight training in an aircraft with an IRI(A) or FI(A) holding privileges to provide training for the EIR**

If neither of these options are acceptable, then, at the very least, we believe that alternate EIR revalidations should be permitted on an FNPT II or FFS, as per FCL.625.A (a) (3) in respect of the IR(A). We see no reason to make the EIR revalidation conditions more onerous than that of the IR.

FCL.825 En-route Instrument Rating (EIR) – general comments

Other than the specific comments above, we strongly support the EIR as described in FCL.825

We believe it has the right balance of privileges, training and accessibility.

We are aware that some stakeholders would prefer the EIR to include more privileges in the departure and arrival phases of flight. However, this has 2 problems. Firstly, more privileges will likely mean more training. We think it is very important that the EIR training requirement should not “creep up” above the present 15hrs, in order to preserve its accessibility as a post-PPL qualification. Secondly, we believe the EIR privileges in the NPA fit well with current ICAO and European practices in respect of flight planning and ATC services. It is normal and acceptable for a flight to transition to IFR after departure and to transition to VFR at the end of the enroute phase for a VFR arrival at an airport. All existing airspace and air traffic services can and do cope with this flight profile. Some airports do not permit VFR arrivals or departures, and this will clearly be a restriction on EIR holders. There is no question that the utility of the EIR is materially lower than that of the IR. Equally, we believe, there is no question that it adds very material utility to the privileges of a PPL, and it is this point which should be emphasised. The case of a “hybrid” flight which is IFR in the arrival phase but then at some point prior to the final approach must transition to VFR is not one that fits with air traffic service requirements in many terminal areas.

Equally, we are aware that some stakeholders may be concerned about whether EIR standards will be adequate for enroute IFR flight in controlled airspace. We are convinced that they will be. Firstly, because the EIR minimum training (15hrs) exceeds the ICAO requirement for the full IR (10hrs) and equals that of the full FAA IR (15hrs). An additional example is that of the UK IMC rating, in which candidates are taught IFR departures, enroute flight and approaches in 15hrs. Therefore we believe the combination of training and privileges will be appropriate. Secondly, because, at present, VFR and IFR traffic mix in controlled enroute airspace across Europe separated only by 500’ and the VMC minima. In other cases, Class A low level airways have very low traffic volumes. We think the additional training of the EIR will increase pilot capabilities and overall safety in this context. The point at which CAT and GA traffic mix in relative proximity is during the departure and arrival phases of IFR flight, when EIR holders will be precluded from using their instrument privileges.

The final potential concern about the EIR is that of the risk of forecast weather precluding an EIR holder from establishing VFR at a safe level prior to arrival. We believe the emergency approach training in the EIR course is an appropriate way of mitigating such risk, and that the net effect on safety of training pilots in enroute instrument flight, to avoid marginal VMC at low level, will be a positive one.

FCL.830 Sailplane Cloud Flying Rating

We support these proposals. We believe EASA should avoid imposing FCL paradigms from powered flight that are not suitable for the operation of sailplanes, where there is flexibility to create better alternatives based on existing precedents. The proposed Cloud Flying Rating has some formal elements (training at an ATO, 5hrs minimum time, Skills test with an FE, 24month revalidation) which may not be necessary and we would support our colleagues in the Sailplane community in their comments in this respect.

Appendix 6 – Modular training courses for IR – Section 2, A.2. IR(A) – Competency-based modular flying training course

Points 1-4: no comment

Point 5, Theoretical Knowledge

The 100hrs is proportionate to the reduction in the TK syllabus, so we support it; however, in principle, we do not think the minimum hours mandate in FCL course approvals is of any particular value.

On classroom teaching, our experience is that some TK candidates enjoy and benefit from classroom instruction, and others find it unnecessary and of no value. Our membership includes pilots with modest educational backgrounds, pilots who are University Professors and every level in between. Therefore, we welcome the flexibility in the NPA in this respect. It should be clarified that a candidate may complete a TK course and the Exams and subsequently complete the minimum classroom time in combination with practical flight training at an ATO which may be a different one from the TK course provider.

Point 6, Flight Instruction – General comments

We strongly support the flight instruction proposals exactly as worded in point 6. We would oppose any adjustments whatsoever to increment the total training time, total experience time or ATO training. The principle underlying training requirements in ICAO, under major non-European training regimes and for most existing EASA FCL qualifications is that the minimum training time must allow an instructor to teach the syllabus in full to a student. For example, the EASA Multi-Engine Piston Class Rating has a minimum time of 6hrs, which just permits the syllabus to be covered in full. Another example is the EASA IRI qualification, which requires 10hrs – ie. a candidate may be taught how to teach the entire IR syllabus in 10hrs. Type Ratings on mulipilot aircraft are another example: it is possible for a pilot with very limited experience to qualify for an Airbus A320 Type Rating with ~16hrs as Pilot Flying in a FFS. On this basis, the 50-55hrs of the present EASA FCL IR course is clearly an anomaly. It requires around 10-15hrs to teach the IR syllabus, and the remaining time is spent in students practising training routes to reach the test standards. We believe that such practise should be competence-based, rather than mandated by FCL, as it typically is in other EASA FCL qualifications.

Point 6, Flight Instruction para (a) – specific comments

We would oppose any increase to the 40hrs specified in para(a), since we believe there is considerable evidence that an IR course for ab-initio candidates may safely be conducted to the ICAO minimum of 40hrs, and that there is no evidence supporting the requirement for 50hrs as introduced by JAR-FCL. This is quite different from acknowledging that many candidates may need more than 40hrs to complete a course. It is not the purpose of regulations stipulating minimum course duration to predict the statistical distribution of candidates'

performance, since actual training times can vary due to a range of factors wholly unrelated to the training standards or syllabus (eg. a candidate's aptitude, experience, motivation, budget constraints, time and travel constraints).

Additionally, we believe the competence-based method should be available for the ME IR(A), and therefore recommend the following wording for an additional para (a1)

The flight instruction for the multi-engine competency-based modular IR(A) shall include at least 45 hours of instrument flight instruction by reference to instruments of which a maximum of 30 hours may be instrument ground training in an FNPT I or II. A minimum of 15hrs training must be in a multi-engine aircraft.

Point 6, Flight Instruction para (b) – specific comments

We strongly support the methods for crediting training and experience as detailed in para (b). We would note that these credits still result in requirements significantly in excess of ICAO or FAA standards, and that the "Competence Based" proposal is a compromise between fully competence-based training (which would only stipulate the minimum time needed to cover the syllabus, eg. 10-15hrs) and the present Modular IR. On this basis, we would oppose any adjustment to para (b) which reduces the credits available from PIC experience or independent instruction.

We believe the 10hrs required at an ATO is sufficient to ensure that the full IR syllabus is covered in a 'controlled' environment (we again point to the 10hrs requirement of the IRI course). We believe that both flight safety and accessibility are served by allowing candidates to practice and train with an independent instructor, since this will most easily permit training on the aircraft type and in the environment the candidate is most likely to fly in. The attached "FAQ" paper on the NPA contains further arguments in support of this point. We want to emphasise that the EASA Basic Regulation and Essential Requirements do not require flight training to be conducted exclusively at ATOs, in fact there is no minimum requirement for ATO training anywhere in the BRs or ERs. Whilst the ATO environment is successful in delivering high quality training to full time ATPL cadets, it is not able to offer the flexibility needed for IR training by mature candidates with work and family commitments that preclude a residential course at a remote location. The high standards of the ATO environment are of no value if pilots are unable to take advantage of these courses, and, as the RIA points out, under JAR-FCL the take-up of the IR by private pilots has been statistically very low. The additional factor is that of aircraft types available at ATOs. Most ATPL cadets will go on to fly aircraft which bear no resemblance to the light piston airplanes in a typical ATO fleet – therefore the actual training type is of little consequence. Conversely, many private CB-M IR candidates are likely to operate light aircraft types which are quite different from the training aircraft at an ATO. The ATO standardisation of instructors and training methods is of limited value for training on a candidate's own aircraft, which usually will feature performance and an avionics installation very different from that of a typical training aircraft. In this case, we believe that training standards and quality are improved by permitting, as proposed in Para 6(b), candidates to choose independent instructors to conduct a tranche of the CB-M course.

We also support the credit for instrument time as PIC (up to 15hrs). We note that under the ICAO and FAA systems, such credits do not require the

candidate to hold an instrument qualification (ie. a VFR-only pilot may credit time in simulated IMC when accompanied by a safety pilot). The Agency's proposal is considerably more onerous, and whilst we can accept this, we would strongly oppose any further restriction or reduction in this credit.

We also note that these two methods of training credit involving flight experience and instruction, and may only substitute for the FNPT2 hours of the 40hr course as specified in para 6(a). This means that no candidate will have a cost motive to qualify via the credits, since FNPT2 training will be cheaper than flying an aircraft. Therefore, we can anticipate that candidates will use the credits in circumstances when it better suits the type of aircraft and operation they conduct. Otherwise, any candidate has a clear economic motive to complete a 40hr course at an ATO using the maximum allowance for FNPT2 training. For this reason, we believe the 6(b) provisions should have minimal impact on Commercial training.

On this specific subject we also submit the attached ("PPLIR Attachment 2") article from "Flight Training Views" in which the comments of our Vice-Chairman, Mr Jim Thorpe, in respect of the NPA provisions for instrument flight training reflect our organisation's views.

Point 7: No comment

Point 8: Training credits for experienced ICAO IR holders

..in respect of para 8(b)

We welcome the intent of para 8(b) but believe there should be a clarification of the means the Agency will consider acceptable "to demonstrate...acquired knowledge". We believe an oral examination conducted by a IRE is the most practical method, and that there is little or no value in subjecting an experienced instrument pilot, who will be required to complete an extensive flight test with an examiner, to additional written examinations. We would recommend the following wording to be inserted at the end of para 8(b): (ie. as per FCL.725(b)(3))

the theoretical knowledge examination shall be conducted verbally by the examiner during the skill test

..in respect of para 8(d)

We believe the requirement for 100hrs of instrument flight time as PIC is too onerous. This might require 500hrs-1000hrs experience of flight under IFR, given that most IFR flights encounter only a few minutes of IMC. We presume the intention of the requirement is to provide an appropriate conversion process for genuinely experienced 3rd country IR holders, but, otherwise, to avoid allowing candidates to circumvent the provisions of para 6. We believe a requirement for 50hrs instrument flight time as PIC would be more reasonable and still meet these goals. 50hrs PIC instrument time is a very significant amount of experience requiring many hundreds of hours of "real world" IFR. 50hrs is also sufficient to prevent an ab-initio candidate seeking a 3rd country IR in order to avoid the training requirements of para 6.

Para 9: No comment

Para 10: No comment

response *Partially accepted*

Thank you for providing this comment and for your support of the new ratings.

The Agency has decided to allow EIR privileges to be exercised at night provided that a night rating is held in accordance with FCL.810. In addition, the Agency decided to introduce an IR(A) restricted to day only. With this change an instrument rating could be achieved without a night rating.

With regard to the EIR in combination with multi-engine rating, the Agency has developed a multi-engine EIR course. In addition, the Agency has reduced the instrument flight instruction to at least 2 hours in multi-engine aeroplanes for holders of a single-engine EIR. Single-engine skill test content remains the same as the multi-engine skill test. Please refer to the resulting text for exact details.

With regard to the EIR revalidation, the Agency has decided to keep the 1-year validity period. However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.

Please refer to the comment 121 by BGA as some of the items you mentioned were also raised by it. In addition, the Agency would like to highlight that cloud flying rating does not have a revalidation, but a recency requirement only. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months.

With regard to the competency-based IR theory requirements, the Agency believes that a minimum amount of hours will enable standardisation; however, it decided to further reduce the requirement to 80 hours. In addition, it was decided to delete the option to combine practical flight instruction with theory instruction.

Competency-based IR(A) practical flight training requirements, for both the single-engine and multi-engine course, comply with ICAO minimum requirements.

Part-FCL licence holders who also hold ICAO Annex 1 instrument rating may be credited towards the competency-based IR(A) training requirements. The Agency has decided to change the minimum experience requirement to 50 hours of flight time under IFR as PIC on aeroplanes for full credit. If the applicant does not meet the requirement for full credit, a certain amount of his/her ICAO compliant instrument flight time under instruction or PIC time can still be credited.

The skill test requirement was amended to allow an applicant to demonstrate an adequate level of theoretical knowledge (air law, meteorology, flight planning & performance) to the examiner during the skill test.

comment 80

comment by: *Alain Gautron*

With respect to requirement A.2.IR(A), paragraph 8(d), it is indicated that the applicant must have "a minimum experience of at least 100 hours of instrument flight time as PIC on aeroplanes".

The definition of PIC may vary from jurisdictions between European states and OACI states with respect to instrument training flight time. Certain states accept that IFR training be logged by a pilot as PIC although under the supervision of an instructor whilst other states do not allow logging PIC status for IFR training flights with instructor. In order to avoid any confusion, debate an most importantly the inequitable treatment for holders of licences from different OACI states, reference to PIC status of the instrument flight time should be dropped.

There is no reason not to take into account instrument flight training time (whether or not counted as PIC time in certain states). This time should be counted in the number of hours required to fulfill this requirement. Instrument flight training time is probably some of the most valuable instrument flight time for any pilot.

There is no lessening of standards if the PIC status is dropped from the minimum required instrument flight time requirement since by imposing 100 total hours of instrument flight time, the amount of time exceeds by more than double most OACI or European states' minimum requirements for training flight time before obtaining an IFR rating. (Most countries require 40 to 45 hours prior to examination.)

In addition, as a safeguard, paragraphs 8(a) and 8(b) ensure that a check of the pilotage skills, regardless of the number of hours will take place.

Requiring 100 hours of instrument flight time as PIC may, because of the way flight time may be logged in certain countries during IR training, result in pilots accumulating 140-145 hours (100 hours plus instrument training time if not permitted to be logged as PIC) of overall instrument flight time before meeting this requirement. This vastly exceeds the objective of these minimal requirements and surely cannot be the intention of the proposed text. EASA cannot justifiably say that an OACI IR rated pilot with 100 hours (dual and solo combined) which has just been tested in accordance with paragraphs 8(a) and 8(b) is not as safe or safer than a newly rated European pilot (40 hours).

It should be remembered that the objective of these regulations is to bring into the European regulatory framework a greater number of IR rated pilots, not to exclude them.

I therefore submit that this condition 8(d) be re-written as "have a minimum experience of at least 100 hours of instrument flight time on aeroplanes."

response *Partially accepted*

Thank you for providing this comment.

After receiving several other related comments, the Agency and the Review Group experts have decided to change the experience requirement to 50 hours flight time under IFR as PIC on aeroplanes.

comment 85

comment by: *George Knight*

FCL.830

(c) The sailplane cloud flying rating shall be valid for a period of 24 months. For the revalidation and renewal, the applicant shall pass a proficiency check.

May I suggest a validity period of 25 months to allow a full 24 month usage plus time to renew.

response *Not accepted*

Thank you for providing this comment.
The Agency would like to highlight that cloud flying rating only has a recency requirement, but no revalidation. For this reason and due to the fact that other ratings follow the same standard time frame, the 24-month requirement will be kept as is.

comment

97

comment by: *Peter KEUTGENS*

12) Appendix 6 - Modular training courses for IR - Section 2

...

A.2. IR(A) - Competency-based modular flying training course

...

6.(b) Part-FCL pilots holding an ICAO third country IR(A) but not meeting the conditions of paragraph 8 below may seek credit under paragraph 6.(b) for their hours of instrument flight instruction under supervision of, most likely, an FAA certified instrument flight instructor or for hours PIC instrument flight as a FAA rated instrument pilot. However the wording in 6.(b) leaves room for interpretation as to whether instrument flight time on the basis of an FAA IRA may be taken into account or not towards the maximum of 30 hours credit. The wording appears clear that credit should be possible for PIC instrument flight time on the basis of an FAA IRA, but if the FAA instrument rated pilot does not get any credit for dual time with an FAA rated instructor then that pilot would need at least an additional 25 hours of flight training with an EASA rated instructor. Under current JAR rules I believe that 10-15 hours of differences training is considered appropriate, so requiring a minimum of 25 hours additional hours instruction appear unnecessary.

My recommendation would be to allow up to 20 hours of open up bullet one of 6.(b) to all ICAO compliant flight instruction or add a third bullet allowing up to 20 hours of other ICAO instrument flight training to be taken into account towards the 30 hours credit. I believe that either solution would be consistent with a competency-based approach.

...

8. The requirement of 100 hours PIC instrument flight time for a Part-FCL PPL or CPL holder with a valid ICAO-based third country IR(A) is an awful lot for any pilot to accumulate, in particular a private pilot. If one assumes that an average flight under IFR may be 20% of the time in actual IMC, then this equates to 500 hours for the pilot to accumulate under IFR after obtaining the IR(A). My recommendation is that this should be reduced to a more realistic 50 hours or that all instrument flight time should be taken into account, including PIC and dual flight time with any ICAO-rated instrument instrument flight instructor.

response *Accepted*

Thank you for providing this comment. The Agency and the Review Group have discussed the issues. As a result, the Agency has developed an AMC to allow 15 hours of third-country flight instrument instruction time to be credited towards the 25-hour requirement. With regard to your comment on 100 hours

of PIC, the Agency reduced the PIC instrument flight time requirement to 50 hours for a Part-FCL PPL or CPL holder with a valid ICAO-based third-country IR(A).

comment 100

comment by: *Irish Aviation Authority*

In relation to paragraph (a) (1), It is not clear if the holder of this proposed EIR rating can file a VFR - IFR - VFR Flight plan - if so, is there a special designation to inform ATC that the pilot is limited in ability and privilege. Will the EIR pilot be sharing airways with other fully IFR traffic? For example: The inability of a pilot to comply with an IFR departure instruction when airborne in the vicinity of other full IFR traffic could cause significant disruption to ATC and possible loss of separation minima. Again, in relation to paragraph (a) (2), it is not clear what class of airspace it is intended to use this rating in - any aircraft entering IMC in the vicinity of other IFR traffic must be capable of accepting an IFR departure clearance in order to ensure separation, particularly in the event of a subsequent communications failure or emergency situation. NC21/11/11

response *Noted*

Thank you for providing this comment. The Agency would like to highlight that there is already a process for filing a VFR-IFR-VFR flight plan. These flight plans contain either Y or Z in item 8 and the change point is placed in item 15. It would also be possible to put a remark in item 18, such as 'RMK/EIR holder', but there is no requirement to do this. Since ATC has access to the flight plan, they will be aware that the EIR holder has not filed an IFR arrival or departure. The Agency acknowledges that there may be a need for some initial publicity so that ATC units are aware of the nature of the rating. EIR holders will be allowed to operate in any class of airspace as applicable to IR(A) holders.

comment 101

comment by: *Irish Aviation Authority*

In relation to paragraph (a) (3) -

The use of the word 'only' is un-necessary, - Furthermore - This statement seems to suggest that pilots who previously held an multi-engine class or type rating prior to the initial issue of an EIR (regardless of how long ago) are NOT required to undergo ANY training or checking in a multi-engine class or type so that they may fly under the proposed EIR rating.

response *Accepted*

Thank you for providing this comment.

After reviewing the proposals, the Agency agrees that an applicant for a multi-engine EIR needs to undergo training and checking in line with the single-engine EIR. Therefore, the Agency has amended FCL.825 to include requirements for obtaining a multi-engine EIR including a requirement to complete a skills test on a multi-engine aeroplane.

comment 102

comment by: *Irish Aviation Authority*

In relation to paragraph (a) (3) (b) -

response

Is this 20 hours cross-country as PIC a pre-requisite for the commencement of training or a pre-requisite for an EIR rating to be issued by a competent authority subsequent to training?

Noted

Thank you for providing this comment.

The Agency would like to clarify that the 20 hours requirement is a pre-course commencement requirement.

comment

103

comment by: *Irish Aviation Authority*

In relation to FCL.825 EIR - Training Course:

It is not clear here:

- 1) Who bears overall responsibility for the delivery, completion and overall oversight of the course?**
- 2) Is the course to be 'Approved' – If so who holds the approval, the ATO or the IRI / FI or both;**
- 3) Who must keep a record of the training course and for how long?**
- 4) Who 'recommends' the applicant for the skill test?**
- 5) Is it possible to use an FNPT2 or FSD on the course? (This is very important now given the advent of modern FNPT2s)**

Consider: The impact of the modern FNPT2 / FSD should be considered in the context of the perceived necessity for a 15 hour EIR pilot trained in an aeroplane – JAR FSTD approved devices are now widely available throughout Europe and drastically reduce the cost of a full modular IR. It would be preferable to encourage pilots to engage in a full training course resulting in the award of a full modular IR. Up to 40 hours of the modular IR course can be completed in a suitably qualified FNPT2 at considerably lower cost than in an aeroplane.

response

Noted

Thank you for providing this comment. Based on the comments received, the Agency decided to amend FCL.825. The Agency would like to clarify that the course will be provided by an ATO, with the possibility of crediting hours flown with an IRI(A) or FI(A)+IRI instructor outside an ATO. To record the training outside an ATO, the Agency developed an AMC training record. This record will be checked by the ATO in conjunction with the pre-course assessment. If the ATO identifies an instructor providing below-standard training outside an ATO, feedback should be provided to the competent authority via the normal established communication link between the ATO and the competent authority.

comment

111

comment by: *Peter GELDARD*

FCL 825 En-route Instrument Rating (EIR)

The creation of such an 'intermediate' rating (between a PPL and IR) is to be encouraged.

The creation of 'building block' training (and qualifications) – common in other parts of the world - can only be of benefit to aviation and its safety in Europe.

It would encourage more pilots – over a period of time – to advance in their skills and thus improve safety.

response

If a pilot has proven his ability to be awarded a **Night Rating** he/she should be allowed to exercise his EIR privileges in such an environment. *There seems to be no logic in restricting its use to 'only' daytime, unless such a person has physical limitations which would restrict his/her flying to 'day time only' – in which case he/she would NOT have been issued with a Night Rating.*

Accepted

Thank you for providing this comment.

The Agency has extended the privileges of an EIR-holder to conduct flights also by night under IFR and in IMC in the en-route phase of flight in case a night rating in accordance with FCL.810 is also held.

comment

112 comment by: Peter GELDARD

Point 8: Training credits for experienced ICAO IR holders
Para 8(b)

The intent running through para 8(b) is to be welcomed; especially as prior to its publication there was much concern and anxiety that well-qualified and high-hours IR pilots might be required to 'go back to school again' – with all the expense and repeat of fundamentals that that would entail.

The phrase "*to demonstrate . . . acquired knowledge*" needs to be clarified.

For those who have already been flying for many years within the European IFR environment **an oral examination** would seem to be the most practical method; but it would be useful – for both the candidate & the examiner – to know clearly in advance what area(s) would be covered and at what depth.

For those holding an ICAO IR, but without extensive experience of flying in Europe, *a single theoretical examination* – perhaps on Air Law, Safety and European meteorology might be appropriate. It would be hoped that if this was created that it would be possible to achieve it by **self-study** and that testing – by computer? – might be available easily at a variety of **testing centres** so as to ease costs and facilitate the process.

response

Accepted

Thank you for providing this comment.

After receiving feedback from stakeholders, the Agency in consultation with the Review Group experts has decided to change 8(b) to require an applicant to be able to only demonstrate the acquired level of theoretical knowledge to the examiner during the skills test.

comment

113 comment by: Peter GELDARD

Para 8(d)

Although many of us may have actually sought out IMC conditions for our original training, and may have achieved some 40/60 hours in such an environment; once qualified, although one might log many hundreds of hours 'under IFR', the nature of such flying is that throughout that later time one might only accumulate a few extra hours of actual 'extra' IMC experience.

Most IFR flights frequently have little or no IMC experience within them. It has been wisely said that although we have proved through test & experience that we can fly competently in IMC, most of us "fly IFR in order to avoid IMC, not to get in to it!"

To ask of people who are requesting to convert their ICAO IR to "have 100 hours of Instrument Flight as PIC" (in Instrument conditions) is, I believe, **too high a threshold**. I believe something like **50 hours total instrument time** would be more realistic and fully commensurate with safety.

response *Accepted*

Thank you for providing this comment.

After receiving several other related comments, the Agency and the Review Group experts have decided to change the experience requirement to 50 hours flight time under IFR as PIC on aeroplanes.

comment 125

comment by: *Alastair MacGregor*

It is essential that gliders be permitted to fly both within cloud and outside VMC. The SCFR should be available to LAPL(S) pilots as well as SPL pilots.

EASA should rethink the decision to reject the restricted cloud flying rating. This is the way gliders have operated in the UK and other countries for many years without any significant risk.

If gliders were restricted to VMC it would be the end of gliding in the UK.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(S)/SPL holders/restricted cloud flying rating) were also identified by BGA.

comment 137

comment by: *Peter GILL*

1) FCL830 Sailplane Cloud Flying Rating is essential for gliding safety in the UK and other countries with relatively low cloudbases in order to reduce the risks of landing away from airfields.

2) The 30 hours minimum PIC is reasonable.

3) 5 hours dual instruction is unrealistic in sailplanes, 3 hours would be sufficient and then only if training in TMG as for other aspects of advanced sailplane flying was accepted.

4) The 2 year revalidation is acceptable if included within the overall licence revalidation.

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

In addition, the Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation date.

comment

141

comment by: *Peter GILL*

Notwithstanding the introduction of a Sailplane Cloud Flying Rating, the basic gliding licence should permit flying up to cloudbase in order to reduce the incidence of field landings by glider pilots who have not attained the full SCFR. This will include those on first cross-country flights for whom the loss of 1000' will often prevent the safe completion of the planned flight, particularly in northern Europe where cloudbases are relatively low. Safer conduct of flights up to cloudbase could be covered within the basic sailplane pilot training.

response

Not accepted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

142

comment by: *Colin Field (UK Glider Pilot)*

FCL.830 Sailplane Cloud Flying Rating

We feel that, although the Sailplane Cloud Flying Rating and the formal training associated with it is a broadly good idea, the practicalities of achieving 5 hours of dual flight instruction are unworkable, especially since this would be required to take place in a Touring Motorglider (TMG) which, by regulation, is not permitted to fly in IMC. It is our recommendation that this time restriction is removed and replaced with an approval based on skills alone.

Furthermore, the proficiency check required to maintain the rating every 24 months should only be relevant to pilots who do not perform cloud flights during that time. Otherwise, this would be restrictive and irrelevant for pilots who are in current cloud flying practice.

It is important to note that sailplane pilots do not typically fly in cloud for more than 20 minutes at a time, and only on rare soaring days is this possible. This highlights the impracticalities and unrealism of requiring 5 hours of dual instruction, and any minimum number of cloud flying hours required to stay current in the rating.

RESTRICTED Sailplane Cloud Flying Rating, as proposed by the BGA

We have seen the British Gliding Association's recommendations regarding a 'Restricted' SCFR. We feel that, for safe gliding for all purposes, this is a vital system to implement, and would otherwise put at risk the future of the entire sport.

It is our recommendation that a Restricted Sailplane Cloud Flying Rating is implemented. This would permit flight close to the base and sides of cloud without reliance on cloud flying instruments, which is necessary for any form of thermal or wave soaring, and for any aerotow or winch launching at any gliding site.

This RSCFR should not require any flight training beyond that which is taught as

pre-solo flying skills training, and would be mandatory for any pilot who embarks on solo flight. It is accepted that some of the theoretical tuition for the SCFR may be necessary for the issue of an RSCFR.

Colin Field and Timothy Marlow
For and on behalf of the University of Bath Gliding Club
studentgliding@lists.bath.ac.uk

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

In addition, the recency requirements for SCFR have been amended. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 149

comment by: *Jonathan Coote*

I approve of and support the introduction of a rating which allows sailplane pilots to operate within cloud. This is a very beneficial development to the gliding community and will prevent the existing freedoms of the sport which are currently enjoyed safely from being unnecessarily limited by one-size-fits-all regulation.

I question the necessity of specifying a minimum of 5 hours of dual flight instruction as a requirement for the SCFR. This is a very significant length of time, and as most applicants for the rating will have already accumulated and applied the relevant skills over many years, it is an unnecessary stipulation. The essential requirement is that applicants are sufficiently skilled, and this requirement is already covered by the skill test.

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 155

comment by: *Robin Birch*

The choice of 5 hours seems a little arbitrary. It would surely be better to require the students to demonstrate a practical capability as some people will pick it up very quickly and some will take longer. It also allows people who have carried out instrument work in other environments to directly re-use these skills.

response *Partially accepted*

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

167

comment by: *David Trowse*

I suggest that EASA adopts the UK CAA practice of crediting instrument flight hours as equivalent to 4 times IFR hours.

I suggest that the IFR experience requirements for instructing for an EIR be reduced below those required for instructing for an IR.

response

Not accepted

Thank you for providing this comment. The Agency strongly believes that the instructors instructing for the EIR must have a full IR(A) to ensure an additional level of safety during training and to allow them to demonstrate the conduct of 2 IFR approaches in the context of an emergency.

comment

169

comment by: *Tony Perry*

I welcome and support the proposal for a Sailplane cloud flying rating.

In particular I believe that the point about the increased risk of (potentially hazardous) land-outs if cloud flying ceases to be permitted is well made and shows an understanding of the problems faced by sailplane pilots. I would add that swiftly changing cloud conditions are a particular hazard in the UK, which is why such a rating exists in this member state.

The only real reservation I have is the rigid requirement for 5 hours dual flight instruction; this may be difficult to achieve in a sensible timescale in a pure glider given the dependency on lift.

Whilst not diminishing the importance of experience, I believe that a lower hours requirement for dual instruction across a number of individual flights (not 1x5 hour session in cloud!) would enable a pupil to demonstrate consistent safe flying in a way more suited to pure gliders.

response

Partially accepted

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

171

comment by: *John McCullagh*

The proposal for a cloud rating for sailplanes is welcome. The majority of British glider pilots do not fly in cloud but since this proposal allows us to fly up to the base of the clouds, then I strongly support it. I would have preferred a rating for sailplane pilots to fly up to cloud-base in uncontrolled airspace that is separate from a rating to fly in cloud. Flying in cloud requires very different

skills and much greater training than when the ground is visible. In the UK the right to fly up to our low cloud-bases allows us to fly cross-country in uncontrolled airspace on many days when VFR would prevent this. In many countries already in Europe, some glider pilots fly up to cloud-base in uncontrolled airspace. This is safe if they remain in sight of the ground, but does not comply with the requirement to remain in VMC. Whenever a rule is ignored, even if it is minor, it allows a pilot to wonder if any other rule can be disregarded. Unnecessary restrictions bring necessary restrictions into disrepute. The UK's accident record shows that there are no disadvantages with this proposal for sailplane pilots to have a cloud-flying rating. I strongly urge that it should be retained to ensure that only respected rules are introduced.

response *Partially accepted*

Thank you for providing this comment and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 174

comment by: *Oscar Tjernberg*

The requirement that applicants "...shall be the holder of...including the privileges to fly at night." should be changed so that only to pilots who wishes to exercise the IR at night are required to have night privileges i.e. it should be possible to obtain a day time only IR. This is important for a large number of pilots that are not interested in night flight or are prohibited from night flight. This option would add flexibility and enhance access to the IR and thus be in line with the general purpose of the proposed amendment.

response *Accepted*

Thank you for providing this comment. The Agency has decided to restrict IR(A) to by-day only, unless a night rating in accordance with FCL.810 is held.

comment

176

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: 5) Subpart I – Additional Ratings
FCL 825 En-route Instrument Rating (EIR) (a) (1)

Page: 17

Relevant Text: (a) *Privileges and conditions.* (1) The privileges of the holder of an en-route instrument rating (EIR) are to conduct *flights by day* under IFR or in IMC in the en-route phase of flight, with any aeroplane for which a class or type rating is held

Comment: According to the text EIR is only valid for flights by day under IFR or in IMC?

Proposal: Clarification

response *Accepted*

Thank you for providing this comment.

The Agency has extended the privileges of an EIR-holder to conduct flights also

by night under IFR and in IMC in the en-route phase of flight in case a night rating in accordance with FCL.810 is also held.

comment

177

comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Section: 5) Subpart I – Additional Ratings
FCL 825 En-route Instrument Rating (EIR (a) (1)

Page: 17

Relevant Text:) *Privileges and conditions.* (1) The privileges of the holder of an en-route instrument rating (EIR) are to conduct flights by day under IFR or in IMC in the en-route phase of flight, with any aeroplane for which a class or type rating is held

Comment: EIR shall be restricted to non HPA aircraft.

Proposal: To conduct flights under IFR with an HPA aircraft shall require a full IR, not only EIR

response

Not accepted

Thank you for providing this comment.

The Agency and the expert Review Group discussed this issue and, as a result, the Agency decided not to limit the EIR privileges to non-HPA aircraft. The reasoning is that a pilot applying for a type rating for high-performance aeroplane needs to fulfil the additional requirements set in FCL.720(b). In case of high-performance complex aeroplane, an IR(A) is required as set in FCL.720(c).

comment

178

comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Section: 5) Subpart I – Additional Ratings
FCL 825 En-route Instrument Rating (EIR) (b)

Page: 18

Relevant Text: *Pre-requisites.* Applicants for the EIR shall hold at least a PPL(A) and shall have completed at least 20 hours of cross-country flight time as PIC in aeroplanes

Comment: An applicant should have more experience before the EIR or IR course.

Proposal: Keep the 50 hours of cross-country flight time as a pre-requisite for EIR and IR.

response

Not accepted

Thank you for providing this comment.

The Agency and the expert Review Group discussed this issue and, as a result, the Agency decided to keep the 20 hours cross-country flight time as PIC in aeroplanes. For competency-based IR the requirement is still 50 hours.

comment

179

comment by: *Swedish Transport Agency, Civil Aviation Department*

(Transportstyrelsen, Luftfartsavdelningen)

Section: 5) Subpart I – Additional Ratings
FCL 825 En-route Instrument Rating (EIR) (c) (2) (1)

Page: 18

Relevant Text: The instrument flight instruction for a single-engine EIR shall include at least 15 hours of flight time by reference to instruments. At least 10 hours of the required instrument flight instruction time shall be completed in an ATO. The remaining flight time may be completed under the supervision of an IRI(A) or an FI(A) holding privileges to provide training for the EIR;

Comment: Delete the possibility to train with an IRI without any responsibility for the training and no permission. We require a lot from the ATOs but for this training with an IRI (FI+IRI) there are no requirements for an approved training program, Management System (SMS), etc.

Proposal: All training shall be completed in an ATO.

response *Not accepted*

Thank you for providing this comment. Based on the comments received, the Agency decided to amend FCL.825. The Agency would like to clarify that the course will be provided by an ATO, with the possibility of crediting hours flown with an IRI(A) or FI(A)+IRI instructor outside an ATO. To record the training outside an ATO, the Agency developed an AMC training record. This record will be checked by the ATO in conjunction with the pre-course assessment. If the ATO identifies an instructor providing below-standard training outside an ATO, feedback should be provided to the competent authority via the normal established communication link between the ATO and the competent authority.

comment

180

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: Appendix 6 Modular training courses for IR
Flight Instruction 6. (a), (b)

Page: 21

Relevant Text: When the applicant has: - completed instrument flight instruction under the supervision of an IRI (A) or an FI (A) holding the privilege to provide training for the IR; or - prior experience of flight time by reference to instruments as PIC on aeroplanes, under a rating giving the privileges to fly under IFR or in IMC, these hours may be counted towards the 40 hours above up to a maximum of 30 hours. To determine the amount of hours credited and to establish the training needs, the applicant shall complete a pre-course assessment flight at an ATO. In any case, the flight instruction part of the training course shall include at least 10 hours of dual instrument flight instruction in an aeroplane at an ATO and the total amount of dual instrument instruction time shall not be less than 25 hours.

Comment: The minimum hours shall be the same as ICAO Annex 1. At least 40 hours dual instruction in an ATO. Applicants who hold an EIR may discount 15 hours of the 40 hours.

A maximum of 20 hours in a FNPT I or II and minimum of 20 hours in an aero plane. If a FFS is used the maximum shall be 30 hours in the FFS.

Proposal: Follow ICAO Annex 1.

response *Accepted*

Thank you for providing this comment. The Agency would like to highlight that the proposal for the competency-based IR(A) has been amended to follow ICAO standards and recommended practices.

comment

181

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: Appendix 6 – Modular training courses for IR – Section 2
Flight Instruction 7. (a)

Page 22

Relevant Text: - recognition and recovery from incipient and *full stall*;

Comment: Shall it be "full stall"? There are not many aero planes that allow a full stall maneuvering.

Proposal: Clarification

response

Not accepted

Thank you for providing this comment. The Agency would like to highlight that the same text is used for the IR(A), LAPL and PPL. The Agency therefore decided to keep the same text for the EIR.

comment

186

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: Appendix 6 A.2 6.(a)

Page: 21

Relevant Text: The flight instruction for the single-engine...shall consist of at least 40 hours of instrument flight instruction...

Comment: Is it possible to do the competency-based modular IR course entirely on a multi-engine aircraft? If so, how many hours are required? The proposed rule only covers single-engine requirements. The only requirement for multi-engine training is 5 hours for pilots already holding a single-engine IR.

Proposal: Add a paragraph that includes the requirements for a ME competency-based IR.

response

Accepted

Thank you for providing this comment. After receiving several similar comments, the Agency decided to add requirements for a competency-based multi-engine IR(A). Please refer to the resulting text for the course requirements.

comment

187

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: Appendix 6 A.2 5

Page:

Relevant Text: The minimum amount of classroom teaching as required by ORA.ATO.305 may be combined with the practical flight instruction.

Comment: This wording is unclear. What is meant by "combined with"? Could a course be created where 10 % of the classroom teaching only includes pre-flight briefings?

Proposal: Remove wording to make it more clear that 10 % of the theoretical

	<p>knowledge training is to be done in classroom and that this needs to include parts of the learning objectives.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving several similar comments by other stakeholders, the Agency and the expert Review Group discussed this issue. As a result, the Agency decided to amend the text by deleting the possibility to combine theoretical and practical training, but keep a specified amount of classroom teaching as stipulated by ORA.ATO.305.</p>
comment	<p>190 comment by: <i>Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</i></p> <p>Section: Subpart I Additional ratings FCL 825 (f)(3) (i) Page 18 Relevant Text: Complete refresher training provided by an IRI(A) or an FI (A)..... Comment: Under FCL 905.TRI – Privileges and conditions, the privileges of a TRI are to instruct for a) the revalidation and renewal of an EIR. Proposal: Add TRI in FCL 825 (f)(3)(i).</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency decided to include a TRI privilege to instruct for the renewal of the EIR.</p>
comment	<p>192 comment by: <i>British Gliding Association</i></p> <p>FCL830. The BGA is in sympathy with the concerns expressed by the UK CAA and others about the privileges of the rating including use in TMGs. It is essential, however, that training for this rating be possible in TMGs.</p> <p>Every TMG of which we are aware is restricted, by its Flight Manual, to VFR only. We would not recommend that any TMG pilot should fly under IFR.</p> <p>We would be content if use of the SCFR rating were to be prohibited in TMGs, but must repeat: It is essential that training for the SCFR be possible in TMGs.</p> <p>Recommendation</p> <p>We recommend that the following be added to FCL.830 “(d) The privileges of the Sailplane Cloud Flying Rating may not be exercised in a TMG”</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to your comment No 121 addressing the same issue. The Agency will address this issue.</p>

comment	196	comment by: <i>Midland Gliding Club</i>
	<p>I support the Sailplane Cloud Flying Rating proposal.</p> <p>I feel however that the 5 hour dual instruction requirement is too much. I would support having no limit due to the fact that as a specific skill test is required this would dictate the amount of training any specific glider pilot would need in order to pass the skill test, or if a limit is seen to be required I would like to see a lower minimum limit of say 2 or 3 hours</p> <p>I support the possibility of doing training in a motor glider as part of the training for a sailplane pilot.</p> <p>My justification for the above remarks is that in the UK the sport of sailplane flying has, through the BGA developed adequate training in all aspects of sailplane flying, including cloud flying, which I believe is required to ensure safer flying at those times where more height is necessary to ensure a safer landing and/or return to an airfield.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>	
comment	199	comment by: <i>Martin Hayden</i>
	<p>The requirement for 5 hours dual instruction is a huge expense just to learn something I have been doing for years. The 5 hours instruction in cloud would need to be completed in a Motor Glider with expenses of well over £500. This seems highly unnecessary and unreasonable.</p> <p>I support the need for a test with a qualified instructor and suggest this can be achieved in either a two seat glider or a motor glider without the need for a compulsory training period. The qualification should be skills based not time served.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>	
comment	203	comment by: <i>Robin Martinus</i>
	<p>As a pilot in the UK, I fully support the proposal FCL.830, with the exception of the requirements for 5hrs dual flight FCL830 (b)(2)(11). In summary, am in support of FCL.830 as proposed by the BGA</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>	
comment	207	comment by: <i>Croft Brown</i>

I am a glider pilot in the United Kingdom. I have been flying for 15 years, with over 1000hrs and FAI Gold Badge with 2 Diamonds. I also have a lapsed Basic Instructor rating. My BGA glider licence No. 722 was issued in 2002. My gliding club is Bowland Forest Gliding Club.

These comments are mine, not the gliding clubs.

For many years, I have regularly flown in Instrument Meteorological Conditions (IMC) while flying my glider. I climb in thermal lift to just below cloud base and then fly on the to the next source of lift to climb yet again to cloud base. This is the way that most sailplane pilots fly many kilometres. At other times I fly in wave to many thousands of feet, with due regard to airspace restrictions, to cover huge distances above cloud. When the lift is no longer available, I then descend either through gaps in clouds or through the clouds with the appropriate Artificial Horizon and Turn and Slip instruments to get below cloud level before landing.

Will I have the right to continue with my current practice or have I to go through some training programme to do what I am doing already? (I don't expect an answer to this rhetorical question)

The British Gliding Association are the governing body for Gliding within the United Kingdom. They have responded to this NPA in their own right and their comments are endorsed by me in all respects. Their comments are summarised below.

1. The Sailplane Cloud Flying Rating is essential for the safe operation of gliding in the United Kingdom and consider it is essential that the privilege is maintained.
2. The BGA membership have a safe record of cloud flying and it has never needed to put a specific figure on the training requirements to exercise their privilege.
3. The BGA require the training to be conducted in TMGs but would accept pilots be prohibited from exercising the privilege of the SCFR in TMGs
4. I agree with the BGA that a restricted SCFR be re-considered by EASA.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 208

comment by: *Richard Slater*

6) Subpart I – Additional Ratings
Sailplane Cloud Flying Rating. page 18

Because achieving the rating is dependant on passing a skill test a requirement of 5 hours training is not required. For some pilots 5 hours will not be sufficient to attain the required standard and for others with suitable experience 5 hours will not be required to meet the skill level and thus it will introduce further and unnecessary expense.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment	213	comment by: <i>Richard Abbott</i>
	<p>Although I can appreciate from an inexperienced perspective that some might think a rating is required to fly in cloud, the reality is different. Cloud flying is an acceptable way of gaining height on a cross country flight, and those sailplane pilots that choose to use this method are experienced pilots who self-regulate the training required and the experience necessary to successfully cloud fly safely. Does self regulation work - yes, 35 years of accident statistics in the UK confirm that self regulation has not resulted in the need for additional rules.</p>	
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.</p>	
comment	220	comment by: <i>Doug WILSON</i>
	<p>This minimum period for sailplane cloud flying (in FCL.830, b (1)), linked to the proposal for a skills test in b(3), represent a sensible level of experience and training. However, the addition of the required training in b(2), in particular 5 hours dual flight instruction appears to be overly prescriptive and unnecessary.</p> <p>By way of compromise a 2- 3 hour period of dual flight instruction would be appropriate, particularly if this formed part of the skills test.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>	
comment	221	comment by: <i>Doug WILSON</i>
	<p>In order to avoid the privilege of the Sailplane Cloud Flying Rating being misused by Touring Motor Glider pilots, this could be added as a specific exclusion, except for instances of instruction.</p>	
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>	
comment	222	comment by: <i>Doug WILSON</i>
	<p>Would request that a Restricted Sailplane Cloud Flying Rating be reconsider to allow flight clear of cloud but under IFR conditions where airspace restrictions allow. This restriction should be based on, as a minimum the theoretical knowledge required for the full Sailplane Cloud Flying Rating.</p>	

response *Not accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 225

comment by: *Stephen HALEY*

FCL.830 Sailplane cloud flying rating

It is essential that this rating is enacted. UK safety records indicate there is no reason to curtail this and if curtailed then it would severely impact on our sport. It should be recognised that sailplane cloud flying normally only entails climbing within cloud and rarely cruising for any extended period of time in IMC conditions. There is a case for a secondary restricted licence that would allow flying within 1000ft of cloud but not within cloud itself.

b) Part 1 - 30 hrs is too little this should be extended to 50-100hrs.

b) part 2 ii) The no of hours should be lowered to 2-3 and the instruction should be allowed in a TMG using the necessary aids to restrict pilot but not instructors vision in normal VFR conditions. In no way do I support the use of the rating in a TMG.

5 hrs IMC in a glider could easily amount to 20+ flights . Alternatively a percentage of ground time in a suitable simulator max 40% of total should also be allowable.

Rating should be renewed with licence

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (Restricted SCFR/5 hours training/ use of TMG) were also identified by BGA.

In addition, your comment on increasing the FCL830(b)(1) 30 hours PIC requirement to between 50 and a 100 hours is not accepted as no justification is given.

Finally, the Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation date. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 232

comment by: *john NORTH*

The skill test for the Sailplane Cloud Flying Rating should be the sole criterion for acceptance.

The 5 hour instruction requirement is superfluous and should be removed.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue. The minimum required training will be lowered to one hour flight training on sailplanes.

comment

235

comment by: *J burrow*

FCL.830

(2) subsection 2

Defining a set training time is not the best way here. some pilots will be competent withing about 1 hr and others may take 5 hrs. It all depends upon the pilot's experience and aptitude. The Examiner will pass or fail candidates according to their ability so how many training hrs the candidate has flown is irrelevant. If you must have a minimum then 1.5 to 2 hrs would be acceptable.

response

Partially accepted

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue. The minimum required training will be lowered to two hours flight training on sailplanes or powered sailplanes. At least one hour has to be flown on sailplanes, the remaining hour could be flown on TMG. As an alternative solution a certain number of take-offs will be introduced as well.

comment

244

comment by: *wy davies*

As a glider Pilot, I see these proposals for cloud flying rating as very realistic and would enable the continued flying close to and in cloud when safe to do so. I reccomend the adoption of this Skills Test.

response

Noted

Thank you for providing this positive feedback.

comment

251

comment by: *Michael Cartney*

FCL 830 Sailplane Cloud Flying Rating

The principle of this rating is a good one as it will enable the operational range of sailplanes to be extended, and in an emergency or when caught above cloud will enable a safe descent to be made through cloud.

response

Noted

Thank you for providing this positive feedback.

comment

253

comment by: *PhilKING*

Regarding:

FCL.830 Sailplane Cloud Flying Rating

(2) a training course at an ATO including:

(ii) 5 hours of dual flight instruction, controlling the sailplane solely by reference to instruments;

The specification of a minimum time is unnecessary. Provided that the pilot can pass the skill test successfully then there is no need for the pilot to spend a specific time under training.

(c) The sailplane cloud flying rating shall be valid for a period of 24 months. For the revalidation and renewal, the applicant shall pass a proficiency check.

In the UK there has never been any requirement for revalidation and renewal of cloud flying competency. I have been on the BGA Safety Committee for 3 years and have access to comprehensive sailplane accident data for the UK covering the last 36 years and there is no safety case for this requirement. The revalidation and renewal requirement should be deleted.

response *Partially accepted*

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 277

comment by: *Carwyn Grange*

Ref Page 18 **Additional ratings**

My personal view on this matter is that it will add unnecessary expense, for little gain in safety. On balance most glider pilots that have attained bronze and cross country endorsements have already undergone more than 5 hours flying P2 with an instructor within the parameters of the proposed rating.

Therefore the taking and upkeep of an additional rating for cloud flying would appear excessive in view of the stringent training criteria. That a glider pilot had already had to go through in order to fly solo.

response *Not accepted*

The Agency acknowledges your comment.

However, the Agency would like to highlight that the reasoning provided is not correct. The future training for a sailplane pilot licence does not contain any exercise for flying in clouds. This is the reason why all gliding experts involved voted for a specific additional rating. The Agency therefore kept the decision to create a specific rating for flying in clouds.

comment 301

comment by: *Albert Jackson*

The requirement for a minimum of 5 hours of dual instruction is excessive. In my experience, a competent sailplane pilot can master cloud flying with 1 hour of dual instruction or less. Consequently SCFR rating should require no more than a minimum of 2 hours of dual instruction. This would allow a 100% margin for the minority of pilots that may struggle to achieve the necessary proficiency.

response *Partially accepted*

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training TMG) was also identified by the BGA.

comment 309 comment by: *Mike Armstrong*

Page 19 6) Subpart I - Additional Ratings FCL.830 (b)(2) (ii). As stated in my second paragraph of comments I would support deleting this clause or at least reducing the requirement to 1 hour since award of the license requires a skill test.

Page 19 6) Subpart I - Additional Ratings FCL.830 (c). I would propose to remove the renewal requirements "provided that the privileges of the licence have been exercised for at least 1 hour in the preceding two years."

response *Partially accepted*

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 321 ❖ comment by: *Julian RICHARDSON*

Page 11, 3.2 and Page 19, 6) (b) (2) (i): Sailplane Cloud Flying Rating (SCFR); requirement for 5 hours of dual flight instruction

Specifying a minimum number of hours of dual flight instruction for this type of competency-based qualification would be counter-productive, for the following reasons:

- The training which delivered the exemplary UK record for safe sailplane cloud flying has never included minimum hours requirements.
- Time spent learning is no guarantee of competency. Competency

demonstrated by assessment (the Skill Test) is the most reliable method of ensuring standards are achieved.

- The number of hours of required instructional time varies considerably between students; enforcing a 'one-size fits all' hours requirement may be insufficient for some students and may result in frustration and a negative perception of the training process for faster learners/more experienced pilots. Frustration and negative perceptions of the training process could lead to negative attitudes to flight training with potential safety implications. This comment applies to many aspects of flight training and is not specific to the SCFR.

Therefore, I urge that minimum hours requirements should not be mandated.

However, if this is unavoidable please consider the difficulties of achieving this in sailplanes where the average training flight time is measured in minutes, and reduce the requirement to 1-2 hours.

Page 11, 3.3 and Page 19, 6) (b) (3): Sailplane Cloud Flying Rating (SCFR); Skill Test

Implementing a skills test makes this an 'assessed, competency-based qualification'. **I strongly support assessed competency-based qualifications.**

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 335

comment by: *Dick Dixon*

FCL.830 (b) (2) (i) Many experienced glider pilots will not need anything like 5 hours training in order to achieve the required standard to control the sailplane solely by reference to instruments. I suggest this requirement is deleted and replaced with "Sufficient time as might be required to satisfy the instructor that the trainee has achieved the required standard." Failing this, I suggest that the mandatory training time be reduced to 2 hours minimum.

response *Partially accepted*

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 345

comment by: *MarkDAVIS*

The requirement to complete 5 hours dual flight instruction for the SCFR is excessive. Most instructional flights in sailplanes are less than 1 hour in

duration with the average being 30 minutes. With take off and landing taken into consideration the time left per flight for flight controlled solely by reference to instruments would likely be less than 10 minutes per flight. This would therefore require an excessive number of flights to achieve the 5 hours required.

Those pilots requiring a SCFR would already be skilled in aircraft handling and would not require 5 hours to master flight controlled solely by reference to instruments. 2 hours should be ample to demonstrate the skills required.

For those pilots who do not wish to fly up to, but not in cloud, an RSCFR would yield the best solution for improved safety.

response *Partially accepted*

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment 349

comment by: *Mike FLYNN*

AMC1 FCL.825 does not adequately define the detail arrival procedures in marginal VFR.

Propose the EIR pilot file a VFR transition before the IAF and be allowed to descend to the MVA or Minimum Safe Altitude (1000 feet above the tallest obstruction within 5 miles) with a requirement to be in VMC prior to further descent. Requiring transition to VFR at the Minimum Sector Altitude can result in unreasonably high transition points.

This is the common operational approach for transitioning from IFR enroute to an arrival at a VFR field.

If the requirement to transition to VFR is too far from the field there is a risk that the transition will need to be planned in a location with materially different weather than observed at the destination.

This still has EIR pilot clearly transitioned to VFR before commencing a segment of the actual instrument approach.

response *Accepted*

Thank you for providing this comment. The Agency, after receiving several similar comments, has deleted the requirement to have an IFR/VFR transition point prior to the IAF. Instead, the text now includes a requirement to file a flight plan in accordance with operational rules and should state an IFR/VFR transition point. A significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports.

In any case, an EIR pilot should be in VMC conditions within 1 000 ft above the highest obstacle within 5 nm of the aerodrome reference point.

comment 350

comment by: *Mike FLYNN*

	<p>III,1,1.2 defines the transition from IFR to VFR be achieved before reaching Minimum Sector Altitude. In a radar environment this is unreasonably restrictive. This should be the lower of MSA, Minimum Vectoring Altitude or Minimum Safe Altitude (As defined for IFR operations).</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that this is training requirement. For minimum ATC requirements, please refer to AMC1 to FCL.825.</p>
comment	<p>352 comment by: <i>Mike FLYNN</i></p> <p>AMC1 FCL.825 directs that at no time should an EIR pilot accept an arrival, approach or departure clearance. The prohibition against accepting a departure clearance will require a pilot departing VFR in say 1500 ft overcast to initially be cleared VFR and then re-cleared enroute IFR in a short time scale. Propose the pilot be allowed to receive and an expected IFR clearance with a clearance valid from 1000ft AGL. This may only be issued if the reporting ceiling is not lower than 1000 ft.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The privileges of the EIR are only to be exercised in the en-route phase of flight and, for this reason, the holder of an EIR should at no time accept an IFR clearance to fly a departure, arrival or approach procedure (GM1 FCL.825). The EIR pilot will be able to file a flight plan where he/she indicates the point for transferring from VFR to IFR rules and also again from IFR to VFR rules and can have a clearance for the route already on the ground.</p>
comment	<p>354 comment by: <i>Mike FLYNN</i></p> <p>For converting third country ICAO IRs, the demonstration of knowledge should allow multiple methods of compliance including,</p> <ul style="list-style-type: none">• an Oral examination by the IRI conducting the flight check. (preferred option) <p>the identified subset of the Competency IR exams</p> <p>The demonstrated knowledge requirement should focus on those aspects of European IFR flight that are different from ICAO standards and as such would not have been included in the Theoretical Knowledge for the third country IR.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving feedback from stakeholders, the Agency in consultation with the Review Group experts has decided to allow an applicant to be able to demonstrate the acquired level of theoretical knowledge to the examiner during the skills test.</p>
comment	<p>355 comment by: <i>Mike FLYNN</i></p>

	<p>8 (d) minimum experience</p> <p>The requirement for 100 hours of PIC flight by sole reference to instruments is unreasonably high and should be 100 hours IFR flight under ATC control.</p> <p>Most IFR operators will climb to a clear level for enroute so the fraction of time spent in actual IMC will typically be low relative to the time subject to ATC IFR procedures.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving feedback from stakeholders, the Agency in consultation with the Review Group experts has decided to reduce the minimum experience requirement to 50 hours flight time under IFR as PIC on aeroplanes.</p>

comment	<p>357 comment by: <i>Alec STEVENSON</i></p> <p>I support the proposal to allow gliders to fly in cloud by means of a Sailplane Cloud Flying Rating. The existing, good safety levels in the UK will be maintained and training for such flight may be better structured. The use of rising air in clouds is a valuable resource for cross-country glider flights, and the use of mountain wave sometimes requires an eventual descent through clouds.</p> <p>It would also be useful to most glider pilots to be able to use thermals to as great a height as possible but without entering cloud - that is, up to cloud base. It is disappointing that the proposals do not include some sort of provision for a less onerous rating to permit such flight without contravening Visual Flight Rules.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.</p>

comment	<p>361 comment by: <i>Colin Hamilton</i></p> <p>RESPONSE TO NPA 2011-16</p> <p>I have been a sailplane pilot since 1976; a gliding instructor since 1983; I have all 3 FAI diamonds and a UK 750km diploma for cross-country soaring. I have recently been appointed a British Gliding Association Regional Examiner for Scotland. Additionally, I have a CAA Flight Instructors Rating for NPPL (SLMG).</p> <p>I therefore have over 35 years experience as a participant and instructor and have a keen interest in the regulatory environment pertaining to both sailplane and light aircraft pilots.</p>
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It is important that any regulation is proportionate to the problem perceived to require regulation. The British Gliding Association as the Governing body of Gliding in the UK has successfully governed the sport for over 35 years and has managed the safety of UK gliding in a self regulated environment during this time. This is seen by all pilots as being proportionate. The safety record of UK gliding demonstrates that this arrangement has worked satisfactorily and there is therefore no need for further complex regulation.

In my time gliding, flight within and near to cloud has been an essential part of the sport. I find it quite worrying that proposals should exist, which would effectively prohibit *flight near cloud* unless pilots meet additional training and licensing requirements. There are significant additional hazards that would be introduced to gliding activity if pilots weren't allowed to fly near cloud. An Acceptable Means of Compliance with the absolute minimum amount of additional training or licensing should be brought forward within these proposals which will allow sailplane pilots to continue to fly near to cloud without requiring extensive additional training.

Gliding flight *within cloud* has been practiced in the UK for many years. Often competency in this has been gained in an informal manner but nevertheless competency has been demonstrated as evidenced by the very minimal incidence of accidents occurring in this flight environment. Perhaps some degree of formal training / testing needs to be introduced. This needs to be proportionate and should only be competency based and not have a minimum number of training hours associated with it.

Generally, I support, the main elements of the proposed Sailplane Cloud Flying, however I would offer the following detailed comments:-

1. SPL & LAPL(S)

The SCFR is a welcome proposal.

It essential that this privilege is available to both SPL and LAPL(S) holders.

2. Flight Training for the SCFR

This qualification should be competency based. If a specified skill test is in place, there should be no requirement to specify a minimum amount of dual flight instruction. It takes whatever it takes to reach the required level of competency.

3. Touring Motor Gliders

If the SCFR is to become a reality then there must be suitable aircraft in which to train pilots for it. The typical club training 2 seater sailplane would not be suitable as the number of times they could be taken to fly in cloud would be limited. TMGs however would be the ideal aircraft in which to train students for the SCFR.

4. Restricted SCFR

At earlier stages in the development of this NPA there had been proposals that, in addition to the SCFR, a Restricted SCFR be made available for flight under IFR but clear of cloud. For the reasons described in my initial comments above, I believe such provision to be essential in order not to introduce additional hazards into our sport. In this respect, I support the BGA's suggestion for a RSCFR.

Summary

	<p>1. I support the proposal for a SCFR for both LAPL(S) & SPL holders.</p> <p>2. I do not support the requirement for 5 hours dual training for the SCFR. A competency test along with theoretical study is all that is required.</p> <p>3. Training in TMGs is essential for the SCFR to be readily achievable for the majority of sailplane pilots new to the practice of cloud flying.</p> <p>4. A Restricted SCFR option is essential for flying near cloud in certain classes of airspace and should be included in the EASA proposals.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>370 comment by: <i>Philip James Warner</i></p> <p>EASA has suggested that the test for the SCFR should be competency based. It therefore seems unnecessary to also specify an hours requirement. Some pilots who already fly in cloud in member states that permit it make reach proficiency in less than 5 hours, whereas other might take more than five hours.</p> <p>If an hours requirement is deemed necessary, a lower minimum number of hours prior to the test, perhaps two or three would be sensible.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>372 comment by: <i>peter HICKS</i></p> <p>FCL.830 Sailplane Cloud Flying Rating Section (b) 1) 30 hours as PIC is OK</p> <p>2a) theoretical knowledge is OK, glider pilots should know this.</p> <p>2b) 5 hours dual instruction is excessive because it takes no account of total sailplane hours or range of conditions and terrains encountered gaining flying hours. 5 hours is also excessive because the safe application of this rating depends on the proficiency acheived rather than adherence to a stipulated number of hours.</p> <p>3) is fine. Theoretical knowledge and the skill test should be the only criteria for issuing a SCF Rating.</p> <p>Section (c) 24 months seems short. In my experience cross country glider pilots fly frequently (for pleasure) and will maintain their skill base in the process. A longer period between proficiency tests wouldn't adversely affect safety. Perhaps 60 months.</p>
response	<p><i>Partially accepted</i></p>

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation.

comment

375

comment by: A Darby

Whilst a 5 hour minimum might be appropriate for someone who has never flown on instruments alone, is this really appropriate for someone who either has instrument time in a single or multiengine aircraft or has been sailplane cloud flying prior to this requirement being introduced. I agree that some time is sensible to ensure consistency but perhaps a transition period could be considered where the minimum of perhaps one hour is acceptable given that there is still a requirement to pass the skills test. I am suggesting this based on the number of people capable of passing the practical based on current skills (from glider or aeroplane flying). Two years after introduction of the rating it would be more acceptable to increase to 5 hours (with cross crediting from powered aircraft) as those with the skills prior to the introduction of the rating will have had the opportunity to pass the rating.

A second concern is the availability of instructors for the number of people requiring the 5 hours. Most glider pilots will fly up to cloud base (assuming airspace allows) where this is above 3000' when they get to 1000' below the cloud they are in IMC and so require a cloud rating.

This will probably mean that 90% of glider pilots with more than 30 hours P1 will want a cloud rating. (Based on the number of pilots wanting to fly within 1000' of a cloud above 3000'). If you take the number of pilots this equates to and multiply it by the number of hours required how long will it take to instruct all of these pilots many of which already have the required skills.

Also consider that a glider pilot normally only does three things in cloud. These are a thermalling ascent starting visually below the cloud with the turn only maintained until 2, a transition from turning to straight to exit in the direction of the intended turnpoint or 3, a descent through cloud in an emergency if trapped above.

If the instruction is to be performed in a glider in real cloud only half of the time could be spent in cloud with the other half spent descending and finding another cloud to climb into. If the cloud is simulated then the instructor will have to find the thermals as this is normally done visually below cloud even if in IMC (above 3000' but less than 1000' below the cloud). These factors mean that even achieving 5 hours will probably take significantly more than 5 hours in the air.

(5 hours by instruments plus the extra for takeoff and landing

response

Partially accepted

Thank you for providing your comments.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

Furthermore, the Agency partially accepts your comment on prior instrument experience and has added an additional condition under FCL.830 (b)(4) stating 'holders of an EIR or an IR(A) will be credited in full against the requirements of (b)(2)(i) and (ii)'.

comment 392 comment by: C Crocker

I strongly support the proposed Sailplane Cloud Flying Rating.
I would like to see a Restricted Sailplane Cloud Flying Rating implemented as well.

response *Not accepted*

Thank you for providing your comments and your support for sailplane cloud flying rating.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted sailplane cloud flying rating) was also identified by BGA.

comment 393 comment by: C Crocker

The 5 hours of instruction required for the Sailplane Cloud Flying Rating is way too much. Cloud flying is a skill. If the pilot can demonstrate the skill with just one hours flying then why waste their time and money with more compulsory flying. They may have done a lot of cloud flying before the regulations came in.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 405 comment by: Ian Carrick

Once the new sailplane licences have been set up, initial issue to currently experienced pilots should not require a further 30 hours for the issue of a SCFR.

response *Noted*

Thank you for providing this comment.

Previous experience may be credited towards a Part-FCL licence and/or rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. The Agency will support the UK CAA in finding a solution to this issue.

comment 413 comment by: UK CAA

Page No: 16

Paragraph No: B.I. 1 - Subpart A, FCL.035(4)

Comment: The text seems to be corrupted/incorrect? Add the words "in another" between "IR" and "category".

Justification: "... and an IR category of aircraft when...." does not read correctly. We believe this part of the text should be the same as in the proposed FCL.035(3).

Proposed Text:

"(4) Notwithstanding (b)(3) above, and examination for an IR in another category of aircraft....."

response *Noted*

Thank you for providing this comment.

comment

414

comment by: UK CAA

Page No: 17,18,19
Paragraph No: Various

Comment: The UK CAA notes that Night Flying privileges are a pre-requisite for the Modular IR only, which means that the Cloud Flying Rating and the En Route Instrument rating will be available to pilots who suffer from colour vision problems. This is appropriate and the UK CAA would not support the night privileges being added as a prerequisite to the Cloud Rating or EIR as a result of this consultation.

Justification: The Cloud Flying Rating and the EIR should be available to pilots who cannot obtain night privileges.

Proposed Text: None.

response *Noted*

Thank you for providing this comment.

comment

415

comment by: UK CAA

Page No: 17, 18, 19
Paragraph No: Various

Comment: It is not clear whether the training courses must be approved by the Competent Authority. The UK CAA believes that they should be approved and that the approval should include how credit will be given for any previous training and experience obtained before attending the ATO.

Justification: As the Modular IR and the EIR may be added to a professional licence, and the EIR/Cloud Rating training may give credit towards the Modular IR, the UK CAA considers that all of the courses must be approved by the Competent Authority and the course approvals held under the approvals of ATOs. For these various instrument ratings to be issued it will be appropriate to require the Head of Training of the ATO to sign a declaration that the pilot has complied with all of the requirements and has completed the course as approved by the Competent Authority.

Proposed Text:

FCL.825(c) - Training Course - Replace the first line with -
"Applicants for an EIR shall have completed, within a period of 24 months, an approved course including:"

And on page 19

FCL.830(b)(2) - Replace the first line with -

"(2) an approved training course at an ATO including:"

And on page 21

A.2.IR(A), (4) - Replace the first line with -

"4. The course shall be approved and shall comprise:"

response *Noted*

Thank you for providing this comment. Based on the comments received, the Agency decided to amend FCL.825. The Agency would like to clarify that the course will be provided by an ATO, with the possibility of crediting hours flown with an IRI(A) or FI(A)+IRI instructor outside an ATO. To record the training outside an ATO, the Agency developed an AMC training record. This record will be checked by the ATO in conjunction with the pre-course assessment. If the ATO identifies an instructor providing below-standard training outside an ATO, feedback should be provided to the competent authority via the normal established communication link between the ATO and the competent authority.

comment 416

comment by: UK CAA

Page No: 18 and 21

Paragraph No: Page 18, Para (c)(2)(i) and page 21, Para 1 and 6(b)

Comment: The Modular IR and EIR allow for part of the training to be conducted by IRI(A) or FI(A) who have no association with an ATO.

It is recommended that all references to training outside ATOs by IRIs and FIs be deleted.

Justification: The course must be finished at an ATO and the ATO will conduct an assessment of the final training required. There may be problems with this in practice if ATOs frequently reject the training hours conducted by independent IRIs and FIs. Also, as almost all other training, including training for the standard IR, is carried out within ATOs, will there be many IRIs and FIs (in good current practice) who are not within ATOs?

Proposed Text:

Delete references to IRIs and FIs in the paragraphs referenced.

response *Not accepted*

Thank you for providing this comment.

After receiving similar comments on the issue, the Agency and the Review Group discussed the issue again. The outcome of the discussion was that the current proposal is still supported. The Agency and the group strongly believe

that the pre-course assessment will establish the level of competence of the student on which subsequent ATO training needs can be based.

comment

418

comment by: UK CAA

Page No: 18 and 19
Paragraph No: FCL.830

Comment: It should be made clear that the privileges of the cloud rating do not apply to TMGs

Justification: The TMG rating may be added to the LAPL(S) and SPL and also to the LAPL(A), PPL(A), CPL(A), MPL(A) and ATPL(A). The TMG has the characteristics of a powered sailplane and of an aeroplane. The holder of an aeroplane with TMG rating will have to complete the 15 hours EIR course to obtain an EIR in order to fly a TMG in IMC. But the holder of a sailplane licence may fly in cloud after completing Sailplane Cloud Flying Rating which requires only 5 hours instruction. This would be inconsistent. The Sailplane Cloud Flying Rating is intended to meet the particular needs of sailplane pilots to fly close to and within cloud in soaring flight. This rating is not intended to facilitate continued straight and level powered flight within clouds, which is what the EIR provides for.

It is necessary to use TMGs to provide the instruction for the Cloud Rating, but it would be unusual to fly within cloud whilst doing this. The normal practice when giving instruction or practice in instrument flying is for the external view of the student to be blocked - by a hood, screens, or other means - while the aircraft is flying in VMC with the instructor looking out for other aircraft. Thus it is not necessary to have the cloud flying rating available for TMGs to enable instrument training to take place.

If the Cloud Flying Rating is not valid in TMGs it will prohibit any pilot who does not have an IR, Modular IR or EIR from flying a TMG within certain distances of clouds at particular altitude. However, this is no different from the current position in many countries.

Proposed Text:

In FCL.830 add

"(d) The privileges of the Sailplane Cloud rating shall not be exercised in a TMG"

response

Accepted

Thank you for providing this comment.

The Agency and the Review Group experts agree with the UK CAA and have added text to FCL.830 to exclude a TMG, as proposed, from exercising the cloud flying privilege.

comment

424

comment by: Cambridge Gliding Centre

Cambridge Gliding Centre strongly support the SCFR as being necessary for the safe operation of gliders in the UK. Without it not only will gliding be less safe, but the sport is likely to be significantly adversely affected financially.

The requirement for 5 hours of dual flight instruction is excessive, given the limited requirements of glider flying in cloud. It should be replaced with a competence based assessment.

We support the BGA's position on the use of TMGs for training for the SCFR. It should be possible to train for the rating in a TMG, but it is not advisable that a TMG should fly in IMC.

We consider that the Restricted SCFR is a useful proposal and should be reinstated, since there are many occasions when it is necessary to fly a glider close to cloud, whether cross country or in wave, and a full SCFR is not needed to safely use this privilege.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment

427

comment by: UK CAA

Page No: 16

Paragraph No: B. I. 2) Subpart G

Comment:

JAR-FCL 1.017 allowed for national ratings not included in JAR-FCL to be added to JAR-FCL licences and used in the airspace of those countries only, as follows:

JAR-FCL 1.017 Authorisations/Ratings for special purposes

Authorisations/Ratings for special purposes associated with a licence (e.g. IMC flying, towing, aerobatics, dropping of parachutists, etc.) may be established by the Authority in accordance with the requirements of that JAA Member State for use solely within that Member State's airspace. The use of such an authorisation/rating in another JAA Member State's airspace requires the prior agreement of the State(s) visited, except where a bilateral agreement exists.

Retaining a similar requirement in Part-FCL would satisfy the needs of UK pilots wishing to gain the UK IMC Rating in the future.

Justification:

It is noted that that Article 4 of the Aircrew Regulation was amended at the EASA Committee to make provision for Member States to allow pilots to exercise limited privileges within the airspace of the Member State concerned before qualifying for a LAPL.

The UK IMC Rating may be regarded as an interim step towards obtaining the EIR or the modular IR. It is proposed therefore that by analogy a similar provision may be made for national ratings for flight under IFR to be exercised within the airspace of the relevant country only.

Proposed Text:

FCL.600 IR - General

(a) Except as provided in FCL.600(b) and FCL.825, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

	<p>(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR in the airspace of that Member State only, provided that the pilot holds the national qualification of that Member State appropriate to the circumstances of the flight.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The existing national ratings such as UK IMCR may be credited towards Part-FCL ratings during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>430 comment by: <i>John SAVAGE</i></p> <p>A minimum of 5 hours of dual training seems to me to be more than required for many pilots. They will have to pass a skills, ensuring an acceptable level of ability.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>434 comment by: <i>Edward MATTHEWS</i></p> <p>Previous instrument flying training should be credited, such as the instrument awareness / flight training that is required for NPPL and PPL training.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that prior PIC instrument flight time or instrument flight instruction provided by an IRI(A) or FI(A) holding the privilege to instruct for the IR(A) may be credited towards training for the EIR or competency-based IR(A). Refer to the resulting text for the exact requirements.</p>
comment	<p>435 comment by: <i>Edward MATTHEWS</i></p> <p>I agree with a minimum requirement of 30hrs PIC.</p> <p>I agree that theoretical knowledge instruction will be valuable.</p> <p>However in my opinion 5 hours of dual flight instruction is far in excess of what is required. In UK gliding, most if not all of the cloud-flying pilots known to me have been able to acquire by themselves sufficient instrument flying skills to maintain thermalling climbs into cloud solely from text book study and a cautious and gradual process of self-training. This has been achieved using only Turn & Slip, ASI and variometer instruments, even in 1970s single seat gliders with all-moving tailplanes and poor pitch stability, but still capable of very rapid airspeed increase. In my opinion one hour of actual dual training in instrument flying, with a competent instructor and using vision-limiting goggles or ideally in cloud, would be ample to equip a glider pilot to enter cloud with the knowledge to identify the need for, and to carry out, a safe</p>

recovery. Compared with circling to optimise climb rate, it is relatively simple to level the wings, regain speed control and fly straight and level on a compass heading into clear air, even if this takes a minute or so. On this basis pilots could gradually develop their skills as they do now, when satisfied that it is safe to enter cloud (situational awareness, other gliders, radio call on 130.400) and worth the effort (need for altitude, worthwhile climb rate, desire to practice the art).

I am aware that the BGA has proposed a restricted SCFR to permit a pilot with Theoretical Knowledge, but without full practical flying skills training to fly under IFR but clear of cloud. I strongly support the proposal on the grounds that UK soaring will be practically impossible on all but the most suitable soarable days if pilots will no longer be able to climb higher than 1000' below cloudbase unless they qualify for the full SCFR.

response *Partially accepted*

Thank you for your comments and positive feedback.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by the BGA.

comment 436

comment by: *Edward MATTHEWS*

For context, gliding activity in the UK is usually subject to great unpredictability owing to weather-dependency. It takes more determination than many potential newcomers to the sport possess, and I believe this is a major cause of wastage and a decline in numbers of current participants. In my opinion additional regulation has little effect on UK gliding flight safety - the BGA safety initiatives (e.g. winch launching) have been far more effective - and the main impact of seeking EASA compliance has been simply to add cost, complexity and frustration to the sport.

These points made, the likelihood of being able to arrange for a two-seat training glider on a suitable-weather day, with instrument flight training capability (suitable instruments, vision-limiting goggles for training if in clear air, suitably qualified instructor all available) is very small.

Therefore the practical solution will be to use a training motor glider. I am not aware of any that is CAA approved for IFR, so the training will need to be in clear air using vision limitation. I understand there are concerns that the SCFR might be used by some pilots to fly TMGs IFR. The simple solution is to prohibit holders of SCFR from cloud flying in a TMG.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 437

comment by: *Warwick HORNE*

The approved rating for Sailplane Cloud Flying Rating is a worthwhile addition to the LAPL and SPL licence.
The figure of 30 hours is probably a good figure for the necessary level of experience required for training this.

response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>438 comment by: <i>Warwick HORNE</i></p> <p>The stated figure of 5 hours dual flight instruction is I think too long. We generally work on testing competence after training, to determine the length of time required. Some trainees require more some less in many aspects of training.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>439 comment by: <i>Warwick HORNE</i></p> <p>The Sailplane Cloud Flying Rating validity period seems rather short at only 24 months. We generally work on 3 year and 5 year re-training/testing for general instruction for Glider Pilots.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that sailplane cloud flying rating only has a recency requirement, but no revalidation. The 24-month period is a standard time frame in line with similar ratings.</p>
comment	<p>444 comment by: <i>British Gliding Association</i></p> <p>It is noted that that Article 4 of the Aircrew Regulation was amended at the EASA Committee to make provision for Member States to allow pilots to exercise limited privileges within the airspace of the Member State concerned before qualifying for a LAPL.</p> <p>UK IMC qualifications may be regarded as a step towards obtaining the sailplane cloud flying rating. It is proposed therefore that a similar provision may be made within FCL for national ratings for flight under IFR to be exercised within the airspace of the relevant country only.</p> <p>We propose the following text;</p> <p>FCL.600 IR - General</p> <p>(a) Operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.</p> <p>(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR in the airspace of that Member State only, provided that the pilot holds the national qualification of that Member State appropriate to the circumstances of the flight.</p>

response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The existing national ratings, such as UK IMCR, may be credited towards Part-FCL ratings during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>445 comment by: <i>Lasham gliding society</i></p> <p>FCL 830 Sailplane cloud flying rating</p> <p><i>(i) theoretical knowledge instruction; and (ii) 5 hours of dual flight instruction, controlling the sailplane solely by reference to instruments;</i></p> <p>5 Hours of training in a sailplane to accomplish competency in cloud flying is in my opinion excessive, as I know from experience in training sailplane pilots to fly in cloud that they can achieve a satisfactory standard in 1-2 hours under the hood. The level of training required should be enough to pass the skills test and has to be based on their previous experience.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>451 comment by: <i>DC-AL</i></p> <p>Para 5) (f) EIR validity. The standards for an EIR are the same as for a full IR. However, experience demonstrates that the ability to fly an accurate instrument approach deteriorates quicker than the ability to fly a safe en-route segment. It therefore seems proportional to extend the validity of an EIR to 2 years.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to amend the EIR revalidation requirements. The Agency would like to clarify that the validity period remains 1 year in line with the IR(A). However, the text was amended to allow for the option of revalidation with an instructor holding the privilege to provide training for the EIR. In any case, each alternate revalidation would require a proficiency check.</p>
comment	<p>452 comment by: <i>J Walker</i></p> <p>Sailplane cloud flying rating 6) b) 1)</p> <p>Whilst I can understand why the requirement for 30 hours PIC has been added, If the pilot can pass the test then I cannot see the need.</p>
response	<p><i>Noted</i></p>

Thank you for your comments.

comment

453

comment by: J Walker

Sailplane cloud flying rating 6) b) 2) ii)

5 Hours of instruction to get this rating seems way over the top given that most glider pilots would only fly in cloud to climb in a thermal and then straighten up on an approximate course to clear the cloud. Glider pilots do not cruise through cloud as that would not allow them to stay up. After leaving the lift a glider pilot will try and clear cloud as quickly as possible as the glider will generally perform better clear of cloud. I make these comments from the background of 35 years gliding of which 30 I have regularly flown in cloud. I think that 2 hours training should be enough given that the pilot has to pass a test to get the rating.

Please note that these comments refer to Sailplane cloud flying rating being used for gliders and SLMG but not TMG's. Although TMG's should be able to be used for the training and testing (in clear air (under the hood!)).

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

454

comment by: DC-AL

para 6) FCL.830 (b) (2) - Most Sailplane ATOs will have difficulty providing 5 hours instrument training on sailplanes. 4 hours of instrument flying training in aeroplanes fitted with similar instruments to that of a sailplane, at an aeroplane ATO can provide a safe and cost-effective lead-in to allow one final hour on sailplanes to complete the training.

response

Not accepted

Thank you for providing your comment.

The Agency reviewed your proposal but came to the conclusion that only training provided in sailplanes and TMGs should be counted for sailplane cloud flying rating. As most of the instrument rating instructors for aeroplanes are not at the same time holders of a FE(S) rating and as normally no IFR-certified aeroplane is on the list of training aircraft used by a non-complex training organisation providing training towards the sailplane licences and ratings, this option is not considered to be practical.

However, a general credit for prior instrument time as EIR or IR holders is already foreseen.

comment

455

comment by: DC-AL

FCL 905.FI (g) - many FIs have already given excellent instrument flying training; as holders of an IR themselves they are perfectly competent to do so. There should be no need for a FI who holds an instrument rating and has

	<p>had the restriction for giving applied instrument flight instruction removed from his rating to complete an IRI course. If it is considered necessary for him to pass an IRI assessment, so be it, but there should be no need to attend a course if he is already competent.</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that existing licences and ratings may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>
<p>comment</p>	<p>457 comment by: DC-AL</p>
	<p>Para 12) Modular Training Courses for the IR A.2.IR(A) Para 6. The need for a certain amount of training within an ATO is accepted. However, training outside the ATO should not be restricted to the period before the pre-course assessment. Considerable safety value will be achieved if the candidate, having completed the necessary hours training on aircraft operated by the ATO, can finalise his training, and be tested, on the aircraft which he intends to operate in the IFR environment. It seems disproportional for the pilot to have to undergo further familiarisation training in order to exercise the privileges of his rating on an individual aircraft and instrument fit which may well be his own but which differs considerably from the fit in the ATO's training aircraft. The same argument applies to revalidation and renewal testing.</p>
<p>response</p>	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to keep the proposal. The Agency would like to clarify that the ATO is an important element in ensuring that a minimum training and checking standard is achieved. Subsequent revalidation and renewal may be completed outside an ATO.</p>
<p>comment</p>	<p>459 comment by: J Walker</p>
	<p>"Sailplane Cloud flying rating"</p> <p>The addition of the Sailplane Cloud flying rating is essential for the UK given that cloud bases in the UK are often quite low making a cloud climb sometimes the only way to get home and not land in a field.</p> <p>I am a UK full cat instructor and train pilots for off field landings so see first hand the problems that can occur. Of all the areas of gliding that we do the off field landing is by far the most hazardous. Any additional risks the Sailplane Cloud flying rating my provided are dwarfed by the additional risk of an off field landing. UK glider pilots have always been able to fly in clouds under a less onerous scheme than set out here and have had very few problem.</p> <p>Just to clarify my point, (based on 35 years of gliding and inc 25 years of instructing). If you decide NOT to approve the "Sailplane Cloud flying rating", then more off field landing accidents will happen and potentially pilots will die.</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please see the response provided to the</p>

BGA comment No 121 addressing the same issue.

comment 471 comment by: *Eisten Nilsson*

FCL.825 (a) (1). I propose a change. by day under IFR or in IMC in to be written by day under IFR in

Under IFR gives the right to fly in IMC. The NPA text indicate the right to fly in IMC but not on IFR rules which I see as a high flight safety risk.

response *Partially accepted*

Thank you for this comment.

The text has now been clarified to be 'under IFR and in IMC' which is the same text as in Part-FCL for instrument rating modular course.

comment 472 comment by: *Eisten Nilsson*

The Applicant shall present for the ATO acceptable documentation, signed by the instructor, of the training completed outside of the ATO.

response *Noted*

Thank you for providing this comment.

comment 499 comment by: *IAOPA(Europe)*

Draft Opinion Subpart G – Instrument Rating.

IAOPA(EU) notes that NPA 2011-16 does not include provision for the specific national needs of certain Member States. These include (but are not limited to):

1. Operations under IFR conducted entirely within the airspace of a Member State (MS) by a national of that MS flying an aeroplane registered in that MS using the national language of that MS. For example, a French pilot operating an F-registered aeroplane under IFR in French airspace communicating in the French language.
2. An acceptable solution to the future of the UK IMC rating when used on EASA aeroplanes entirely within UK airspace.
3. An acceptable solution to sailplane towing operations within certain airspace categories when the cloudbase is above 3000ft a.m.s.l.

IAOPA(EU) notes that JAR-FCL 1.175 includes para. 1.175(b) which would solve these shortcomings if adopted within an amendment to **FCL.600**. Accordingly, IAOPA(EU) strongly recommends the following amendment to **FCL.600 IR – General**:

FCL.600 IR – General

(a) **Except as provided in FCL.600(b) and FCL.825**, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be

conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

Adoption of this amendment would enable the Commission to fulfil earlier commitments given to the European Parliament in respect of a solution to the UK IMCR; however, more significantly it would enhance safety where Member States have identified a specific national need. In accordance with the general principle of subsidiarity, detailed requirements for such national qualifications should be devolved to the competent authority of the Member State.

response *Noted*

Thank you for providing this comment.

With regard to language requirements, the holder of EIR has no FCL language requirement; however, the competency-based IR(A) holder will be required to comply with FCL.055.

UK IMC may be converted into a Part-FCL rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

The Agency does not foresee that towing close or into the clouds is required during training for sailplane cloud flying rating. However, during normal operations a towing pilot will require either an EIR or IR to conduct flights within 1 000 ft of clouds above 3000 ft.

comment 500

comment by: *IAOPA(Europe)*

[FCL.825 \(a\) \(1\)](#)

IAOPA(EU) proposes that the privileges of the EIR should be extended to flight by night under IFR if the EIR holder also holds a valid Night Rating. This is particularly necessary for Member States of predominantly northern latitudes whose periods of daytime are limited at certain parts of the year.

response *Accepted*

Thank you for providing this comment.

The Agency has extended the privileges of an EIR holder to conduct flights by night under IFR and in IMC in the en-route phase of flight in case a night rating in accordance with FCL.810 is also held.

comment 501

comment by: *IAOPA(Europe)*

[FCL.825 \(a\) \(3\)](#)

IAOPA(EU) does not support the concept of a *specific* 'multi-engine EIR'. However, IAOPA(EU) agrees that, for pilots who only obtain their first multi-engine class or type rating after the initial issue of the EIR, the privileges of the EIR should only be extended to multi-engine aeroplanes after receiving suitable training and testing. The IFR limitations of the EIR are such that we consider 3 hr of instrument flight instruction in multi-engine aeroplanes to be excessive in this context. We propose that a minimum of 1 hr of instrument flight instruction in multi-engine aeroplanes in the en-route phase of flight should be sufficient before the applicant passes the EIR Skill Test in a multi-engine aeroplane.

response *Partially accepted*

Thank you for providing this comment. The Agency reviewed the issue and decided to require at least 2 hours of instrument flight time in a multi-engine aeroplane at an ATO. The Agency also amended the text to include multi-engine EIR course requirements.

comment 502 comment by: IAOPA(Europe)
FCL.825 (e) (typographical error).

The final sentence of paragraph (e) should read '*For a single engine EIR.....*'

response *Noted*

Thank you for providing this comment.

comment 503 comment by: IAOPA(Europe)
FCL.825 (f) (1) Validity, revalidation and renewal.

IAOPA(EU) considers that the limitations of the EIR are such that a 1 year validity period is disproportionate. We propose that an EIR shall be valid for 2 years.

response *Partially accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to amend the EIR revalidation requirements. The Agency would like to clarify that the validity period remains 1 year in line with the IR(A). However, the text was amended to allow for the option of revalidation with an instructor holding the privilege to provide training for the EIR. In any case, each alternate revalidation will require a proficiency check.

comment 504 comment by: IAOPA(Europe)
FCL.830 (a) Sailplane Cloud Flying Rating.

IAOPA(EU) considers that this paragraph shall include suitable wording to preclude inappropriate use of the SCR by TMG or powered sailplane pilots for extended IFR cruising. We therefore propose the following amendment to **FCL.830 (a)**:

response	<p>(a) Holders of a pilot licence with privileges to fly sailplanes shall only operate a sailplane, powered sailplane or TMG under IFR when:</p> <p>(i) They hold a sailplane cloud flying rating; and</p> <p>(ii) Except when being used for conducting instrument flight instruction for the sailplane cloud rating, the aircraft is operated in the manner of a sailplane.</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency and the Review Group experts agree that a TMG should not be able to make use of the sailplane cloud flying rating privileges. Therefore, FCL.830(a) has been amended to exclude a TMG accordingly. A TMG may still be used for sailplane cloud flying rating training and checking purposes.</p>
comment	<p>505 comment by: IAOPA(Europe)</p> <p><u>A.2. IR(A) – Competency-based modular flying training course</u> <u>FLIGHT INSTRUCTION 6 (b)</u></p> <p>IAOPA(EU) has considerable concerns regarding pre-course assessment flights used by an ATO to assess credit and training needs. Such flights lack standardisation, are open to commercial pressures and abuse and serve little worthwhile purpose. The C-B IR is essentially competency-based by definition and no ATO will propose an applicant for a Skill Test unless that applicant has demonstrated adequate preparedness. We therefore propose that the sentence <i>'To determine the amount of hours credited and to establish the training needs, the applicant shall complete a pre-course assessment flight at an ATO.'</i> shall be deleted.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The pre-course assessment is a tool for an ATO to establish the standard of the student and to determine the amount of credit. The Agency and the Review Group strongly believe that the assessment is an essential element of the course.</p>
comment	<p>506 comment by: IAOPA(Europe)</p> <p><u>A.2. IR(A) – Competency-based modular flying training course</u> <u>FLIGHT INSTRUCTION 8</u></p> <p>IAOPA(EU) agrees with sub-paragraphs 8(a) and 8(c), but has the following comments with regard to the rest of paragraph 8:</p> <p>8(b). IAOPA(EU) considers that the demonstration of acquisition of knowledge to which this sub-paragraph refers can be satisfactorily assessed by the Examiner during the pre-flight preparation and conduct of the C-B IR Skill Test, supplemented if necessary by oral questions. It should be noted that the requirement for the holder of an IR issued in compliance with the requirements of Annex 1 to the Chicago Convention to sit further written theoretical</p>

knowledge examinations when converting to a EU IR is widely regarded as an expensive waste of time, which serves very little practical purpose. An Examiner will be able to make a much more pertinent assessment of the applicant's relevant knowledge; we strongly recommend that oral assessment in the manner described should satisfy the requirements of sub-paragraph 8(b).

8(d). IAOPA(EU) considers that 100hrs of instrument flight time as PIC is excessive. Pilots with considerable flight time under IFR would be disadvantaged; there would be safety implications for a pilot to fly deliberately in IMC, with the attendant risks of turbulence and icing, merely to reach the 100hrs requirement. We therefore recommend that sub-paragraph 8(d) is reworded as follows:

8 (d) have a minimum of at least 50 hrs of flight time under IFR as PIC on aeroplanes.

We remind the Agency that the C-B IR is 'competency based' by definition and that, although some relevant experience is clearly needed, the Skill Test will provide entirely sufficient assessment of the applicant's suitability to be issued with the C-B IR.

response *Accepted*

Thank you for providing this comment. The Agency and the Review Group experts agree with IAOPA (Europe) and have amended 8(b) to allow an applicant to demonstrate adequate theoretical knowledge to an examiner during the skills test. The Agency and the group also agreed to amend 8(d) by reducing the minimum experience required to 50 hours flight time under IFR as PIC on aeroplanes.

comment 507

comment by: *IAOPA(Europe)*

A.2. IR(A) – Competency-based modular flying training course
PRE COURSE ASSESSMENT 9

IAOPA(EU) considers that a pre-course assessment flight is entirely unnecessary. There should be no doubt about credit for previous instrument flight time, provided that this has been properly recorded and it is not appropriate for any ATO to query credit allowed by the Agency's regulatory proposals. In any event, the subsequent instrument flight training will, if properly conducted, reveal any omissions or weaknesses resulting from the applicant's previous instrument flight training or experience.

response *Not accepted*

Thank you for providing this comment.

The Agency and the Review Group experts have decided to keep the pre-course assessment requirement as proposed in this NPA as it is considered an important element of the future process.

comment 520

comment by: *AOPA(UK)*

FCL.825 (a) (2)

AOPA(UK) considers that significantly greater emphasis is necessary with regard to the IFR limitations of the EIR and proposes the following amendments to FCL.825(a)(2) to state more clearly the VFR requirements:

(2) The holder of the EIR shall only initiate or continue a flight on which he/she intends to exercise the privileges of his/her rating if the latest available meteorological information indicates that:

(i) The weather conditions on departure are such as to enable the segment of the flight from take-off to a planned VFR-to-IFR transition point to be conducted in compliance with VFR.

(ii) The latest available area and aerodrome forecasts for the planned destination are such as to enable the segment of the flight from an IFR-to-VFR transition point to landing to be conducted in compliance with VFR.

AOPA(UK) expresses some concern at the specification standards required by ICAO for meteorological area forecasts and we request that, in order to address these concerns, the Agency confirms whether it considers ICAO area forecasting standards to be sufficiently robust to support the EIR.

response *Accepted*

Thank you for providing this comment. The Agency decided to amend the text to reflect your suggestion. In addition, the Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. Furthermore, the Agency strongly believes that the current forecasting standards are appropriate to support the EIR.

comment 521

comment by: AOPA(UK)

FCL.825 (c) (2) Training Course.

AOPA(UK) considers that, as the regulation of flight instruction will be defined by part-AR/OR, references to training 'at an ATO', or otherwise, are inappropriate in this NPA pending clarification from part-AR/OR. Furthermore, we consider that FCL.825 (c) (2) (ii) is excessive, given the limited privileges of the EIR. We therefore propose the following amendment to FCL.825 (c) (2):

(2) instrument flight instruction. This shall include at least 15 hours of flight time by reference to instruments. Where multi-engine privileges are sought, at least 1 hour of the required instrument flight instruction time shall be completed in a multi-engine aeroplane.

response *Partially accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency and the Review Group discussed the issue again. As a result, the multi-engine EIR requires at least 16 hours of flight time with reference to instruments at an ATO, of which 4 hours on multi-engine aeroplanes. In addition, those who hold a single-engine EIR and a multi-engine type or class rating will require at least 2 hours instruction in instrument flying. Please refer to the resulting text for exact details.

comment	522	comment by: <i>Alistair Johnson</i>
	<p>For the purposes of sailplane cloud flying 5hrs tuition is excessive. 1 or 2 hours is more than adequate. By the very nature of flying without an engine and the often short duration of flights it will be very difficult for the majority of glider pilots to achieve even one hour's tuition unless motor gliders are used for training. Therefore training in TMGs will be necessary for glider pilots to achieve the SCFR.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.</p>	
comment	523	comment by: <i>AOPA(UK)</i>
	<p><u>11) Subpart K – Examiners – Section 5</u> AOPA(UK) considers that the limited IFR privileges of the EIR can be adequately assessed by an FE(A) who holds an IRI(A) certificate and do not require specific assessment by an IRE(A). Due to the qualifying requirements, IRE(A)s are relatively few in number and, if the EIR proves to be popular, are unlikely to be sufficient to meet anticipated demand. Hence, in addition to the proposed amendment to FCL.1005.IRE, we propose the following amendment to paragraph (a) of FCL.1005.FE:</p> <p><i>(5) skill tests and proficiency checks for the EIR, provided that the examiner also meets the requirements of FCL.905.FI paragraph (g) and has completed at least 1 000 hours of flight time as a pilot on aeroplanes or TMGs, including at least 250 hours of flight instruction of which at least 50 hours shall be instrument flight instruction;</i></p> <p>AOPA(UK) also considers that a suitably qualified CRE(A) should be empowered to conduct proficiency checks for the renewal or revalidation of the EIR and we propose the following amendment to paragraph (b) of FCL.1005.CRE:</p> <p><i>(3) revalidation and renewal of EIRs, provided that the CRE also holds a valid IRI(A) certificate and has completed at least 50 hours of instrument flight instruction time on aeroplanes.</i></p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency and the group have reviewed your proposal and have amended Subpart K 'Examiners' to enable the FE(A), CRE(A) and TRE(A) to conduct revalidation and renewal for the EIR.</p>	
comment	526	comment by: <i>John T Donovan</i>
	<p>Text: <i>6) Subpart I – Additional Ratings FCL.830 Sailplane Cloud Flying Rating</i></p>	

(a) Holders of pilot license with privileges to fly sailplanes shall only operate a sailplane or powered sailplane within cloud when they hold a sailplane cloud flying rating.

Comment:

It is likely that UK sailplane pilots, who hold an instructor rating and/or fly outside of the EU, will opt for the SPL. The remaining and **majority** of UK sailplane pilots will probably choose the LAPL(S).

Therefore it is crucial that the SCFR proposal is retained for **all** sailplane licence holders.

response *Accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 529

comment by: *Jon Hall*

FCL.830 Sailplane Cloud Flying Rating

I agree with the option for a cloud flying rating on the glider pilot license but have issues with the details expressed here.

Firstly there are many glider pilots in the UK who have been cloud flying for many years and should be granted some form of grandfather rights.

Secondly 5 hours of dual flight training seems disproportionate to the task. Many glider pilots have done IMC instrument training elsewhere and will have no problem in passing the test after less than 5 hours. For them the minimum 5 hour requirement is an unnecessary and unfair extra expense.

The British Gliding Association has a very safe record of gliders flying in cloud - I believe there has hardly ever been an accident caused by cloud flying in gliders. The likelihood of imposing this extra 5 hours on all glider pilots wishing to fly in cloud will be an increase in the number of accidents. Where is the safety case in that? The BGA has never seen the need to impose any specific minimum amount of training for cloud flying, or any other form of training for that matter. I urge that this minimum 5 hr requirement is removed. However if this is a negotiating point I would strongly urge a compromise of say half that amount - 2.5 hours.

Most glider pilots, especially in the limited meteorological conditions of the UK, have to spend a great deal of time clear of, but close to, cloud. To restrict all non SCFR pilots to IMC rules will on many days bar them from flying at all when cloud base may be at 4000' and the terrain is at 2000'. This is particularly applicable to hill soaring gliding clubs like my own at the Midland Gliding Club, where the airfield is at 1500'. I would strongly urge the adoption of a Restricted SCFR that would make flight available under IFR but clear of cloud. This would need no new or additional skills from most glider pilot license holders but would require the Theoretic Training from the SCFR.

Summary

I support with reservations the SCFR

I urge that the requirement for 5 hour minimum dual flight instruction be removed

I recommend that the RSCFR option is reconsidered by EASA

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issues.

comment 531 comment by: *Chris Fox*

FCL.830 (b) (2) (ii) - The requirement for five hours dual instruction for the SCFR is both excessive and impractical. Given that there is a Skill Test specified, the requirement should be to meet the standards required by the Skill Test rather than to impose a specific minimum number of hours.

response *Partially accepted*

Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.

comment 533 comment by: *Sunay Shah*

My view is that 5hrs requirement is too much. Someone having done instrument training elsewhere will be able to pass the test in much less than 5hrs. My recommendation is 3hrs as a compromise

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency has added a condition under FCL.830 (b)(4) stating that 'holders of an EIR or an IR(A) will be credited in full against the requirements (b)(2)(i) and (ii)'.

comment 534 comment by: *Chris Fox*

FCL.825 En-route Instrument Rating

This rating does little to enhance safety, as the pilot with such a rating who finds themselves inadvertently in IMC will not have been trained to make a safe approach in IMC conditions.

It is also doubtful whether the present reliability of weather forecasts will make compliance with condition (2) practicable.

Recommendation: The privileges of (and therefore training for) the EIR should include the ability to make instrument approaches to specified minima.

response *Partially accepted*

Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging to an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during

training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

comment

545

comment by: *David Evans*

In Section 6 SubPart 1 FCL830 (b)1 this writer considers that 30 hours is too low for a full sailplane cloud flying rating. 50 hours would be more appropriate. 30 hours is however entirely appropriate for flying IMC close to cloud.

In (b) (2) (ii) 5 hours of dual instruction seems high given that the proposed rating is competence based and subject to assessment. Four hours might be more appropriate for the full rating and 1 hour for close to cloud flight.

response

Partially accepted

Thank you for your comments.

The Agency and the Review Group experts deem the 30 hours requirement appropriate for sailplane cloud flying rating. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA. Finally, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. This will not prevent Member States from defining certain airspace categories with specific rules for sailplane operations.

comment

556

comment by: *TOM SAGE*

Ref : Sailplane Cloud Flying Rating: 5 hours dual instruction seems excessive, particularly in relation to transition when many sailplane pilots already have considerable experience. A 'Grandfather Rights' transition procedure requiring only a theoretical knowledge and skills test would be less disproportionate.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

With regard to your comment on 'grandfather rights', the Agency would like to highlight that an existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment

557

comment by: *D&LGC*

FCL.830

response	<p>Sailplane Cloud Flying Rating.</p> <p>As "near to cloud flying" is a necessary evil in sailplanes I find this a refreshing and useful part of the legislation. I would have no problems with the proposed pilot licensing for cloud flying.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>561 comment by: <i>Colin HUNT</i></p> <p>The requirement for sailplane pilots to hold a cloud flying rating is reasonable, but the requirement for a minimum 5 hours of dual instruction is excessive. The actual time required will depend upon the pilot aptitude and upon the instructor's judgement, but if a minimum is to be specified it should be less, say 3 hours.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>566 comment by: <i>Trevor Watcham</i></p> <p>FCL.830 Sailplane Cloud Flying Rating</p> <p>Flying near to or in cloud is an essential skill to successfully soar a Sailplane. I therefore support this proposal.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>568 comment by: <i>Peter BROWN</i></p> <p>I comment in relation to para. 6 Subpart 1 -Additional Ratings - FCL.830 Sailplane Cloud Flying.</p> <p>Specifically, (b) (2) (ii) - the proposal to require 5 hours of dual instruction.</p> <p>I submit that this is excessive and does little to contribute to the objective of ensuring a satisfactory level of competence. Many pilots will be absolutely competent having undergone considerably less time than this, and others will not be competent given even longer training. However, the requirement to pass a skill test is the real test of competence, rather than a mandatory 5 hours instruction. I and many other pilots I have spoken to are quite convinced that a 2 hour period of flight instruction is adequate, given the nature of glider cloud flying and the level of competency required.</p>

I would make the point, in support of my submission above, that sailplanes, unlike powered aircraft, will spend little time in cloud, and rarely if ever attempt a sustained flight in cloud on a particular heading. They need to be able to exit cloud ideally with a +/- accuracy of 30 degrees, although in view of the very short time in cloud, this is not critical. A training requirement that does not recognise the true nature of IMC flying in a sailplane will result in an excessive and entirely irrelevant level of competency. The fact is that although IMC flying is currently permitted in the UK the vast majority of sailplane pilots will only ever fly up to cloudbase, and choose not to enter cloud but leave the cloud in search of another thermal.

I respectfully ask that the time requirement for instruction is revisited therefore.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 571

comment by: *Felix Velarde*

As a recently-qualified cross-country glider pilot with ambitions to compete, I support the SCFR and believe it should be available to LAPL and SPL holders.

I also concur with the view that 3 hours dual instruction is plenty - 5 hours would require almost a season to complete and cannot be justified.

I agree the RSCFR option be reconsidered by EASA.
- Felix Velarde, Cotswold Gliding Club

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A)/SPL/5 hours training/Restricted SCFR) were also identified by the BGA.

comment 580

comment by: *John Richardson*

FCL.740.A Revalidation of class and type ratings – aeroplanes
5) Subpart I – Additional Ratings

The validity of the EIR should be brought in line with the sail plane rating and the UK IMC rating and amended to 24 months. There is no safety justification in restricting the validity to 12 months given the lack of departure and approach privileges.

response *Partially accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to amend the EIR revalidation requirements. The Agency would like to clarify that the validity period remains 1 year in line with the IR(A). However, the text was amended to

allow for the option of revalidation with an instructor holding the privilege to provide training for the EIR. In any case, each alternate revalidation will require a proficiency check.

comment

584

comment by: *Brian Allen*

Agree with proposal FCL.830 Sailplane Cloud flying rating (a) (b) but under proposal (c) why does the rating have to be renewed after 24 months. If the pilot regularly fly's in cloud and has entries within his/her logbook to verify this, why must a proficiency check have to be carried out. However, would agree if pilot has flown less than 5 hours per year in cloud.

response

Partially accepted

Thank you for providing your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

With regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

585

comment by: *Charles Tolman*

i) Strong support for the SCFR:

I strongly support the SCFR proposal since without it, here in the UK we would be severely hampered by the limited cloudbase heights. Frequently in the last year summertime cloudbase has been between 3000ft and 4000ft AGL. Being able to get up to cloudbase would mean the difference between being able to "get away" on a cross country flight as opposed to having to stay within gliding range of the airfield or need to make more frequent field landings. A riskier process. As an early cross-country pilot this makes a large difference since I am more cautious than experienced flyers.

ii) Add a Restricted SCFR:

Again, considering myself to be an early cross-country pilot I really consider it important to fly up to cloudbase without having a full SCFR. I therefore propose that the BGA Cross Country Endorsement (or EASA equivalent) must include the Theoretical Knowledge training of an SCFR. This would then represent a Restricted SCFR which would allow flight up to cloudbase for the early cross-country flying. The practical training for, and attainment of, the SCFR would then make sense for flights actually into cloud.

iii) SCFR training minima:

Unlike the BGA, I am happy with the 5hr minimum requirement for dual training for an SCFR. Although, as a holder of an NPPL, possibly the reduction to the 3hrs the BGA suggest would be valid if one had such a rating or similar.

	<p>iv) Allow TMG use for SCFR Training: I consider the use of TMGs to be crucial, indeed necessary, for SCFR training since as for cross-country flying training they provide the ability to have longer and more concentrated training sessions.</p> <p>v) Prohibit normal SCFR flying in TMGs: However in the light of (iv) above I agree with the BGA that the following section be added to FCL-830: "(d) The privileges of the Sailplane Cloud Flying Rating may not be exercised in a TMG."</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments and positive feedback.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/ Restricted SCFR) were also identified by BGA.</p>
comment	<p>595 comment by: <i>Bill LONGSTAFF</i></p> <p>I generally support the proposal that Sailplane pilots should have a rating in order to qualify for the privileges of flying in or near cloud. While I feel that the qualifications and renewals for this rating are excessive considering the historical safety of this type of sailplane flying, I can understand the wish to keep the standards high to offset possible criticisms from the public and commercial operations.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>With regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.</p>
comment	<p>603 comment by: <i>Ted Richards</i></p> <p>Reference p18 FCL.830 Sailplane Cloud Flying Rating. I think it is entirely appropriate that a level of skill assessment is carried out and I accept that an amount of training may be required to successfully demonstrate that the necessary skills have been achieved. Whilst 5 hours seems quite an extensive amount of training for individuals who are already competent, I accept that a starting point is required. Therefore I support the underlying rationale for this rating</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>

comment	<p data-bbox="351 201 414 235">607</p> <p data-bbox="1037 201 1436 235">comment by: <i>Graham Morris</i></p> <p data-bbox="351 257 877 291">FCL.830 Sailplane Cloud Flying Rating</p> <p data-bbox="351 324 1436 392">As a British Sailplane Pilot I am both pleased and relieved that a Sailplane Cloud Flying Rating is to be introduced.</p> <p data-bbox="351 425 1436 526">As an instructor I am also pleased that in addition to the theoretical part of the rating, a skill test will be required. However, I am both amazed and perplexed at the suggestion that 5 hours tuition would also be mandatory!</p> <p data-bbox="351 560 1436 750">I have in the past trained sailplane pilots in instrument flying and a completely safe and satisfactory standard can easily be achieved for the vast majority of pilots in less than 30 minutes! Given that the rating depends on a successfully conducted skill test, I suggest that the minimum 5 hours training be deleted and a safe and appropriate standard rely on the good judgement of the examiners.</p> <p data-bbox="351 784 1436 873">Experience of the British way of doing things has proved safe over many decades and clearly indicates that the 5 hours training requirement is excessive in the extreme.</p>
response	<p data-bbox="351 896 606 929"><i>Partially accepted</i></p> <p data-bbox="351 952 1085 985">Thank you for your comments and positive feedback.</p> <p data-bbox="351 1019 1436 1120">Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p data-bbox="351 1187 414 1220">613</p> <p data-bbox="1101 1187 1436 1220">comment by: <i>Eric Smith</i></p> <p data-bbox="351 1243 1436 1310">I agree with FCL.830 other than the number of dual hours should be reduced. It is impractical for 5 hours dual in a glider.</p> <p data-bbox="351 1344 1436 1411">I say this as a UK glider pilot with over 40 years experience, including instructing. I have flown in cloud on many occasions.</p>
response	<p data-bbox="351 1433 606 1467"><i>Partially accepted</i></p> <p data-bbox="351 1489 1436 1612">Thank you for your comments and positive feedback. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p data-bbox="351 1680 414 1713">633</p> <p data-bbox="1021 1680 1436 1713">comment by: <i>Laurence SMITH</i></p> <p data-bbox="351 1736 813 1803">Reference 6) Subpart I - Additional Ratings</p> <p data-bbox="351 1836 1372 1870">I strongly support the proposal for a Sailplane Cloud Flying Rating.</p> <p data-bbox="351 1904 1436 1993">It is particularly important for the on-going stability and future of gliding in the UK, bearing in mind the average larger amounts of cloud and lower cloudbases in the UK relative to many of the member states.</p>

response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>638 comment by: <i>Alan Sparrow</i></p> <p>The requirement for 5 hours of dual flight instruction for the Sailplane Cloud Flying Rating appears to be arbitrary. As the rating is granted based on a skill test there is no need for a minimum number of hours. The rating should be granted once the required level of competence is demonstrated irrespective of the number of hours of instruction.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments and positive feedback.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>642 comment by: <i>British Gliding Association</i></p> <p>FCL830. With a specified skill test in place, this qualification is competency based, a welcome contrast to much of the rest of Part-FCL. The requirement for a specific minimum of dual flight instruction of 5hrs is excessive. Doubtless, some pilots will need to fly more than this minimum. Their training will be directed by gaining the skills to pass the test. Others, perhaps having done other instrument training elsewhere, will be able to pass the test after less than 5hrs training. For these, the 5hr requirement is an unfair, unnecessary, extra expense.</p> <p>The BGA has a safe record of glider cloud flying: it has never needed to specify any minimum amount of training. We do, however, recognise the realities of negotiating this sort of figure and could accept, as a poor compromise, a 3hr dual flight instruction minimum.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to your comment No 121 addressing the same issue.</p>
comment	<p>650 comment by: <i>Richard Bennett</i></p> <p>I support the idea of a Sailplane Cloud Flying Rating as proposed in this document and support the British Gliding Association's ability to agree a set of rules.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>655 comment by: <i>David Miller</i></p>

I strongly support the introduction of the SCFR for both the LAPL(S) and SPL. In the UK it is necessary to fly in or close to cloud to safely progress cross country flights. On a typical day in the UK that is suitable for cross country flying cloud base will typically be between 2500 and 4000 feet AGL. Not having the ability to fly in cloud would significantly reduce the opportunity for cross country flights and increase the number of out landings with the inherent risks of these landings.

In the UK we can fly in cloud today and many, including myself, do exercise this privilege.

I consider 5 hours training to be excessive - particularly when many of the pilots in the UK who would wish to qualify for the rating already have significant cloud flying experience. I can understand why some countries such as Sweden or Switzerland that have very different terrain to England (where the bulk of UK gliding takes place) would require additional training but I do not consider this to be necessary for the UK. The qualification should be proficiency based with a lower minimum of say 2 or 3 hours.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (LAPL(A) and SPL/5 hours training) was also identified by BGA.

comment 658 comment by: *Finnish Aeronautical Association - Kai Mönkkönen*

B. Draft Opinion and Decision

I. Draft Opinion

FCL.830 Sailplane Cloud Flying Rating

Page 18-19

Comment:

Reflected to our long and good experience in Finland, we keep those requirements as proposed in subclauses (b)(1) and (b)(2) of FCL.830 well enough for the sailplane cloud flying rating. However, we do not see any reason why a TMG could not be used for flight training for a sailplane cloud flying rating. According to the current practice, if used, such a TMG has been equipped with an artificial coverings for a student pilot to limit her/his vision to the flight instruments only.

Proposal:

Modify subclause FCL.830 (b)(2)(ii) to read: "5 hours of dual instruction with a sailplane or a TMG, controlling the sailplane solely by reference to instruments;"

Justification:

Use of a TMG for cloud flying training has been allowed for a long time in Finland and also at least in Sweden. We see no reason why not to allow continuation of that good practice.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (use of TMG / 5 hours training) were also identified by BGA.

comment 659 comment by: *Finnish Aeronautical Association - Kai Mönkkönen*

B. Draft Opinion and Decision
I. Draft Opinion
FCL.830 Sailplane Cloud Flying Rating
Subclause (c)

Page 19

Comment:

The Finnish Aviation Association see the requirement of a proficiency check (i.e. use of a FE) every 24 months, as an only option, clearly oversized method for the revalidation/renewal. Such limitation compared with the current long and good experiences would cause extra burden and increased costs without any evidence of increased safety. Furthermore, if limited to a proficiency check (i.e. use of a FE) only, as the gliding is voluntary sports activity, availability of a qualified FE for the purpose may be difficult, or regionally even impossible.

Proposal:

Modify FCL.830 (c) to read: "The sailplane cloud flying rating shall be valid for a period of 24 months. For the revalidation and renewal, the applicant shall have during the last 24 months, min. 1 hour experience with a sailplane in a cloud, or 1 hour training flight time solely with reference to instruments with a sailplane or a TMG with an instructor, or shall pass a proficiency check".

Justification:

We have very good experience at least in Finland of using flying time experience of min. 1 hour either in a cloud, or during training flights (solely by reference to instruments) with an instructor during the last 24 months for the revalidation. It is very simple way and has proven to be safe. Still, it does not outrule option to a proficiency check. The key point, however, is that there is no safety related reasons why to limit revalidation of a sailplane cloud flying rating to a proficiency check only.

response *Partially accepted*

Thank you for providing your comments.

With regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 661 comment by: *RoderickWEAVER*

FCL 830(b) (2) There is no need to over-complicate a system which has worked well with an extremely good safety record with a requirement for 5 hours dual and a skill test with a FE.

A simple GFT with a FI(e) would be quite sufficient to ensure that the past good safety record is maintained.

There is a strong streak of self preservation in sailplane pilots who are not subjected to commercial pressure to perform high risky flying activities. So far their judgment on how to safely undergo cloud flying is excellent; there is no need to introduce expensive and complicated measures to an already safe procedure.

There is a great risk that doing so simply results in pilots ignoring regulations

response	<p>which in turn brings the regulatory body into disrepute. If there must be a lower limit on training then let it be no more than 3 Hours and approved by a FI(E).</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please see the response provided to the BGA comment No 121 addressing the same issue.</p>
comment	<p>662 comment by: <i>GeorgeSANDERSON</i></p> <p>The standard of expertise will differ greatly so a fixed 5 hrs min could be excessive for some pilots. A minimum of 3 hrs would be more suitable based on the results of training.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>663 comment by: <i>GeorgeSANDERSON</i></p> <p>It is essential that the training be permitted in TMG for both convenience and cost reasons. Standard gliders are not suitable all year round for teaching inst flying.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment.</p> <p>However, it should be highlighted that the use of the TMG (except one hour to be flown in a sailplane) has already been proposed by the Agency with the NPA.</p>
comment	<p>665 comment by: <i>RoderickWEAVER</i></p> <p>As a least worse choice I support the Sailplane Cloud Flying Rating proposal.</p> <p>I would strongly recommend that the FI(e) is approved to examine the pilots who have been trained by a FI(s). The small numbers of examiners available will otherwise result is an overburdened demand for examination in geographically challenging locations.</p> <p>The training must be available in TMGs fitted with the necessary equipment. I agree that TMGs themselves should not be permitted to cloud fly as per their Flight manuals.</p> <p>Setting the period of instruction to a minimum of 5 hours is unnecessary. Skillful sailplane pilots who have been familiar with cloud flying and some holders of PPLs will already be well experienced in cloud flying. However as EASA likes to set strange illogical barriers, why not set the minimum at 3 hours as a small sop to the gliding community.</p>

To summarise:-

- 1) Re-open the RSCFR option.
- 2) Go with the SCFR which must be available to LAP(S) and SPL holders.
- 3) Reduce the 5 hours training to no more than 3 hours (fewer would be even better).
- 4) Ensure that TMGs can be used for the training albeit that TMGs can only fly VFR
- 5) EASA make understanding what the regulations are and how to comment on proposals a great deal less user unfriendly.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/5 hours training/use of TMG/Restricted SCFR) were also identified by BGA.

comment

667

comment by: *Martin Roberts*

Pages 18 & 19
Background

I have 800 hours in gliders. I hold the FAI Diamond C. I am a BGA rated Instructor.

FCL.830 (b) (1) 30 Hours P1 in sailplanes is a significant period of experience only if this experience is not spread over a period of years, say 5 years. To be relevant and fit for purpose, the qualifying period; here stated as 30 hours, should be within a 3 year window. 30 hours is probably an appropriate length of experience - prior to undertaking cloud flying training. But I know of pilots who completed 30+ hours P1, took a break of 3+ years and then came back to flying gliders. Such pilots are not ready to undertake cloud flying or cloud flying training, even though they would have qualified under the proposed 30 hour rule. A further proposal needs to be made in order to close this loop-hole. Cloud flying training could be seen as a valued and desirable skill/knowledge set to possess.

FCL.830 (b) (2) (i) The theoretical knowledge instruction; Will there be a charge made to the pilot receiving instruction? Will pilots have to pay for their Rating or any part of it? Will those giving instruction themselves face costs in becoming FE qualified? In my view there should be absolutely no extra administrative charges, as this will deter both pilots and potential Instructors. Cloud flying training should be seen as a valued and desirable skill/knowledge set to possess - there should on no account be any financial burden placed on clubs or individuals. Any attempt to do so would be seen as a deterrent against advancing skills & knowledge.

FCL.830 (b) (2) (ii) 5 hours of dual flight instruction would be very expensive for the pilot under instruction and would tie up valuable club resources that could be more gainfully employed elsewhere, both gliders, launch facilities and

Instructor man-power. 5 hours of pure cloud flying "solely by reference to instruments" would be very difficult and expensive to organise for in gliders, and it would take a long time to complete. My view is that this proposal is unworkable and would significantly deter pilots from moving towards increasing their knowledge/skills to an otherwise desirable objective.

Further, in the UK the great majority of pilots progress from zero to first solo in anything from 2 to 5 hours P2, depending on aptitude, type of launch and frequency of flights, etc. Some clubs offer zero-to-solo packages and these range from between £850 and £1600 (1000Euro to 2000Euro). These typically allow the new pilot one year to complete that particular learning journey. There is a clearly designed path and major aspects of club role and management are directed at the training of new pilots. In UK gliding clubs Ab Initio training is a tightly controlled and virtually industrial activity. Rightly so. The "5 hour" proposal suggests that cloud flying training should actually *take longer* to accomplish than going from zero to first solo! It also suggests that a new "industry" be built up around the "5 hours" - an industry which will consume much time, materiel, training, man-power and money. The counter argument might be that few pilots would go forward to Cloud Flying training - but this is not the case; Conditions in the UK are not great for soaring gliding flight. UK pilots will climb in cloud where the need arises in order to extend scope for action and avoid the risks inherent in landing in fields. In my experience of 24 years in sport gliding in the UK *most* pilots of Silver "C" and above have received the necessary BGA Training, and most pilots of that experience level or above partake in cloud-flying activity at least once per year, often more. This equates to literally hundreds of UK glider pilots. Additionally, proposal **FCL.830** (c) for a 24 month "revalidation and renewal" is unclear. It does not specify what will need to be done in terms of flying and or ground school.

Case Study indicating real costs in a real-life scenario.

Let me exemplify what a typical learning journey towards "5 hours of dual flight instruction, controlling the sailplane solely by reference to instruments" might actually look like for a typical United Kingdom soaring pilot (such as myself). Bear in mind that conditions have to be right and that not every day will be suitable for flight safety reasons. Bear in mind too that there will be many other pilots like me trying to build up this 5 hours, they will be competing with me for resources;

Day 1 February; 2 Aerotows to 3300 feet (1000m) into cloud with base 1600 feet (500m) under instruction. Conditions not soarable - Time in cloud on instruments, off tow in free flight; 20 minutes (that's a very generous estimate). Cost to me = 2x1000m Aerotows = £90 (110Euro). Glider hire time 45 minutes = £30 (40Euro). Total cost to me; one day + £120 (150Euro).

Days 2 and 3 March; 4 Aerotows to 3300 feet (1000m), as above. But 40 minutes of time on instruments. Cost to me; two days + £240 (300Euro).

So far I have completed 1 hour of pure cloud flying "solely by reference to instruments". Only 20% of the way there.

Days 4 and 5 April; Same as Days 2 and 3. Cost to me; two days + £240 (300Euro).

Day 6 May; Same as Day 1. Cost to me; one day + £120 (150Euro).

So far I have completed 2 hours of pure cloud flying "solely by reference to instruments". 40% of the way there. I have devoted 6 precious days to this and at least £720 (900Euro) and I am still not half way towards satisfying the 5 hour requirement.

Day 7 June; Same as Day 1. Cost to me; one day + £120 (150Euro). I am still not half way - only 2 hours and 20 minutes completed. So far it has cost me 7 days and £840 (1050Euro)

Days 8 and 9 July; 2 Aerotows to 2000 feet (600m). This time we get the right conditions to soar into cloud and can complete a total of 45 minutes in cloud under instruction. In real life this would be exhausting for both P2 and Instructor, and would probably be at the limits of safety and endurance for both pilots. Cost to me = 2x600m Aerotow - £70 (85Euro). Cost of glider hire = 90 minutes - £60 (75Euro). Total cost to me 2 days + £130 (160Euro)

Days 10 & 11 August; Same as Days 8 & 9. Cost to me = £130 (160Euro). I still have to complete a further hour of instructed flight.

Days 12 & 13 September; Same as Days 8 & 9. Cost to me = £130 (160Euro).

Day 14 October; Same as Day 1; Cost to me £120 (150Euro). 4 hours and 55 minutes logged so far.

Day 15 November; *AMC2 FLC.830 PRACTICAL SKILL TEST*. In a Motor Glider in this instance so that all the skills can be checked on one flight in order to save costs. 45 minutes engine time. Total cost to me = £70 (85Euro). Hopefully, I pass.

I have finally logged 4 hours and 55 minutes of "of dual flight instruction, controlling the sailplane solely by reference to instruments", and completed the *AMC2 FLC.830 PRACTICAL SKILL TEST*. These 15 Days would represent a fairly typical mix of soaring and non-soaring conditions in the UK which would spread the cost, and this in my opinion would be the fairly average learning journey.

It has cost me 15 Days. In a typical flying year I only fly for about 18-24 days. *So cloud flying training has cost me about **three-quarters** of all my flying days in this year.*

It has cost **me** £1320 (1565Euro). In a typical year my budget for gliding is always less than £2000 (2400Euro). *So cloud flying training has cost me well over a **half** of my total budget for gliding in this year.*

I showed earlier that zero-to-solo packages are offered in the UK by certain clubs costing between £850 and £1600 (1000Euro to 2000Euro). My costings are approximate, but suggest that gaining the Cloud Flying Rating will cost the pilot at least as much in terms of time and money (£1300 and 15 days) as it did for them to go solo in the first place. This seems grossly disproportionate.

My model presumes that all runs smoothly for me in terms of weather, and that I can gain access to the resources I need in the face of competition from the many others who are also trying to gain the Rating.

Aerotowing into cloud is not a particularly safe thing to do either.

In real-life soaring flight the average soaring pilot in the average calendar year

would only spend minutes in cloud. Only rarely does the typical pilot in the UK climb in cloud. For a pilot who logs 100 hours in a year (a very active pilot) I would estimate that they spend well under an hour total in cloud for every 100 hours. This has certainly been the case for myself.

We do not need these expensive arrangements to be put in place for something we do so rarely, but which is sometimes a necessity for flight safety reasons. In the UK when we do cloud fly - we do so in perfect safety.

CONCLUSION

I hope that I have shown that the impact of implementation of **FCL.830** (b) (2) (ii) "5 hours of dual flight instruction" is wholly excessive and prohibitively expensive for participants. It is potentially dangerous. It would consume considerable resources in terms of glider resources and Instructor time. It would require significant restructuring of typical glider club activity - redirecting it to cloud flying.

FCL.830 (b) (2) (ii) "5 hours of dual flight instruction" - is in my opinion ***hugely impactful*** at every level and should be reconsidered. I would suggest that the typical pilot in the UK with 30+ hours P1 on gliders who is "current" would require 1-3 hours, with 3 hours being the maximum and 2 hours being the expected norm. Even 2 hours could, out of season, still cost the pilot approximately 6 days and £720 (900Euro), and would still require clubs to undergo significant restructuring in order to compensate for the new demands. Smaller clubs would not be able to cope, with pilots at those clubs being forced to go to those which offer the facilities - thus incurring yet more costs, yet more deterrence.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

With regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

Finally, the Agency estimates the following costs for the sailplane training:

- €30–€50 per sailplane hour (dual)
- €60–€100 per TMG hour (dual)
- €45–€60 per launch to 1 000 m (which will allow 20 minutes flight time)

Therefore:

- 5 hours dual instruction: €150–€250
- 5 hours dual TMG instruction: €300–€500
- 15 launches to 1 000 m: €675–€900

The total cost of 5 hours of dual instruction without the use of TMG is €825–

€1.150. The Agency estimates that 5 hours of dual instruction can be carried out within 4 days which is a realistic figure confirmed by the Agency's gliding experts.

However, addressing the comments received and discussing the proposals again with the experts, the Agency decided to further reduce the minimum amount of training required to 2 hours and leave it to the instructor and ATO to decide when the trainee is ready for the skill test and has completed all the exercises successfully.

comment

668

comment by: *MaureenWEAVER*

FCL.830

(a) Flight within cloud only permitted for holders of a Sailplane Cloud Flying Rating - good idea.

(b) (1) 30 hours PIC in sailplanes is a reasonable requirement.

(2) A training course containing

(i) theoretical knowledge instruction - sensible

(ii) 5 hours of dual flight instruction - specification of time required is unnecessary. Dual instruction in gliding has always relied upon assessment of competence on the part of the instructor. Some glider pilots (like myself) have already experienced instruction in instrument flying as part of a PPL and would not be expected to need the full 5 hours. Other glider pilots may need more than 5 hours training. The number of hours training should be at the discretion of the instructor. I propose that the number of hours required to attain the rating is left to the discretion of the instructor.

(3) A skill test - sensible. But there are a limited number of FEs among glider pilots. It would be much more appropriate for the skill test to be carried out by an FI(E), who is considered competent to test all other aspects of flying.

response

Partially accepted

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to highlight that as a principle the Basic Regulation and Implementing Rules allow only examiners to conduct skill tests or proficiency checks. The Agency believes that with the new system a sufficient number of FE(S) will exist with the privilege of conducting test and checks for cloud flying rating.

comment

675

comment by: *Pete Whitehead (Edensoaring)*

Sailplane Cloud Flying Rating

The suggested requirement for 5 hrs of dual flight instruction is in my opinion:-

1. **unnecessary and excessive** - it should be based on competency alone,

not time-related in an arbitrary way. It would almost certainly be provided on a commercial basis, because the requirements for the instructor would be unlikely to be fulfilled by a volunteer instructor. It will therefore be **expensive, and prohibitive** to many glider pilots in the UK. Therefore, **there should be no minimum time required**

2. Many pilots already have competency, and many would achieve it from scratch in less than this, and some never would even if they took longer.

If a **minimum** time for Dual Flight Instruction must be demanded, then it **should be no more than 2 hours**. The Instructor should have a good idea of when a candidate would pass the proficiency test. Why not rely on this opinion checked by the proficiency test to check a pilot has the competency?

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 703

comment by: *Peter Gray*

6) subpart I additional rating FCL.830

I support the idea of a formal cloud flying rating for sailplane pilots. Sailplane flying is more than a leisure diversion. It is a challenging skill in the class of Olympic sports where the value of individual endeavor to society's health is recognised. Gliding forms a significant employment sector overall and numerically outweighs CAT both in terms of pilots and aircraft.

In it's attempts to harmonise aviation over Europe EASA should not stifle one sector of general aviation by neglecting to provide a 'means of compliance' that it does offer to the rest.

Apart from the need to take to cloud to access the conditions that will lead to successful flight it is occasionally necessary to penetrate cloud to regain a safe route home.

In these respects the proposal is a welcome development.

With reference to "(2) a training course at an ATO including: (i) theoretical knowledge instruction; and (ii) 5 hours of dual flight instruction, controlling the sailplane solely by reference to instruments;"

Gliding qualifications are characteristically gained by assessment of competence without minimum training periods. In this respect a minimum of five hours will be excessive in some cases and I believe an examiner should be free to sign off as soon as a candidate is consistently reliable.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment	708	comment by: <i>Jim Thomson</i>
	The earlier comment on a minimum of 5 hours tuition being excessive applies also to this section.	
response	<i>Partially accepted</i>	
	Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.	
comment	720	comment by: <i>richard starling</i>
	I believe 5 hrs dual to be inappropriate to the type of cloud flying practised by glider pilots. This is usually limited to let downs and short periods of thermalling in cloud. These skills are usually learnt very quickly by glider pilots and I would suggest that 2hrs dual would be more than adequate	
response	<i>Partially accepted</i>	
	Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.	
comment	722	comment by: <i>derekheaton</i>
	Whilst I fully support the principle that prolonged sailplane flying in cloud should only be carried out by pilots with an appropriate sailplane cloud flying rating, this will only affect a minority of the general UK club based pilots. The issue that is much more important to the majority of us is to be able to continue to fly safely as we currently do, namely for flight under IFR rules BUT clear of cloud. Without this ability, gliding in the United Kingdom will be decimated. Therefore I would like to see a second category included - call it a Restricted Cloud Flying rating that permits the holder to fly close to cloud or descend vertically down through cloud that may have closed up below the sailplane. I suggest that for this RSCFR it would be very prudent that the licence holder had carried out the theoretical knowledge required for the full SCFR but that it is not necessary for him to have to carry out the the flying part skills of the SCFR.	
response	<i>Not accepted</i>	
	Thank you for your comments and positive feedback. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (Restricted SCFR) was also identified by BGA.	
comment	723	comment by: <i>BGA</i>
	Whilst agreeing in principle with the implementation of a SCFR in order to give sailplane pilots the freedom exploit soaring conditions to their best advantage,	

there a number of points that I feel should be reconsidered.

i) removal of the minimum number of hours of instruction proposal. Many sailplane pilots have experience of instrument flying in other types of aircraft and are therefore already competent at cloud flying. Issue of the rating should be determined by competence rather than minimum hours - some pilots will undoubtedly require more than the proposed 5 hours while others will require fewer. If a number must be imposed, then 3 hours might be a suitable alternative.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment

729

comment by: *Ralph Erskine*

I am a glider pilot in the UK (a member of the Ulster Gliding Club).

I strongly support the proposed FCL 830, introducing a Sailplane Cloud Flying Rating.

response

Noted

Thank you for providing this positive feedback.

comment

737

comment by: *David Chambers*

Page 17/FCL.825 (a) (1)

I do not agree that the holder of an EIR should be limited to flights by day if (s)he already holds a Night Qualification. It is to be expected that many EIR flights would be longer and more likely to involve some part at night. Limiting the EIR to day time only would considerably reduce the potential for its use, or encourage transition to VFR at sunset when it would be safer to remain in IFR. I do not see the rationale to restrict the EIR for daytime only, and believe this to make the qualification less safe.

Page 18/FCL.825 (f)

Revalidation requirements for EIR

The UK IMC Rating has proven successful with a requirement only for revalidation every 25 months. At least one approach of a different type must have been logged and signed off before the revalidation test. I see no reason why a similar two year revalidation period could not also be applied to the EIR, which has in many ways fewer privileges.

Page 21/Point 5: Theoretical Knowledge

The 100 hours TK syllabus seems to be much more proportionate to the level of material to be studied. I have studied many different subjects through distance learning and never once been required to prove a mandatory minimum number of study hours. Surely pilots who are more experienced and/or who have already studied these subjects in depth may be able to achieve the level of knowledge required in slightly fewer hours. Others may require more. The

exams themselves will determine whether they have achieved the required standard or not.

In the past, I have undertaken several different (aviation unrelated) subjects and have been offered optional classroom study which I've found useful, but by no means essential. I do not believe that a minimum classroom study time should apply – surely the criteria is whether the candidate can pass the set theory test. The requirement to attend classes in person will reduce the number of private pilots able and willing to complete the course, all of which reduces safety.

response *Partially accepted*

Thank you for providing this comment.

After receiving several similar comments, the Agency reviewed the issue and decided to extend the privileges of an EIR to flights by night provided that a night rating is held in accordance with FCL.810.

The Agency also reviewed the EIR revalidation requirement and decided to keep the 1-year validity period. However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.

Finally, the Agency and the Review Group decided to review the EIR and competency-based IR theoretical knowledge requirement. As a result, the Agency decided to keep a minimum number of hours for standardisation purposes, but to reduce the minimum to 80 hours instead.

comment 740

comment by: *Andy Balkwill*

Page 19 FCL.830 Sailplane Cloud Flying Rating.

I support the proposals set out here except that I consider the minimum 5 hours of dual flight instruction to be excessive. It is unclear from the proposals how existing pilots that cloud fly will be transitioned to the new licensing arrangements but I would not support the setting of a 5 hour minimum for dual training since many of those that cloud fly regularly should simply need to demonstrate competency in a skill test and the required theoretical knowledge. The same should also be true for new pilots learning the skills for the first time - the granting of the rating should be based on demonstrating competency in a skill test and the required theoretical knowledge and an arbitrary minimum threshold simply penalises the most capable pilots who have to undertake costly and unnecessary training.

FCL.905.FI - FI Privileges and conditions

This seems to suggest that a Flight Instructor (sailplanes) would be required to have 200hours of IFR flight time logged before being able to provide instruction in cloud flying. Given that many instructors will perhaps fly only 100hours per year, the majority of which will be in VFR conditions, this level of experience seems excessively high and will be likely to result in a severe shortage of instructors able to train and issue SCFR ratings. This could have significant practical implication for the transition process as well as the ongoing training and revalidation processes. Given that cloud flying by sailplane pilots has been conducted safely in the UK for many years this suggests the existing training

	<p>arrangements are satisfactory and do not require major change and so it is unclear why such a high barrier is being suggested for flight instructors.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments and positive feedback.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p> <p>With regard to your comments on the FI(S), the Agency would like to clarify that such instructor only needs to hold a cloud flying rating and must have demonstrated his/her ability to instruct for this rating.</p> <p>Finally, the Agency would like to highlight that previous sailplane instructor experience may be credited to a Part-FCL licence and rating. This process is the responsibility of the Member State in consultation with the Agency.</p>

comment	742	comment by: <i>Steve Lewis</i>
	<p>The proposal for an instrument rating for glider pilots is broadly acceptable but the details show no understanding of glider flying whatsoever. There are 2 issues. Flying near cloud. This must be available to all glider pilots. It is an integral part of thermal soaring. Flying in cloud should require separate training but ,frankly, a minimum of 5 hours of training is ridiculous. This requirement should be removed and replaced with being trained to the required standard.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.</p>	

comment	746	comment by: <i>Nick Hill</i>
	<p>The option of flying sailplanes in or near to cloud has been an essential requirement for many years for the sport of gliding in the UK. If this option is removed it will have a negative impact on the sport of gliding in the UK. It is not clear that there is any evidence that a safety risk exists if the current situation that operates in the UK was to be maintained as it stands today.</p> <p>The requirement of a minimum of 5 hours dual instruction for the Sailplane Cloud Flying Rating is I believe excessive. As a syllabus is defined and a test required then the requirement should be to demonstrate sufficient skills to pass the test. Different sailplane pilots will learn the required skills at different rates and their ability to demonstrate sufficient skills will not be measurable on the basis that they have or have not completed a minimum of 5 hours instruction, or any other pre-determined minimum hours specification.</p> <p>In the gliding club where I fly in the UK there are many sailplane pilots who currently fly in cloud and when questioned they also believe that 5 hours</p>	

	<p>minimum instruction time seems excessive.</p> <p>With the general meteorological conditions prevalent in the UK the recognition of the requirement for what the British Gliding Association proposed of a restricted SCFR allowing flight in IFR but clear of cloud is essential. This area seems to have been ignored in this document but the situation of flying clear of cloud but in IFR conditions is often encountered in the UK and from the UK gliding safety record there seems to be no evidence that this represents any significant risk.</p> <p>I would suggest that the current specification of a minimum training hours and the lack of recognition of a requirement for the BGA restricted SCFR are re-examined.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training/Restricted SCFR) was also identified by BGA.</p>
comment	<p>748 comment by: <i>Colin Cownden</i></p> <p>The minimum dual flight instruction requirement to comply with the SFCR of 5hrs is excessive. A more relevant period would be 2 hrs instruction coupled with the ground school syllabus described elsewhere in NPA 2011-16.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>773 comment by: <i>Liz SPARROW</i></p> <p>Pp18/19 Ref 6 Subpart I Additional Ratings FCL830 SCFR - as a member of the British Gliding Team and a former Chief Flying Instructor, I strongly support the establishment of a sailplane cloud flying rating from both safety and sporting perspectives.</p> <p>The safety case from the UK is clear that there is significant safety advantage in allowing cloud flying, and in particular IMC flying clear of cloud. Without this UK gliding would be sufficiently disadvantaged as to risk its continuation. It would unquestionably also affect the UK's competitiveness in international competition as there are many days when remaining 1000' vertically from cloud would prevent safe cross-country flying and training.</p> <p>I understand that that both the BGA and CAA consider cloud flying to be safe in its current form and not in need of regulation, but recognising the need for an EU-wide framework, it is clear that regulation must be put in place enabling this activity to continue as at present.</p>
response	<p><i>Noted</i></p>

Thank you for your comments and positive feedback.

comment 783 comment by: *Shaun McLaughlin*

5 hours of dual flight instruction is not suitable for sailplanes given the nature of sailplane flight within cloud. A skill based assessment by an Examiner should be suitable for new applicants, existing rights should also apply and be valid for the length of the licence.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 788 comment by: *Allan ARTHURS*

While I support the requirement for a relevant skills test, I feel that the requirement for 5 hours of training is inappropriate because while some pilots may require more than this, others may require less. Furthermore, I feel that it would be far more practical to allow the use of both TMG's and suitable flight training simulators for this purpose.

I additionally propose that provision be made for a national rating for flights under IFR conditions to be undertaken within the allowed airspace on a national (country) basis.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment 803 comment by: *David WILLIAMS*

The requirement for 5hrs training seems excessive, since the SCFR will presumably be sought by those that can already adequately handle an aircraft rather than by *ab initios*. For those that can already fly, the prospect of 5hrs dual training will be exhaustive in terms of availability of aircraft, availability of instructors, availability of weather, and availability of money. In short - excessive.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment	<p>821 comment by: <i>Patrick de Nonneville</i></p> <p><i>Either changing para (1) to read An EIR shall be valid for 2 years Or changing para (2) to add the sentence: On alternate years, the requirement for a proficiency check may be substituted by undertaking at least 1.0hrs of instrument flight training in an aircraft with an IRI(A) or FI(A) holding privileges to provide training for the EIR</i></p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency has decided to standardise the validity period to 1 year to ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.</p>
comment	<p>822 comment by: <i>Patrick de Nonneville</i></p> <p>Theoretical Knowledge The 100hrs is proportionate to the reduction in the TK syllabus, so we support it; however, in principle, we do not think the minimum hours mandate in FCL course approvals is of any particular value. On classroom teaching, our experience is that some TK candidates enjoy and benefit from classroom instruction, and others find it unnecessary and of no value. Our membership includes pilots with modest educational backgrounds, pilots who are University Professors and every level in between. Therefore, we welcome the flexibility in the NPA in this respect. It should be clarified that a candidate may complete a TK course and the Exams and subsequently complete the minimum classroom time in combination with practical flight training at an ATO which may be a different one from the TK course provider.</p> <p>Point 6, Flight Instruction – General comments We strongly support the flight instruction proposals exactly as worded in point 6. We would oppose any adjustments whatsoever to increment the total training time, total experience time or ATO training. The principle underlying training requirements in ICAO, under major non-European training regimes and for most existing EASA FCL qualifications is that the minimum training time must allow an instructor to teach the syllabus in full to a student. For example, the EASA Multi-Engine Piston Class Rating has a minimum time of 6hrs, which just permits the syllabus to be covered in full. Another example is the EASA IRI qualification, which requires 10hrs – ie. a candidate may be taught how to teach the entire IR syllabus in 10hrs. Type Ratings on mulipilot aircraft are another example: it is possible for a pilot with very limited experience to qualify for an Airbus A320 Type Rating with ~16hrs as Pilot Flying in a FFS. On this basis, the 50-55hrs of the present EASA FCL IR course is clearly an anomaly. It requires around 10-15hrs to teach the IR syllabus, and the remaining time is spent in students practising training routes to reach the test standards. We believe that such practise should be competence-based, rather than mandated by FCL, as it typically is in other EASA FCL qualifications.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

After receiving several similar comments by other stakeholders, the Agency and the expert Review Group discussed this issue. As a result, the Agency decided to further reduce the theoretical knowledge requirement to 80 hours and amended the text by deleting the possibility to combine theoretical and practical training, but keep a specified amount of classroom teaching as stipulated by ORA.ATO.305.

comment

845

comment by: *Diana King*

As a glider pilot of 40 years and 3,000 hours experience, I welcome this proposal for a Sailplane Cloud Flying Rating. Although I personally do not often fly in cloud, I frequently find it necessary to fly close to cloud in order to continue a soaring flight and I occasionally need to fly in cloud in order to make a safe descent from high altitude flights. Other pilots make use of our current cloud flying permission far more than I do. In the UK, where cloud bases are often quite low, a regulation prohibiting any flying in or near cloud would be disastrous for us and would cause enormous problems in many of our clubs. In principle therefore I welcome the proposal for Option 1 and support its adoption.

response

Noted

Thank you for your comments and positive feedback.

comment

875

comment by: *BAKER*

With reference to FCL.830 (b) (2): Specifying a minimum duration for dual-instruction instrument flying is unnecessary, particularly for those pilots already competent at cloud flying. An improved requirement is to replace the text "5 hours of.." with "sufficient dual instruction, controlling the sailplane..., in order to pass the skills test". [Also see comment #872 for page 11, 3.2]

The exemplary cloud flying safety record achieved by gliders to date, without formal licensing attained through a mandatory period of dual instruction indicates that it is unnecessary to enforce such requirements.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment

882

comment by: *David TAYLOR*

There is a requirement for 5 hours instruction with reference to instruments only.

Is it not possible to set the instruction time to be "sufficient to train the pilot to a level to pass the proficiency test".?

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by the BGA.

comment 886

comment by: *Colm Farrell*

FCL.825 The Privileges of the En-route Instrument Rating (EIR) should include one approach type (of the candidates choosing) which they are examined on. The EIR holder should then be awarded the privileges to fly such an approach. The flight should then only be initiated or continued when the arrival airport conditions indicate VMC conditions will exist, or that the one approach that the candidate is allowed to fly, is available.

This would enhance the safety of the EIR, as candidates will always have the option of flying this type of approach if caught out with unexpected IFR conditions at the destination. Only one such approach type should be added to an EIR, to preserve the distinction with the IR.

I would be very supportive of the EIR. Its introduction will allow many more pilots to seek further instrument training with attainable goals. It will allow the candidate to gain additional privileges which assist their safe flight, at a reasonable stage during training to a full IR. As such it will be a major improvement on the current situation. However I believe that it requires one approach to be allowed, in order to ensure that the candidate always have an option for a safe arrival if weather is below VFR, contrary to forecasts.

It is all very fine testing the candidate on an emergency IFR approach during the training for an EIR, however if they can't regularly use this approach, their skills on this approach will quickly depreciate, and may not be present when needed. Accordingly it's important that such approach be not only be included in their training, but also be included in their privileges.

response *Partially accepted*

Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. In addition, the Agency, supported by many stakeholders, strongly believes that the EIR will have an overall positive effect on safety and will provide an incentive to General Aviation VFR pilots to obtain the full IR(A) rating at a later stage.

comment 887

comment by: *Colm Farrell*

The training course should not require a ATO. Instruction under any EASA IRI(A) should be acceptable.

response *Not accepted*

Thank you for providing this comment.

The Agency does not agree with your statement 'the training course should not require an ATO'. An ATO will ensure a minimum quality training standard and is

a widely supported and trusted system. Several Member States (and the U.S.) have such a system in place with proven safety benefits.

comment

888

comment by: *European Gliding Union (EGU)*

Response from European Gliding Union

FCL.830 Sailplane Cloud Flying Rating

The EGU is the association of European Gliding Federations or Gliding Sections of National Aero Clubs.

Its aim is to represent the interests of all glider pilots in Europe with respect to regulatory affairs; it currently counts 22 full members and represents more than 80,000 glider pilots. The EGU welcomes these proposals.

In a number of Member States, exclusion from flight in IMC would add significant hazards to glider flying, generally by forcing pilots to fly lower, thus increasing the risks of off airfield landings, and in more congested airspace. These are generally the States with colder, wetter weather.

Associations and National Authorities in these Member States have gathered considerable experience in this aspect of glider flying. Not one of them has found it to present any particular risks. Further, there is no evidence, at all, that those states with the more onerous requirements enjoy any extra safety advantages.

In particular, the Nordic nations have proved that safe revalidation can be achieved by a training flight with an instructor. This proposal's requirement for a proficiency check instead of the well-established training flight would introduce significant difficulties with examiner availability and incur extra costs when examiners can be available. These extra difficulties and costs would offer no safety benefits, but would reduce the take up for the SCFR, introducing the very dangers that the rating is intended to avoid.

Similarly, the Member State with the most experience of glider IMC flying (UK) has never found it necessary to mandate any minimum for instrument training. The EGU does not understand why the privileges of the SCFR should be extended to TMGs.

It is essential that training for the rating is possible in TMGs, but we know of no demand for its use in these aircraft.

Indeed, it would be more appropriate to mandate an EIR or IR for IMC flight in these aircraft. We know of no TMGs with a Flight Manual that permits flight in IMC.

Recommendations:

1. FCL.830 (c) should read: "... For revalidation, the applicant shall undergo 1 dual instructional flight, if launched by aerotow or self launch, or 3 dual instructional flights from other launch methods. For renewal, the applicant shall pass a proficiency check"

2. FCL.830 (b)(2)(ii) should read: "dual instruction, controlling the sailplane solely by reference to instruments, as assessed to be necessary by the ATO"

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training/use of TMG) was also identified by BGA.

In addition, with regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of

the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 889 comment by: Colm Farrell

If an EIR holds no IFR approach nor departure privileges then the validity period should be two years.

response *Partially accepted*

Thank you for providing this comment.

The Agency has decided to standardise the EIR validity period to 1 year to ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.

comment 890 comment by: Colm Farrell

There should be a revalidation by experience option similar to the SEP class rating. If the candidate undertakes 1 hour of additional training this should be sufficient for revalidation.

response *Not accepted*

Thank you for providing this comment.

The Agency has decided to standardise the EIR validation requirements to ensure that they follow the full IR validation requirements.

comment 894 comment by: Colm Farrell

The introduction of the Competency Based Modular IR, is an excellent step forward, and one that I fully support.

response *Noted*

Thank you for providing this comment.

comment 897 comment by: Colm Farrell

Applications for an IR(A) who already hold an IR(A) under the Chicago Convention need to demonstrate that he has acquired knowledge of air law, meteorology, flight planning and performance and human factors. It is not specified how this should be demonstrated. It should be acceptable to demonstrate this by oral examination of the candidate by the flight examiner prior to the undertaking of the skills test.

response *Accepted*

Thank you for providing this comment. After receiving and reviewing several similar comments by stakeholders, the Agency has decided to allow applicants to demonstrate an adequate level of theoretical knowledge to an examiner during the skill test.

comment

899

comment by: *Roger STARLING*

FCL.830 Sailplane Cloud Flying rating

The introduction of the SCFR is **vital** to maintain levels of gliding activity. There is no evidence that safety would be reduced by its introduction - in contrast safety would actually be reduced if it is not introduced as glider pilot would be more likely to have to make field landings.

(2) (ii)

5 hours of dual flight instruction is excessive - sailplane pilots do not habitually fly for long periods in cloud so much of the training designed for light aircraft for example is inappropriate. Given that under section (3) a skill test is required the requirement for a minimum number of hours seems superfluous.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

905

comment by: *Ulrich Baum*

FCL.825: En-route Instrument Rating (EIR): To be consistent with competency-based IR requirements, applicants should be given credit for some simulator (FNPT) time towards the required instrument instruction time.

response

Not accepted

Thank you for providing this comment.

The Agency and the group have discussed the use of FNPT for the EIR. It was decided that because of the low-hours requirement and the need for exposure to the real environment the training should be conducted in the aeroplane only.

comment

906

comment by: *Ulrich Baum*

FCL.825 (EIR): Please clarify whether a multi-engine EIR automatically includes single-engine EIR privileges. In my opinion, it should.

response

Not accepted

Thank you for providing this comment.

The Agency would like to highlight that FCL.825(e) stipulates that 'for a single-engine EIR, the test shall be taken in a single-engine aircraft'.

comment	910	comment by: <i>Ulrich Baum</i>
	FCL.825 EIR: I propose extending the EIR validity period to 2 years - maybe contingent on a certain number of logged IFR hours in the first year. For private pilots, this would align revalidation periods of the EIR and the underlying class rating. (As an example, see Canada's policy for their instrument rating).	
response	<i>Partially accepted</i>	
	Thank you for providing this comment.	
	The Agency has decided to standardise the EIR validity period to 1 year to ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.	
comment	914	comment by: <i>Peter Thomas</i>
	I strongly support the SCFR and believe it to be important to safe and practical glider flights in the UK and other EU countries with similar climate conditions	
response	<i>Noted</i>	
	Thank you for your comments and positive feedback.	
comment	920	comment by: <i>Capt. Nick Hoare</i>
	The inclusion (after much lobbying) of a rating to allow cloud flying in gliders is very welcome. I would like to make the following comments:	
	1. The 30 hours PIC requirement is entirely reasonable.	
	2. For pilots new to instrument flying a course of approved training would seem to be a reasonable idea. The BGA recommends that 3 hours should be the minimum and I agree with this view. Once basic circling and recovery from unusual attitudes has been mastered there is little value in further instruction, the glider pilot is not concerned with radio navigation, IFR cruising and flying instrument approaches.	
	3. Some pilots have a great deal of experience in cloud flying and I would suggest that an examiner should be able to consider this experience and conduct a test with no further training if he/she thinks fit.	
	4. Experienced glider pilots who hold a powered aircraft IR qualification should also be exempt from the training and be able to either take just the bi-annual test or be allowed to substitute the flight test with an IR skills test in another aircraft type as is currently allowed for the SEP rating.	
response	<i>Partially accepted</i>	
	Thank you for your comments and positive feedback.	
	Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) was also identified	

by BGA.

Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment

922

comment by: *John T Donovan*

Text:

6) Subpart I – Additional Ratings

FCL.830 Sailplane Cloud Flying Rating

(a) Holders of a pilot licence with privileges to fly sailplanes shall only operate a sailplane or a powered sailplane within cloud when they hold a sailplane cloud flying rating.

Comment:

I recognise the concern that the SCFR could be used to fly a TMG in IMC and support the UK CAA and BGA's view that the privileges of the SCFR must not include flying TMG's in IMC. I am not aware of any TMG's that are permitted to fly in IMC.

As a holder of TMG class rating and the BGA MGIR (a national motor-glider instructor rating), of which privileges include using a TMG for the purpose of sailplane instruction, I recognise the importance of using TMG's for sailplane instruction.

Using TMG's is a practical and economical sailplane training tool which must be retained.

I request that EASA clarify that TMG's may be used (in VFR only) for the instruction towards the issue, skill test and proficiency checks of a SCFR.

I further recommend that EASA make legislation clear that the privileges of Sailplane Cloud Flying Rating may not be exercised in a TMG.

Recommended changes to text:

6) Subpart I – Additional Ratings

FCL.830 Sailplane Cloud Flying Rating

*(a) Holders of a pilot licence with privileges to fly sailplanes shall only operate a sailplane or a powered sailplane (**excluding TMG's**) within cloud when they hold a sailplane cloud flying rating.*

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment

926

comment by: *John T Donovan*

Text:

6) Subpart I – Additional Ratings

FCL.830 Sailplane Cloud Flying Rating

(2) a training course at an ATO including:

(i) theoretical knowledge instruction; and

(ii) 5 hours of dual flight instruction, controlling the sailplane solely by reference to instruments;

Comment:

1) I welcome the theoretical knowledge element.

2) the 5 hour dual flight instruction requirement is excessive and should be reduced.

As a holder of a JAR-FCL PPL I have done instrument training (in both SEP & TMG aircraft) as part of my PPL training.

In my case the 5 hour training requirement is unnecessary and expensive financially.

As an instructor I am very aware that there are various levels of competence and I support the view that training should be competency based.

There are some 8,000 + sailplane pilots in the UK at various levels of competence. A few will need 5 hours of training, but most will not. The 5 hour minimum requirement is unfair, unrealistic and will add to the cost of flying.

I propose that the 5 hour training requirement is removed and a competency based training and assessment model is adopted instead.

response *Partially accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 936

comment by: *Dr Stephen Gibson*

5 hours "on instruments" in a sailplane is excessively onerous, costly and difficult to achieve. This is a disproportionate requirement carried across from power flying and seems to forget the greater strength of those sailplanes that are allowed to cloud fly and their speed limiting dive brakes. To achieve hours of experience "on Instruments in sailplanes" the use of TMGs must be allowed and credited, but to do so should not mean that EASA should impose excessively long requirements besides a skill test.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were

also identified by BGA.

comment

951

comment by: Alan Mc Killen

however I would like to make some comments on the rationale that was used by EASA to subsequently draft their proposals in the form of options
The principle of a unified system in the form of piloting skill, knowledge and training in the ability to fly at or in cloud and **for** all to be able to use those skills in any of the member states is to be commended.

It is to be assumed that such skills would be used mainly by the power fraternity where they would **often** travel from one member state to another and possibly even further afield

Those flights could be for many purposes - pleasure, training for a commercial career, business, holiday etc etc.

For most power pilots based in the mainland of Europe the above flights would not be unusual

There would be some Gliding sites based again on the mainland of Europe where the crossing of borders (usually only one) would not be uncommon. However, **at** some - **e.g.** Jaca, Sisteron or La Motte **du Caire** - **only a foolhardy** pilot would climb in cloud, not just for the terrain reasons but the volume of traffic both military and civil.

The **mainland UK** however does not have a national border and as such the vast majority of power flights and all Gliding flights are within the one jurisdiction. Terrain would in general not be the big problem that some European countries pose and military traffic is in well defined areas and civil arrangements and training in the form of the Bronze C theoretical knowledge have been set in place for many years and have stood the test of time.

The economic and environmental impact, both to some extent intertwined, have I feel been glossed over.

If cloud flying is prohibited then outlandings will increase, **as is** acknowledged in **NPA 2011-16 for Option 0. However, the analysis of the safety impact for Option 1 is wrong in claiming that Option 1 "would have no impact on safety" for the eight Member States which permit cloud flying. That would be the position only if all existing glider pilots in those States obtain SCFRs (which is unlikely in the UK), or full grandfather rights are conferred on all glider pilots with existing cloud flying privileges in those States. The SCFR will actually have an adverse effect on safety for pilots in those States who do not obtain SCFRs and do not receive full grandfather rights. But the analysis completely overlooks that problem. I appreciate that there is a potential gain in safety in the other countries**

The resulting increased road retrievals in the UK and elsewhere both going to get gliders and then the retrieve back home would have a Co2 impact and with the very high cost of fuel there would be an economic impact.

If land outs were to increase the law of averages would suggest that some would result in injury and or damage. Some might argue that the damage only incidents would provide work for the repair organisations - a very unrelated issue for this argument.

Para 2.2 (p 231) **refers to 37 mid-air collisions involving sailplanes in EASA States between 2001 and 2010, but the data do not support the need**

for a cloud flying rating: as para 2.2 observes, in many reports the narrative is very sketchy, and data about the weather or clouds are unavailable. Moreover, there were no instances of collisions in clouds, and only two cases where collisions were in the "proximity to clouds".

Under the three options Para 4 the only option for cloud flying is option 1 and **surely** only one option is not an option

The financial cost and human resource cost **of the SCFR** for **gliding club** instructors would be huge as it would be to any club member who wishes to go down this route. **This problem will be exacerbated if, as is quite likely, some instructors do not wish to obtain an SCFR themselves. "Grandfather rights" should therefore be conferred on glider pilots who at present are entitled to fly in cloud. Otherwise, when the SCFR takes effect, instructors will be over-burdened and have much less time for instructing beginners to gliding, which could easily deter them, since continuity in instruction is vital when starting to learn.**

The above does not address the **minutiae** of horizontal and vertical distance from cloud etc as I feel the present system in the U.K. has and is working although I would STRONGLY advocate the use of a Flarm based system.

However to conclude I would wish to add my support the British Gliding Associations endorsement of option 2 SCFR-restricted
Alan Mc Killen

response *Not accepted*

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (Restricted SCFR) was also identified by BGA.

In addition, the Agency would like to highlight that an existing national licence and rating may be converted into a Part-FCL licence and rating. This conversion process is the responsibility of the Member State in consultation with the Agency.

comment 964

comment by: *Laurence Woodage*

Ref: Draft opinion & decision.

I am a glider owner and glider pilot. I would have preferred that a "Restricted Sailplane Cloud Flying Rating" be created. However if this is not going to be considered then I agree that a SCFR rating should be created for both LAPL(S) and SPL holders.

In my opinion the proposed requirement for 5 hours of dual flight instruction is excessive and should be either reduced or scaled down for experienced glider pilots.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issues you raised (LAPL(A) and SPL/5 hours training/ Restricted SCFR) were also identified by BGA.

comment 967

comment by: *UK Light Aircraft Association*

Paragraph No: FCL825 (a) (1)

Comment: We propose that where the holder of an EIR is also the holder of a night qualification for that class or type of aircraft, the EIR should not be restricted to day operation.

Justification: The holder of an EIR has demonstrated a competence to safely operate an aircraft by sole reference to instruments and hence it would be disproportionate to restrict the holder of a night qualification from exercising night privileges under en-route IFR where he also holds an EIR. Removing the 'by day' restriction does not absolve the holder from requiring a night qualification in order to exercise his license privileges at night.

Proposed Text:

FCL825 (a) (1) Delete the words 'by day'

Paragraph No: Various

Comment: We are pleased to note that the training regime follows ALARP (As Low As Reasonably Practical) principles in respect of training course approvals and the provision of training from independent IRI(A) or FI(A) holders; we believe this to be in the best interests of the principal Terms of Reference, that to maximise the uptake of Instrument qualification by private pilots.

Justification: The Learning Objectives (LOs) for both the competency-based modular EIR and IR(A) are sufficiently well stated and the requirement for defined training time and skills testing at an ATO provides sufficient oversight proportionate to the needs of the private pilot.

Proposed Text: None

Paragraph No: Sections 1.3 and 2.5 - Theoretical knowledge instruction and examination

Comment: We believe it is inappropriate to require defined time minima either for the theoretical knowledge (TK) aspects, or for defined minimum duration of classroom teaching within an ATO for the competency-based EIR and IR(A).

Justification: The competency-based approach will ensure that only those candidates who demonstrate sufficient TK competency will pass the TK examinations. Where a candidate is able to demonstrate competency within a shorter time than proposed, whether by personal ability or prior knowledge, it would be disproportionate to require additional unnecessary tuition. To do so would impose unnecessary time and cost burdens and may have the effect of reducing the potential uptake of instrument qualification amongst PPLs.

Proposed Text:

A.2.IR(A).5 Delete the words 'of at least 100 hours.'

response *Partially accepted*

Thank for providing this comment.

The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

With regard to the theoretical knowledge requirements, the Agency decided to keep a minimum amount of hours for standardisation purposes; however, the minimum was further reduced to 80 hours instead.

comment

973

comment by: *David GETHIN*

Dual Flight Training requirement

I agree with the BGA position that a competency-based test for the rating is a good idea and makes the concept of a minimum training duration superfluous. The period of 5 hours is excessive especially given that clouds may exist on many days of a year, but may actually be out of reach of glider pilots at many clubs for many of those days. The voluntary nature of clubs and availability of 2-seat gliders would further limit training windows. This may have the effect of limiting training uptake and, therefore, the potential safety benefit in 2 likely scenarios:

Training abandoned due to sustained significant effort to get a rated instructor, an appropriate airframe and appropriate conditions together for the required training time at local / home flying site.

Training abandoned due to additional cost of an intensive course at a 'one of the big clubs', which may not actually deliver the required conditions for training (e.g. 'blue sky' days)

I therefore do not agree that any minimum should be imposed

Touring Motor Gliders (TMGs)

I agree with the BGA position and recommendation that TRAINING for the SCFR should be possible in TMGs and the need to explicitly clarify that privileges of the SCFR should NOT be used in a TMG.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/Use of TMG) were also identified by BGA.

comment

981

comment by: *stephen ancseil*

SCFR (b) 2; 5 hours training seems excessive for pilots who have already practised this in experience. I personally have an FAA issued PPL, where there is a requirement to fly by instrument as well as several hours of night flying too. I concur with the BGA where 3 hours would be sufficient.

Additionally, is there a grandfathering option for the SCFR, and would the existing ratings held by a sailplane pilot be credited forward? Specifically the requirement to fly 30 hours after actual issue of a LAPL (S) licence?

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) were also identified by BGA.

comment

982

comment by: *Federal Office of Civil Aviation FOCA*

With regard to commercial and private helicopter operations the actual IFR training, especially the learning objectives and the amount of theoretical instruction are neither adequate to

	<p>this kind of operations nor are the operational environment and the relevant equipment. Helicopters are non-pressurized and thus are limited to FL100/130. The theoretical knowledge shall also be in line with the technologic development, e.g. ability to read and understand Jeppesen charts (e.g. use of Ipad), RNAV-procedures including e.g. LPV. An adjustment to the needs as proposed by the NPA 2011-16 for the aeroplanes shall be implemented also for helicopter operations in a timely manner.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving several similar comments, the Agency would like to highlight that it is aware that there is a need for similar ratings for helicopters. As the current task entails only aeroplanes, helicopters will be dealt with in a future task.</p>
comment	<p>988 comment by: <i>Bob BOYD</i></p> <p>FCL.830 (a)(2)(ii) 5 hours dual instruction is impractical and would be very difficult to achieve considering typical UK weather conditions.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>996 comment by: <i>alex CLARKE</i></p> <p>Flying in or, more commonly, near to cloud is an essential aspect of flying sailplanes. I therefore strongly support the proposed addition of a Sailplane Cloud Flying Rating. Being unable to cloud fly would reduce gliding range and restrict achievement and/or increase the number of field landings. Ultimately it could lead to lack of enthusiasm and reduction in participation among existing pilots and the gradual erosion of the sport. As gliding represents many pilots' first experiences of flight this is undesirable for all aviation.</p> <p>I do however believe 5 hours to an excessive minimum requirement for dual flight instruction. The instructor should be capable of ensuring the pupil has met the standard, regardless of whether they have been instructed for more or less than 5 hours.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) were also identified by BGA.</p>

comment	998	comment by: <i>Jonathan H May</i>
	We need a sensible safe cloud flying regime controlled by the best people who understand the requirements and risks and collate any statistics. This is best done by the British Gliding Association and their new scfr looks to be the best for all concerned. I accept that it is not perfect but but an unpoliceable rule is no use either.	
response	<i>Noted</i> Thank you for your comments.	
comment	1000	comment by: <i>John Richardson</i>
	The current TK examination process in the UK is not efficient from the private pilot viewpoint. The exams are only held every two months and the timings are fixed. The location is the CAA building at Gatwick Airport. This is inappropriate for private pilots who are in full time employment and find it difficult to schedule the time to take the examinations or to travel to Gatwick airport. The examinations should be administered at the ATO that conducts the flight training. This improves the accessibility of the CBM IR and should encourage more pilots to attempt the rating and hence achieve the objective of improved safety. There is no safety rationale for holding the examinations at a single fixed location since the current examinations for the initial PPL are held at the flight training school and this has not posed any safety issues.	
response	<i>Noted</i> Thank you for providing this comment. The Agency would like to highlight that the issue you raised is the responsibility of the Member State. Please refer to ARA.GEN.205 for further details.	
comment	1001	comment by: <i>Bond Aviation Group Ltd</i>
	FCL.830(a) I support the concept of a Sailplane Cloud Flying Rating. Gliding depends upon the aircraft being able to operate in close proximity or inside of cloud. Without the ability to fly near/in clouds the sport would not be viable. FCL.830(b)(2)(ii). The concept of a minimum number of hours of training is not compatible with a competency based rating; if the candidate can pass the test with no training then that is fine, if he/she requires 25 hours of training then that is fine also.	
response	<i>Partially accepted</i> Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) were also identified by BGA.	
comment	1016	comment by: <i>Francis RUSSELL</i>
	A Sailplane Cloud Flying Rating FCL830 is essential as a substitute for the superior current regime applying in the UK as comparatively low cloud bases	

frequently encountered would, in the absence of IFR flight being possible, entail a considerable increase in the number of field landings on gliders on cross-country flights, with all the consequent implications for safety expense and occasional distress of landowners and the public.

THE REQUIREMENT FOR 5 HOURS DUAL FLIGHT INSTRUCTION mentioned on P19 is unduly prescriptive. Emphasis should be on the attainment of a satisfactory level of competence by the individual: this may involve less than 5 hours instruction or more depending upon individual circumstances. A 24 month period of validity would appear to be excessive bearing in mind that holders of a SCFR would be able to maintain their own levels of competence in the course of their own flying. A check at 5 or ten years would be more reasonable (certain glider pilots have taught themselves cloud flying to a reasonable standard)

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, with regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment *1020*

comment by: *Norwich Gas Centre*

5 hours should be seen as a maximum for less experienced pilots, before a skills test. My suggestion is "1 to 5 hours depending upon skill and experience of candidate"

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment *1037*

comment by: *Michael Thorne*

FCL.830. Sailplane Cloud Flying Rating

It is possibly justifiable to require training and the issue of a licence to fly **within** cloud, although 5 hours training in a dual control glider in cloud or with vision limiting aids is excessively onerous as a condition, in my view. It is also impractical and questionably dangerous in that more gliders will then be flown in cloud by those who have been required to obtain the rating, and the risk of in-cloud collisions during training and cross country flights will inevitably

rise. This could easily be an unintended consequence of the imposition of this licence requirement.

Introducing such a licence would be a major upheaval as the resources to train and test for it are not there. I fly at a medium sized gliding club with 20 instructors on the books and a further 50 flying members, and not one of them is currently qualified to fly in cloud by the holding of a licence. These would all need to be tested and refreshed in continuation.

Many of my club's instructors fly for less than 50 hours a year, and this is quite typical. Adding 5 hours of dual IMC flying is an excessive and unnecessary burden on them. Very few of them ever enter cloud. Most of them fly regularly and safely near cloud in VMC-like conditions but above 3000ft, clear of cloud and in sight of the ground.

Should the need for a licence be proven or imposed, the training and renewal requirements should be 1 hour of IMC flight training. Furthermore it should be required only for those who intend to fly within cloud.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/5 hours training/Restricted SCFR) were also identified by BGA.

comment *1041*

comment by: *Tom Snoddy*

I support the proposal however there are some points that I would like to make.

1. The proposed requirement for a minimum 5 hours training is excessive and is quite unnecessary. This should be changed to read 'as required to reach a satisfactory skill level' to be certified by the instructor. Much of this could be accomplished by the use of a PC based simple gliding simulator followed by a minimum of one hour in-flight training which could be in a TMG using sight screens for the trainee. Flying a glider in cloud is not difficult even without the use of an artificial horizon.

2. I strongly support the British Gliding Association proposal for a 'Restricted SCFR' for flight under IFR but clear of cloud for which new theoretical learning would be required but no further flying training is necessary. This is essential for Great Britain & Ireland and other maritime areas where cloud bases are typically very low compared to inland continental conditions. The combination of low cloud bases and terrain together with your proposals would, in the absence of a 'Restricted SCFR', close vast areas to sailplanes and create new hazards in other areas. The records of gliding safety in Great Britain & Ireland show that there is no problem or safety issue in this regard to be addressed. It is unreasonable to impose rules that may be appropriate for eastern germany where cloudbase may be at 8,000 feet. In coastal areas of Great Britain & Ireland, the moist air keeps cloudbase low, frequently at 2000 feet, and there is simply not enough space below cloud for the rules that you propose.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment

1046

comment by: *Annie Robinson*

For so many years now although we have required pilots to demonstrate their competency before being allowed to fly cross country, we have not included instrument training as part of this, apart for that required to gain a SLMG licence. Many sailplane flyers do not as a matter of choice enter cloud, but may well find themselves at time in situations where e.g. a descent through cloud is unavoidable. All cross country glider pilots however, DO choose to fly near to cloud, and to have to remain at least 1000' below cloud base would impact upon our glide options and at times, safe flight.

May I therefore register my agreement with the proposal to require glider pilots to hold a Sailplane Cloud Flying Rating.

response

Noted

Thank you for your comments and positive feedback.

comment

1057

comment by: *RogerBURGHALL*

Many United Kingdom glider pilots will have many hundreds of hours before obtaining a licence. The requirement for 30 hours after obtaining a licence may be unnecessary and perhaps unreasonable.

The requirement for 5 hours flight instruction seems excessive especially for an experienced sailplane pilot.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency believes that the minimum of 30 hours after licence issue is necessary to commence cloud flying training and to safely operate within clouds.

comment

1063

comment by: *James Innes*

In my opinion the Sailplane Cloud Flying Rating (SCFR) is of paramount importance to the future safety and operation of gliding. I thoroughly support it.

Flying to cloud base is a regular activity undertaken by all glider pilots. Locally from my base at Dunstable airfield (England) the loss of 1000ft (should this not be passed) would cause multiple operational issues and in many cases may even prevent flying from happening at all. This would be of a huge financial impact to my club and may run the risk of it shutting down, as reduced flying

may make its financial situation untenable. This would be a huge tragedy given safe operations (and no safety concerns) over its 60 year history. I suspect that there may be a similar picture throughout the UK.

When cross country flying is considered, the loss of 1000 feet could ultimately prove dangerous. This would dramatically reduce a glider's range and could potentially put glider pilots in very dangerous positions. I would certainly foresee an increase in land outs which would certainly decrease safety of the sport as a whole. It is therefore essential that this rating is passed.

response *Noted*

Thank you for your comments and positive feedback.

comment *1067*

comment by: *James Innes*

In my opinion the Sailplane Cloud Flying Rating (SCFR) is of paramount importance to the future safety and operation of gliding. I thoroughly support it.

Flying to cloud base is a regular activity undertaken by all glider pilots. Locally from my base at Dunstable airfield (England) the loss of 1000ft (should this not be passed) would cause multiple operational issues and in many cases may even prevent flying from happening at all. This would be of a huge financial impact to my club and may run the risk of it shutting down, as reduced flying may make its financial situation untenable. This would be a huge tragedy given safe operations (and no safety concerns) over its 60 year history. I suspect that there may be a similar picture throughout the UK.

When cross country flying is considered, the loss of 1000 feet could ultimately prove dangerous. This would dramatically reduce a glider's range and could potentially put glider pilots in very dangerous positions. I would certainly foresee an increase in land outs which would certainly decrease safety of the sport as a whole. It is therefore essential that this rating is passed.

response *Noted*

Thank you for your comments and positive feedback.

comment *1068*

comment by: *Fédération Française Aéronautique*

12) Appendix 6 - Modular training course for IR - Section 2,
A.2. IR(A) - Competency-based modular flying training course, p.21 :
Flight Instruction

6. (b) : The proposed text states :

"In any case, the flight instruction part of the training course shall include at least 10 hours of dual instrument flight instruction in an aeroplane at an ATO"

FFA put forward this 10 hours of dual instruction may be instrument ground training in an FMPT 1 or 2, instead of only in aeroplane.

response *Not accepted*

Thank you for providing this comment. The Agency would like to highlight that, as 30 hours of prior IFR experience or dual training with an IRI(A) or FI(A)+IRI may be credited to the 40 hours requirement, 10 hours must be flown in an aeroplane at an ATO to ensure harmonisation and a minimum training

standard.

comment

1073

comment by: D Clarke

Page 18 - FCL.825 En-Route Instrument Rating section
(f) Validity, revalidation and renewal

Subsection (1) An EIR shall be valid for 1 year.

It is noted that the EIR training and test for an EIR has to be completed within 24 months.

It is also noted that the Sailplane Cloud Rating is valid for 24 months.

Please consider making the EIR validity 24 months for the following reasons:

(1) The UK IMC Rating is valid for 25 months from the date of the successful flight test, and the UK CAA appear to be content with this. If there were evidence of safety issues with a 25 month validity for a UK IMC Rating I am sure the UK CAA would have changed it a long time ago.

(2) A 24 month validity sounds less of a burden than a 1 year validity, and may encourage more pilots to get the rating. PPLs are also conditioned to a biennial cycle for revalidating the JAA SEP rating.

(3) Whatever the validity period is, pilots are always encouraged to fly with an instructor if they have any doubts or concerns about their abilities or a lack of recent practice.

response

Not accepted

Thank you for providing this comment.

The Agency has decided to standardise the EIR validity period to 1 year to ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.

comment

1074

comment by: D Clarke

Page 18 - FCL.825 En-Route Instrument Rating section
(f) Validity, revalidation and renewal

Subsection (2)

For revalidation of the EIR, if the proficiency check is passed within the 3 months immediately preceding the expiry date of the rating, on what date does the new 1 year validity period commence?

Is it

(i) the date of the successful revalidation proficiency check, or

(ii) the date that would have been the expiry date of the rating with 1 year added to it.

response

Noted

Thank you for providing this comment.

The Agency would like to clarify that if revalidation is completed within the 3 months immediately preceding the expiry date, the new expiry date will be 1 year from the old expiry date.

comment 1088 comment by: Danish Powered Flying Union

Danish Powered Flying Union propose EASA to clarify exactly when the 24 month period commence, according to completing EIR.

response *Noted*

Thank you for providing this comment. When reviewing this NPA, the Agency realised that the current time frame provided might lead to administrative or organisational problems for an ATO or a student pilot. Therefore, it was decided to extend the period to 36 months from the commencement of either the theoretical or practical training.

comment 1091 comment by: Andy Cobbett

5 hours dual training in cloud flying is excessive and would take several days to complete. There have been no cloud flying accidents in the uk, and the BGA should be able to determine the cloud flying qualifications necessary.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 1092 comment by: Danish Powered Flying Union

Danish Powered Flying Union strongly support the option for the applicant to receive some of the instrument flight instruction outside an ATO. It can be to a great benefit for the applicant to train with an independent instructor on the aircraft type and in areas where the pilot normally flies. We find 10 hours flight instruction time at an ATO sufficient to ensure fulfilment of the Syllabus.

response *Noted*

Thank you for providing this comment.

comment 1097 comment by: Danish Powered Flying Union

Danish Powered Flying Union finds 1 year validity for EIR inappropriate. We propose a validity of 2 years, which is more coherent to holding a PPL(A).

response *Partially accepted*

Thank you for providing this comment.

The Agency has decided to standardise the EIR validity period to 1 year to

ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.

comment *1100* comment by: *Paul Jessop*

This proposal from EASA is very welcome in ensuring that existing cloud flying privileges are accommodated in the future. Cloud flying has been shown by the documented accident record to be safe and extends the operating range of sailplanes to allow outlandings to be avoided (and sporting performances to be enhanced).

It is further welcome that this rating will be available to both LAPL(S) and SPL holders - both groups of licence holders being able to safely benefit from it.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (LAPL(A) and SPL) was also identified by BGA.

comment *1101* comment by: *Paul Jessop*

It is unfortunate that the proposed Restricted Sailplane Cloud Flying Rating has not been included in this proposal. Flight under IFR but clear of cloud is essential to sailplane operations and presents minimal risks if properly exercised in relevant categories of airspace. A rating requiring Theoretical Knowledge training but no skills testing (the required skills being tested at basic licence level) would be appropriate.

response *Not accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Restricted SCFR) was also identified by BGA.

comment *1103* comment by: *Paul Jessop*

It is appropriate that the Sailplane Cloud Flying Rating is competency based but it is hard to understand why a minimum amount of dual training is required. Some pilots will have transferrable experience and will be able to demonstrate the required skills in far less than 5 hours and the requirement will, for economic reasons, deter them from seeking the rating and safety levels will be reduced. If a minimum time is necessary then it should be substantially lower than 5 hours.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment *1104* comment by: *Paul Jessop*

It is essential that training for the Sailplane Cloud Flying Rating should be permitted in Touring Motor Gliders. My personal experience as an instructor is that these aircraft provide an excellent platform for glider pilot training and time spent in them will arguably be more valuable than sailplane time in acquiring the skills required for the rating. However the rating should clarify that it is not intended to be used to allow cloud flying (or indeed other flight in IMC) in TMGs.

response *Partially accepted*

Thank you for your comments.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Use of TMG) was also identified by BGA.

comment *1106* comment by: *Danish Powered Flying Union*

Danish Powered Flying Union strongly propose the privileges for the holder of an EIR to be extended to conduct IFR flights en-route by night, provided he/she holds a valid Night Qualification. The opportunity to fly EIR at night is essential for the northern Member States who have limited daytime at certain parts of the year.

response *Accepted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment *1110* comment by: *Peter M. Henningsen*

I'm VCL restricted - not allowed to fly at night. Almost 10% of the male population has a colour defect like me and therefore has this restriction on their license.

Both in the USA and Australia this is not a limiting factor on performing IFR flights or gaining the IR rating.

I do not see why one can safely have an IMC rating allowing flights in IMC conditions in the UK and not be allowed to fly in IFR conditions in other countries.

Removing the requirement to have a night rating will not allow me to fly at night, because that is already limited on my medical. Removing this will allow me to get an IR rating and fly safely in daylight conditions.

The requirements for a night rating to continue to train for an IR rating must be removed not only in the competency-based training but also in the standard IR training.

response *Partially accepted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to amend paragraph FCL.610. Now an applicant for the IR(A) shall hold a night rating only if the IR privileges will be used at night. The Agency also decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment

1119

comment by: *Alex Green*

As a current active glider pilot in the UK, I have grave concerns that the implementation of a glider pilots licence without a sailplane cloud flying rating and restricted sailplane cloud flying rating will have a profoundly negative effect on mine and my fellow pilots flying. With this in mind I support the addition of new requirement FCL.830 Sailplane Cloud Flying Rating

response

Noted

Thank you for your comments and positive feedback.

comment

1132

comment by: *Peter Goldstraw*

Specific points,

I believe that a mandatory flight training time in excess of 5 hours is too much. Surely training to achieve a standard would be appropriate. A pilot might have other instrument flying skills or may have an aptitude.

I believe that a glider pilots version of a restricted instrument rating would be useful for those caught above cloud and only want a straight-line 'let-down' into wind.

Some of the skills tested during the practical examination seem irrelevant and excessive. We would generally only climb a few hundred feet into cloud and then turn onto an approximate heading. When leaving cloud a few miles later, we would resume visual or GPS navigation.

GPS receivers are now fairly universal and these will have the next turning point programmed-in and many will have nearby restricted airspace clearly marked.

1 hour for the flight skills examination seems excessive. We would only fly in cloud for 10-20 minutes at a time and then visually using less concentration. To fly for an hour at full concentration using a turn-and-slip instrument is a disproportionate test.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted sailplane cloud flying rating) were also identified by BGA.

In addition, the Agency believes that these techniques are needed and the proposal is supported by several stakeholders. Please note that working with a GPS/working map requires some navigation skills and that basic navigation skills will be needed in case of GPS failure.

Finally, with regard to your comments on the duration of the skills test, the Agency would like to clarify that the oral theoretical exam will be based on the applicant's previous experience and knowledge. If the applicant holds an EIR or IR, the examiner will focus on sailplane-related items. The practical test must include all practical items to be flown. However, an examiner, based on the applicant's level of experience, may shorten items as required. Therefore, no minimum skills test duration will be stipulated.

comment 1139 comment by: *Patrick NAEGELI*

I repeat my comments on the earlier section on the subject of the minimum specified number of hours dual instruction required for an SCFR.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1143 comment by: *AOPA Denmark*

It is proposed to also allow the use of the EIR during nighttime for pilots holding a VFR night qualification.

The weather requirements for the EIR are already so high that if a transition can take place from IFR to VFR at enroute altitude then there is no reason to limit this to day-operations only.

response *Accepted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment 1144 comment by: *Andrew Cunningham*

The requirement for a specific minimum of dual flight instruction of 5hrs is excessive

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1147 comment by: *AOPA Denmark*

Considering that the EIR is not a full instrument rating but merely an extension of the privileges of a VFR pilot to operate IFR during the enroute phase of the flight it is proposed to extend the validity for the EIR to 2 years so that it follows the same renewal cycle as the PPL certificate.

The Enroute Instrument Rating effectively has much more strict weather requirements for the critical phases of flight (takeoff and landing) than a plain VFR PPL certificate. Therefore it should not be necessary with more frequent proficiency checks.

response *Not accepted*

Thank you for providing this comment.

The Agency has decided to standardise the EIR validity period to 1 year to ensure that it follows the full IR validity period. However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.

comment *1149*

comment by: *Nigel Perren*

I would like to see the addition of a lesser rating, ie restricted to within 50 feet (a sensible distance as this is the wingspan of many gliders) of cloud. I have no inclination to fly in cloud but flight near cloud is essential to the sport of gliding.

1) 30hrs is not too excessive, but 20hrs is more realistic

response *Not accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Restricted SCFR) was also identified by BGA.

In addition, the Agency believes that the minimum of 30 hours after licence issue is necessary to commence the cloud flying training and to operate safely within clouds.

comment *1150*

comment by: *AOPA Denmark*

AOPA Denmark agrees with the proposed weather requirements.

The new EIR however will require revised practices at national aviation weather services.

For the EIR altitudes between typically 1000 to 3000 ft AGL become critical for being able to transition to VFR during the enroute phase of the flight.

The current ICAO guidelines only requires a new TAF to be issued if certain thresholds are passed. These are 100ft, 200ft, 500ft, 1000ft and "in cases where significant numbers of flights are operated in accordance with VFR" also 1500ft.

What this means is that a TAF may forecast a ceiling of CAVOK or 5000 feet but in reality the ceiling could come down to 1000 feet before a new TAF is issued. The Danish Meteorological Institute has confirmed that this is indeed the procedure they follow and that in such a situation they would NOT normally issue a new TAF unless they expect the ceiling to go below 1000 ft.

For present IFR operations and VFR traffic this does not cause any trouble, but for the proposed Enroute Instrument Rating where a pilot anticipate to transition to VFR at an altitude of for instance 2000 ft, it is critical that a TAF is issued with the updated forecast.

The Danish Met Office has confirmed that it would be absolutely no problem for them to change the procedure so that a revised TAF was issues for instance for every 1000 ft ceiling change up to 5000 ft. They just need to be instructed to do so.

EASA should initiate that revised instructions are given to the national aviation weather services.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR.

Furthermore, the Agency strongly believes that the current forecasting standards are appropriate to support the EIR.

comment *1153*

comment by: *Nigel Perren*

ii) 5hrs is far too excessive. I think it should be based on compitancy of the pilot and not exceed 2hrs.

3)I think this should only be applicable to pilots whith less than, say, 40hrs as P1 in any given year. I average 140+hrs a year and would be grossley offended to be asked to have a flight check for something I do not do (cloud fly) as I mentioned, a lesser 'restricted' rating would be more appropriate.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment *1154*

comment by: *Nigel Perren*

there has been some comment of the possible abuse of SCFR in TMG. Perhaps any TMG used for SCFR instruction should have special 'DayGlow' makings to the wings and fuselarge. Just a thought.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Use of TMG) was also identified by BGA.

comment

1168

comment by: *Rod Barrett*

My comment concerns the proposed Sailplane Cloud Flying Proposal which I FIRMLY SUPPORT.

I have conducted cloud flying in gliders over a period of nearly 50 years and want to be able to continue this practice.

Without the facility to fly in cloud and also to fly in close proximity to cloud, the sport of gliding would be severely reduced in scope.

I also consider it a matter of safety that glider pilots should be thoroughly versed and competent in cloud flying techniques and therefore support the training scheme for the cloud flying rating outlined in pages 190-192 of the document.

response

Noted

Thank you for your comments and positive feedback.

comment

1172

comment by: *Paul Dunthorne*

FCL.830

I support this new requirement of a Sailplane Cloud Flying Rating.

It is endorsing what I and many other glider pilots have been doing safely for many years in the United Kingdom.

I am concerned at the rigid 5 hour of dual flight instruction though. This would seem to indicate a minimum requirement, regardless of prior experience or qualification.

The rating should be valid for at least three years, in my opinion. This Rating will entail considerable extra cost to acquire and maintain for recreational pilots.

response

Partially accepted

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, with regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment 1178 comment by: *General Aviation Manufacturers Association / Hennig*

With respect to FCL.825 En-route Instrument Rating (EIR) under (a) Privileges and conditions, (1) the agency proposes that the holder of the EIR may conduct flights by day under IFR or in IMC in the en-route phase of flight, with any aeroplane for which a class or type rating is held.

GAMA requests that the agency clarify the limitation proposed for "flight by **day** (emphasis added) under IFR or in IMC" as opposed to any operation day or night. If GAMA understands the general philosophy of the EIR it is the conduct of a flight that commences and terminates under VFR conditions, but allows for en-route flying by use of instruments only. However, GAMA notes that Part FCL has also established under FCL.810 Night Rating an allowance for PPL to fly at night.

Under the premise that a private pilot holds both a FCL.810 night rating as well as a FCL.825 En-route Instrument Rating is it the view of the agency that the pilot cannot conduct a flight that commences under VFR (day or night as allowed under FCL.810), is conducted en-route under IFR or in IMC and at night (as enabled by FCL.810 and FCL.825) and lands at night (as allowed by FCL.810)? GAMA recommends that the agency allow for a pilot that is properly rated under both FCL.810 and FCL.825 to conduct a flight that is at night and involves enroute flying under IFR or in IMC and revise the proposed FCL.825 to reflect the ability to conduct a flight at night.

response *Accepted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment 1179 comment by: *Martin Gregorie*

No further comments.

response *Noted*

No comment provided.

comment 1184 comment by: *Aero-Club of Switzerland*

FCL.825 EIR
(a) Privileges and conditions
(1) Please add "...and by night..." for holders of a Night-VFR-rating.

Rationale: In our view, based on our experience, looking at the night VFR syllabus accoring to which we train our pilots this addition will be of great benefit for pilots engaged in En-route instrument flight operations. As pilots have to maintain VMC for take-off and landing the provision "...and by night..." will in no way add any risk.

(2) Please add: "On approach the holder of the rating shall be in VMC when descending below minimum Radar vectoring altitude or below MSA or another

specified altitude compatible with VFR operations at the destination and/or its alternate."

Rationale: We think in most cases the En-route part will not be very difficult to be executed. As a minimum approach training has to be maintained (see page 6, para 1.2. Flight instruction, we propose this to become part of the rating. We are convinced of the fact that a solid training background combined with recent experience relieves stress from the flight crew as well as from the ATC staff concerned.

(3) Please add at the end of the para "...test referred to in (e) after completion of the regular training for the relevant class or type of aircraft."

Rationale: To be 100% clear...

response *Partially accepted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided a night rating is held in accordance with FCL.810.

In addition, the Agency has amended the text to require an EIR pilot to be in VMC conditions within 1 000 ft of the highest obstacle in a radius of 5 nm around the aerodrome reference point.

comment

1186

comment by: *Aero-Club of Switzerland*

FCL.825

EIR

(f) Validity, revalidation and renewal

(2) Our question: "...within the 3 months..." or "...within 90 days..."?

(4) Again a question: Which date is the starting point for the calculation of the 7 years we know since the introduction of JAR?

response

Noted

Thank you for providing this comment.

The Agency would like to clarify that revalidation can occur within 3 months immediately preceding the expiry date. This is the same requirement as for the full IR.

In addition, with regard to your 7 years comment, the Agency deems the last expiry date to be the date from which the 7 years should be counted.

comment

1187

comment by: *Aero-Club of Switzerland*

FCL.905.FI FI - Privileges and conditions

(g)

(2) Question: Where do we find details about the contents of such an "assessment of competence"?

Rationale: When asking for level playing fields such assessments should be standardised, a fact we highly promote.

response

Noted

Thank you for providing this comment. The Agency agrees that such assessments should be standardised. The content of an assessment of competence can be found in the AMC to Part-FCL.

comment

1188

comment by: *Aero-Club of Switzerland*

Modular training courses for the IR
A.2. IR(A) Competency-based modular flying training course
3. "The training shall be completed within 36 months." Our question: Which date is the starting point for such a calculation?

FLIGHT INSTRUCTION

6.(b) "...the applicant shall complete a pre-course assessment flight at an ATO..." Our question: What will be the form of such an assessment? Who will define this?

response

Noted

Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue. As a result, the Agency has amended the text to clarify the course duration. The text states that 'the instrument flight instruction and the skill test shall be completed within the period of validity of the pass in theoretical examinations'. This text is in line with the IR course requirement. In addition, the Agency would like to highlight that no AMC or GM materials have been developed to address the pre-course assessment. This is a task for the ATO and will be based on its training syllabus and requirements. A future rulemaking task may be required if the Agency identifies a need to regulate the content of the assessment.

comment

1193

comment by: *John Wright*

I am in favour of this cloud flying rating for glider pilots, as like a large number of glider pilots I fly in clouds occasionally. Will there be grandfather rights for those of us who have flown in clouds for over 25 years?

Page 18-19

Five hours of cloud flying instruction is rather a lot by anyone's standards! That's probably around 10 -15 flights. While I would obviously accept that some training is required, this is rather a lot.

Where it says completed at least 30 hours as PIC in sailplanes after issue of the licence, does that mean that my 2900 hours previous experience and current BGA instructors rating doesn't count and I need another 30 before I can apply for this rating, which I would like to get.

There is no mention of how long the proficiency test is - I'd say 30 minutes in total is probably fair enough, which could easily be done over one or two flights. That would seem a fair test after the large amount of training required.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1199

comment by: *Stuart Lees*

re: FCL.830

As a sailplane pilot, and member of the BGA, I welcome the inclusion of the proposed SCFR in this NPA.

The climate in the UK makes cloud flying, and flying close to cloud, essential for gliding, in a way that is not the case in most of Continental Europe. This proposal for the SCFR is therefore essential for the future of sailplane gliding in the UK.

However, I find the number of hours dual training required to obtain the licence to be hugely excessive. Many experienced sailplane pilots will need to get the SCFR. These pilots are already experienced at cloud flying, so 5 hours training is unnecessary. Even pilots with no previous experience of flying in cloud can easily be taught in half this time.

I suspect that flying in a precisely co-ordinated manner is more important to flying a glider than to other aircraft, and therefore glider pilots have a better skill set when they start train for instrument flying than pilots of other types of aircraft. By the time glider pilots are ready to train for SCFR, they already have most of the necessary skills, and dont need such a long dual-training period to perfect the art.

Since the licence requires a skill test, the safest way of issuing it is to rely on the pilot being able to demonstrate ability, not show a log of hours training. Gliding has a long tradition of self-regulation like this in the UK, and it should be allowed to apply to the SCFR also: No arbitrary number of hours training should be required; the licence should be issued on demonstration of ability. Gliding is a close-knit community, familiar with self-regulation, and instructors know who is capable of advanced skills and who is not, and they are not afraid to say so.

I note that the BGA also proposed a restricted SCFR that would allow sailplanes to be flown under IFR clear of cloud without requiring the pilot to carry out the practical training for cloud flying.

I think this is a really important feature that should be included in this NPA. Omitting this feature is, in my opinion, a huge flaw in the proposed licencing scheme: Many sailplane pilots have no wish to fly in cloud because they dont want to fly away from their airfield, or because they have not yet reached the proficiency to do so. These pilots need to continue to be permitted to fly close to, but clear of, clouds. Preventing this will exclude a large sector of the gliding community from flying effectively, many will leave the sport never to return, and those who are building up their skills will find the activity less rewarding. Gliding clubs in the UK are facing a gradual decrease in membership, and cannot afford to lose large numbers of pilots due to insensitive regulation. Please reconsider this feature, and include it in the proposals.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training/Restricted SCFR) was also identified by BGA.

comment

1209

comment by: CAA Finland

Page 21:

"The minimum amount of classroom teaching as required by ORA.ATO.305 may be combined with the practical flight instruction."

DELETE the sentence. Otherwise may mislead to "long briefing exercises" that is used for FI flight training. By deleting the comment nothing will be lost; it is typical that theory and flight trainings are done slightly parallel.

response

Partially accepted

Thank you for providing this comment.

After receiving several similar comments by other stakeholders, the Agency and the expert Review Group discussed this issue. As a result, the Agency decided to amend the text by deleting the possibility to combine theoretical and practical training, but keep a specified amount of classroom teaching as stipulated by ORA.ATO.305.

comment

1212

comment by: Don BROOKMAN

Five hours would appear an excessive requirement. Many pilots will become fully competent in much less. The risk is that an over-onerous requirement will deter people from gaining the rating, thus failing to secure the full potential benefit of introducing the rating.

To ensure maximum take-up of this important rating, and hence secure its full benefits, I suggest EASA considers:

- reducing the minimum requirement to 3 hours instruction, flying with sole reference to instruments
- allowing credit for other instrument ratings already held.
- allowing instruction in TMG aircraft as well as gliders (which would not have to be carried out in cloud as long as appropriate measures were taken to restrict the student pilot's vision, as is common practice for training in the UK for the PPL/IMC rating today).

Note that the minimum to gain an IMC rating in the UK is 12 hours, requiring the student to master precision and non-precision procedural approaches and navigation with reference to VOR and ADF radio aids. None of these are required to fly a glider in cloud.

In any event, the skills test should determine whether the student has attained the required skill level.

response

Partially accepted

Thank you for your comments and positive feedback.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as the issues you raised (5 hours training/Use of TMG) were also identified by BGA.

Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment

1226

comment by: *J Trenell*

Unfortunately the proposed EIR fails to safely address the needs of many JAR PPL holders flying single engine piston aircraft. PPL holders based on the Isle of Man and the North of England know only too well just how unreliable the weather conditions can be – despite the best efforts of the Met Office.

- I accept that it is foolhardy to depart in IMC conditions in accordance with IMCr minima, but a restriction of not entering IMC below 1000ft above the highest object within 5 miles is unrealistic. In the case of Ronaldsway (EGNS), this would mean a restriction of not entering IMC below 2586ft – despite the fact that a pilot can safely depart below this level in IMC over the sea.
- The offer of conducting flights under IFR and in IMC in the en-route phase is, for many PPL's who fly for pleasure, no additional advantage when compared to the existing IMCr. Many such pilots do not fly in the airways in Europe, and have no wish to do so
- The most detrimental, and indeed worrying, proposal included in the EIR is the compliance with VFR on the approach and landing phase of a flight. PPL holders whose base is north of the Midlands know only too well the nuances of the weather in the area. There are occasions when the TAF's and METARS can indicate that the destination airport is in VFR. Unfortunately, on some of these occasions, when within 15 miles, or even less, of the airport the conditions may then have changed to IMC. For PPL holders on the Isle of Man this presents a problem if they are restricted the conditions of the proposed EIR. Bearing in mind that all flights to and from the Island inevitably take place over water – therefore, if you are unable to carry out an ILS approach at Ronaldsway (due to the restrictions of the EIR), the only option would be to divert back over the Irish Sea to an alternative airport approximately 50 miles away. From a safety aspect surely this needs serious reconsideration? The pilot having to declare an emergency is not the solution.

As an IMCr holder I have used my rating for safety reasons on a several occasions to ensure the continued safety of a flight. I cannot stress enough how important the IMCr is to many PPL holders. It is invaluable. I sincerely hope that the CAA firmly supports the continuation of the IMCr. I urge them to do so.

response

Not accepted

Thank you for providing this comment.

The Agency would like to highlight that the EIR is primarily a rating that extends the privileges of a VFR pilot to include en-route flight under circumstances which require mandatory compliance with IFR, whether in VMC

or IMC. The Agency understands your concerns but believes that even in the case of unforeseen/not forecasted IMC conditions at destination, there is still the option to divert or go to a VFR area within safe fuel range. A provision in EIR training has been made, as a last resort, for an emergency approach to be conducted if needed.

With regard to the UK IMC rating, the Agency would like to clarify that this rating may be converted/credited to obtaining a Part-FCL EIR or IR rating. This conversion process is the responsibility of the Member State in consultation with the Agency. However, once Part-FCL regulations are applicable, the UK IMC rating will cease to exist.

comment

1228

comment by: *Greg Corbett*

FCL.830 Sailplane Cloud Flying Rating

I agree with the idea to award cloud flying ratings to pilots with 30 hours PIC, a skill test and theoretical knowledge instruction, however I don't think that it would be practical to have 5 hours of IFR dual instruction as it would probably entail flying a motorglider which is a very different scenario to flying a sailplane or glider.

Greg Corbett

response

Partially accepted

Thank you for your comments.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1234

comment by: *Michael Williams*

Pages 16-22. I have read the proposed syllabus for the SCFR - this theoretical knowledge can be judged as useful in promoting flight safety. However, the practical element requiring a minimum of 5 hours of flight time is excessive. Motor Gliders are used increasingly for flight training, and due to the restricted flight syllabus, 2 hours should be seen as a minimum experience requirement.

Highly experienced pilots requiring this rating should not need 5 hours flight training, whereas a 30 hour pilot is likely to require further training and flight experience.

Simulated flight should be considered as part of the overall training package, and should be a permitted part of the flight time requirements. I would suggest a maximum of 50% simulated flight towards the SCFR training should be considered, as glider simulators are becoming more sophisticated, and capable of supporting quality simulated flight.

response

Partially accepted

Thank you for your comments.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to clarify that as long as there is no certified glider simulator (FSTD) available, training for cloud flying rating will have to be provided in a sailplane.

comment 1240 comment by: Steven GUNN-RUSSELL

(2) (11): I feel that the need for a minimum of 5 hours dual instruction is excessive.

response Partially accepted

Thank you for your comments.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1252 comment by: Luftsport Club Dümpel e.V.

FCL.830 should credit IR and EIR holders in respect of the training required, as limited panel training comparable to the task controlling a glider in IMC is part of IR training. A credit is given in the current german regulation „LuftPersv, Paragraph 85“ with good experience. A credit will bring more experienced instrument pilots and even IRI into the sailplane cloud flying community, with benefits to the safety standard of cloud flying operations. Proposal: Add a crediting rule e.g:

FCL.830 (d) Crediting. Applicants holding an IR or EIR shall be fully credited towards the requirements in (b)(2).

response Partially accepted

Thank you for your comments and positive feedback.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/Use of TMG) were also identified by BGA.
Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment 1256 comment by: Phil GASCOIGNE

FCL.830
(a) Given that licensing is now inevitable, to preserve the privileges which British glider pilots have enjoyed safely over many years, I agree with the need for a Sailplane Cloud Flying Rating and that it should be available to both LAPL(S) and SPL holders.

(b) (1) I disagree with the need for a 30hour PIC wait after the issue of a licence, before being allowed to apply for an SCFL. There is no logical reason for this and given UK flying conditions, it only causes unnecessary delay. Many

pilots applying for a licence will already be capable of meeting the theoretical and skills requirements and should be allowed to apply immediately after grant of a licence or even concurrently for the licence and rating.

(b) (2) (ii) a defined minimum of 5 hours dual instruction to gain an SCFL is illogical and unnecessary and I disagree with it. There will be a wide variation in the number of hours pilots will need to meet the skills requirement; some will already be capable, others will need more than 5 hours. To prescribe an average or expected or typical figure is meaningless and will only lead to additional costs and delays for many pilots. Any prescribed figure should not be greater than the 1 hour defined in AMC1 FCL.830 2.2

(b) (3) following my comments above, I agree that the proof of competency by a skills test is necessary but the submission of that proof should be allowed immediately after, or concurrently with, the licence application.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/5 hours training) were also identified by BGA.

In addition, the Agency believes that the minimum of 30 hours after licence issue is necessary to commence cloud flying training and to operate safely within clouds.

comment 1264

comment by: *Greg OHAGAN*

I would like to add my support to the proposed Sailplane Cloud Flying Rating.

response *Noted*

Thank you for providing this comment.

comment 1265

comment by: *Luftsport Club Dümpel e.V.*

FCL 830(c): For the revalidation of a sailplane cloud flying rating a credit should be given, if the applicant has passed a proficiency check for any other aeroplane instrument rating. A similar procedure for different instrument ratings is already successfully implemented with Appendix 8 to part FCL. As cloud flying a glider is less complex compared to instrument flying aeroplanes, a cross-credit in this case seems to be reasonable and desirable as well.
Proposal:

(c) The sailplane cloud flying rating shall be valid for a period of 24 months. For the revalidation and renewal, the applicant shall pass a proficiency check **or hold a valid IR(A) or EIR.**

response *Noted*

With regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least

1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

1266

comment by: Ian HEY

6) Subpart I - Additional Ratings

FCL.830 Sailplane Cloud Flying Rating

This rating is welcomed, and is essential to the continuance of gliding in the UK due to our maritime air mass.

The UK gliding movement has a good safety record of cloud flying over more than sixty years, without a defined training period. It is therefore onerous to now demand a fixed minimum period of training when a skill test must be passed. The minimum period of training should be zero, but the skill test must be passed.

The use of TMG for training for this rating is essential. Since no known TMG is certified for instrument flight this training must be in VMC with the use of a hood. Attempting to train for this rating in pure gliders is not acceptable when a defined skill test must be passed.

It is noted that it is likely that much (or all) of the skill test will be undertaken in TMG.

Since no known TMG is certified for instrument flight, the rating cannot be used in TMG. The use of the rating in TMG should therefore be excluded.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

1274

comment by: alan DIBDIN

In general I strongly support this rating. However many of us have been cloud flying for many years. Having to do a 5hr training course to continue to exercise a skill we have used for many years seem unreasonable. The criteria for the rating should be a skill test only. Obviously training will be required for those that have not done any cloud flying before. The ability to fly in lee waves will be difficult / impossible to do legally on many days without this rating. I therefore consider this rating is essential to allow the current operation of UK gliding.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1279

comment by: *David Bowden*

I feel 5 hours of dual instructions is excessive. A competency check by an instructor is more sensible. It is an additional and significant cost.

Is a proficiency check every 2 years

How often in the past have there been problems with gliders flying in cloud. Is this a case where we are imposing rules to deal with a problem that does not exist?

What happens when wave flying and you end-up above cloud? What will be the legal and insurance situation if the sensible option is to let down through cloud? There will be great difficulty in finding instructors with the necessary skills and time.

For the instructor, 50 hours ground time will be very difficult to arrange and very expensive.

Option 2 - Restricted sailplane cloud flying rating seems an excellent idea provided it is in conjunction with option 1. It reflects what is practically happening. That is, most glider pilots will fly up towards cloud base but not actually enter cloud.

Safety Impact - Option 1 The impact calculation are wrong given that most pilots will not become qualified and will be forced to stay well clear of cloud. Their operating range will be less not more the impact is Medium negative -3.

Option 2 is near to 0

Economic impact - Option 1 - I can not see how they can calculate it having a low positive impact. The costs and practical problems involved in gaining the qualification will be so high it will deter pilots from becoming qualified. In the UK it will have a disasterous impact. I might of cparse be wrong, it will probably result in a smaller group of pilots paying more!

Social Impact - Option 1 - An increase in activity is desirable. I fail to see how in the case of the UK it will have anything other than a negative impact.

Please forgive me, but the conclusion and preferred option table seems a case of the facts being made to fit preconceived conclusions

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Option 2 - restricted cloud flying rating) were also identified by BGA.

In addition, with regard to your comment on the 24-month period, the Agency would like to highlight that there is only a recency requirement, but no revalidation. A SCFR holder is required to exercise the privileges for 1 hour or 5 flights as PIC within the 24-month period. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

1286

comment by: *Brian Spriggs*

I am a glider pilot of 15 years. I think that 30 hrs is excesive for a glider pilot as the cross country endorsment is sufficent.

response

Noted

Thank you for your comments and positive feedback.

comment	<p>1287 comment by: <i>Brian Spriggs</i></p> <p>I also think that Our basic training covers flying up to cloud base, and to fly cross country in a glider you must be able to fly up to cloud base to cover any distance.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments and positive feedback.</p>
comment	<p>1299 comment by: <i>AOPA France</i></p> <p>AOPA France notes that NPA 2011-16 does not include provision for the specific national needs of certain Member States. These include (but are not limited to):</p> <ol style="list-style-type: none">1. Operations under IFR conducted entirely within the airspace of a Member State (MS) by a national of that MS flying an aeroplane registered in that MS using the national language of that MS. For example, a French pilot operating an F-registered aeroplane under IFR in French airspace communicating in the French language.
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency has reviewed the issues again and has decided to allow no FCL language requirement for an EIR; however, the competency-based IR(A) holder will be required to comply with FCL.055.</p> <p>In addition, the Agency has decided to extend the EIR privilege to night flight provided that a night rating is held in accordance with FCL.810.</p>
comment	<p>1300 comment by: <i>AOPA France</i></p> <p>AOPA France notes that NPA 2011-16 does not include provision for the specific national needs of certain Member States. These include (but are not limited to):</p> <ol style="list-style-type: none">1. Operations under IFR conducted entirely within the airspace of a Member State (MS) by a national of that MS flying an aeroplane registered in that MS using the national language of that MS. For example, a French pilot operating an F-registered aeroplane under IFR in French airspace communicating in the French language.2. An acceptable solution to the future of the UK IMC rating when used on EASA aeroplanes entirely within UK airspace.3. An acceptable solution to sailplane towing operations within certain airspace categories when the cloudbase is above 3000ft a.m.s.l. <p>AOPA France notes that JAR-FCL 1.175 includes para. 1.175(b), which would solve these shortcomings if adopted within an amendment to FCL.600. Accordingly, AOPA France strongly recommends the following amendment to FCL.600 IR – General:</p>

FCL.600 IR – General

(a) Except as provided in FCL.600(b) and FCL.825, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

response *Noted*

Thank you for providing this comment.

The Agency and the Review Group discussed these issues. The Agency decided to remove the FCL.055 for the EIR. However, the FCL.055 requirement remains in place for the competency-based IR.

In addition, the Agency would like to highlight that a UK IMC rating may be converted into a Part-FCL rating during the conversion process. This process is the responsibility of the UK CAA in consultation with the Agency.

Finally, the Agency does not foresee the need for towing close or into the clouds during training for cloud flying rating. However, to operate within a 1000 ft of clouds above 3000 ft, the sailplane towing pilot must have either an EIR or IR.

comment *1301*

comment by: *AOPA France*

AOPA France notes that NPA 2011-16 does not include provision for the specific national needs of certain Member States. These include (but are not limited to):

1. Operations under IFR conducted entirely within the airspace of a Member State (MS) by a national of that MS flying an aeroplane registered in that MS using the national language of that MS. For example, a French pilot operating an F-registered aeroplane under IFR in French airspace communicating in the French language.

2. An acceptable solution to the future of the UK IMC rating when used on EASA aeroplanes entirely within UK airspace.

3. An acceptable solution to sailplane towing operations within certain airspace categories when the cloudbase is above 3000ft a.m.s.l.

AOPA France notes that JAR-FCL 1.175 includes para. 1.175(b), which would solve these shortcomings if adopted within an amendment to **FCL.600**. Accordingly, AOPA France strongly recommends the following amendment to **FCL.600 IR – General**:

FCL.600 IR – General

(a) Except as provided in FCL.600(b) and FCL.825, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

Adoption of this amendment would enable the Commission to fulfil earlier commitments given to the European Parliament in respect of a solution to the UK IMCR; however, more significantly it would enhance safety where Member States have identified a specific national need. In accordance with the general principal of subsidiarity, detailed requirements for such national qualifications should be devolved to the competent authority of the Member State.

response *Noted*

Thank you for providing this comment. Please check the response given to comment 1300.

However, the Agency would like to highlight that the future European requirements contained in Part-FCL are not designed to cater to national alleviations. The main intent is to create a harmonised common regulation. This means that the rules will not be designed for a specific national operation under specific national requirements. Please see the Basic Regulation and you will easily identify the main principles of the future European legislative framework. As the Agency has to follow these principles, no provisions, as requested by you, for addressing specific national needs of one of the 27 plus 4 States will be introduced.

The future of the UK IMC holder, meaning the conversion of their licences and ratings is not part of this project. As already clearly explained in the Explanatory Note of the NPA, this will be addressed by the UK CAA in their conversion report based on the principles of Article 4 of the Aircrew Regulation.

The Agency does not understand why the issue of sailplane towing operations close to clouds is raised. ICAO airspace requirements have introduced certain VMC minima for certain airspace categories to allow that the principle 'See and Avoid' works. The consequence is that flying in IMC needs certain qualifications and maybe also certain ATC clearances. Towing of a glider close to clouds is not needed for normal gliding operations and is definitely not needed for the cloud flying training. Therefore, the Agency does not see a need to introduce further specific regulations for pilots of the towing aircraft.

comment *1302*

comment by: *AOPA France*

AOPA France proposes that the privileges of the EIR should be extended to flight by night under IFR if the EIR holder also holds a valid Night Rating. This

	<p>is particularly necessary for Member States of predominantly northern latitudes whose periods of daytime are limited at certain parts of the year.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency, after reviewing the issue, has decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.</p>
comment	<p>1304 comment by: AOPA France</p> <p>FCL.825 (a) (3) AOPA France does not support the concept of a <i>specific</i> 'multi-engine EIR'. However, AOPA France agrees that, for pilots who only obtain their first multi-engine class or type rating after the initial issue of the EIR, the privileges of the EIR should only be extended to multi-engine aeroplanes after receiving suitable training and testing. The IFR limitations of the EIR are such that we consider 3 hr of instrument flight instruction in multi-engine aeroplanes to be excessive in this context. We propose that a minimum of 1 hr of instrument flight instruction in multi-engine aeroplanes in the en-route phase of flight should be sufficient before the applicant passes the EIR Skill Test in a multi-engine aeroplane.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. The Agency can confirm, after reviewing the proposed requirements, that the multi-engine instrument flight time requirement has been reduced to 2 hours at an ATO.</p>
comment	<p>1305 comment by: AOPA France</p> <p>FCL.825 (e) (<i>typographical error</i>). The final sentence of this paragraph should read '<i>For a single engine EIR.....</i>'</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1306 comment by: AOPA France</p> <p>FCL.825 (f) (1) Validity, revalidation and renewal. AOPA France considers that the limitations of the EIR are such that a 1 year validity period is disproportionate. We propose that an EIR shall be valid for 2 years.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency has decided to standardise the EIR validity period to 1 year to ensure that it follows the full IR validity period. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will</p>

require a proficiency check.

comment

1307

comment by: AOPA France

FCL.830 (a) Sailplane Cloud Flying Rating
AOPA France considers that this paragraph shall include suitable wording to preclude inappropriate use of the SCR by TMG or powered sailplane pilots for extended IFR cruising. We therefore propose the following amendment to FCL.830 (a):

(a) Holders of a pilot licence with privileges to fly sailplanes shall only operate a sailplane, powered sailplane or TMG under IFR when:

(i) They hold a sailplane cloud flying rating; and

(ii) Except when being used for conducting instrument flight instruction for the sailplane cloud rating, the aircraft is operated in the manner of a sailplane.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment

1308

comment by: AOPA France

A.2. IR(A) – Competency-based modular flying training course
FLIGHT INSTRUCTION 6 (b)

AOPA France has considerable concerns regarding pre-course assessment flights used by an ATO to assess credit and training needs. Such flights lack standardisation, are open to commercial pressures and abuse and serve little worthwhile purpose. The C-B IR is essentially competency-based by definition and no ATO will propose an applicant for a Skill Test unless that applicant has demonstrated adequate preparedness. We therefore propose that the sentence 'To determine the amount of hours credited and to establish the training needs, the applicant shall complete a pre-course assessment flight at an ATO.' shall be deleted.

response

Not accepted

Thank you for providing this comment.

The pre-course assessment is a tool for an ATO to establish the standard of the student and to determine the amount of credit. The Agency and the Review Group strongly believe that the assessment is an essential element of the course.

comment

1309

comment by: AOPA France

A.2. IR(A) – Competency-based modular flying training course
FLIGHT INSTRUCTION 8

AOPA France agrees with sub-paragraphs 8(a) and 8(c), but has the following

comments with regard to the rest of paragraph 8:

8(b). AOPA France considers that the demonstration of acquisition of knowledge to which this sub-paragraph refers can be satisfactorily assessed by the Examiner during the pre-flight preparation and conduct of the C-B IR Skill Test, supplemented if necessary by oral questions. It should be noted that the requirement for the holder of an IR issued in compliance with the requirements of Annex 1 to the Chicago Convention to sit further written theoretical knowledge examinations when converting to a EU IR is widely regarded as an expensive waste of time, which serves very little practical purpose. An Examiner will be able to make a much more pertinent assessment of the applicant's relevant knowledge; we strongly recommend that oral assessment in the manner described should satisfy the requirements of sub-paragraph 8(b).

8(d). AOPA France considers that 100hrs of instrument flight time as PIC is excessive. Pilots with considerable flight time under IFR would be disadvantaged; there would be safety implications for a pilot to fly deliberately in IMC, with the attendant risks of turbulence and icing, merely to reach the 100hrs requirement. We therefore recommend that sub-paragraph 8(d) is reworded as follows:

8 (d) have a minimum of at least 50 hrs of flight time under IFR as PIC on aeroplanes.

We remind the Agency that the C-B IR is 'competency based' by definition and that, although some relevant experience is clearly needed, the Skill Test will provide entirely sufficient assessment of the applicant's suitability to be issued with the C-B IR.

response *Accepted*

Thank you for providing this comment.

The Agency has decided to amend 8(b) and (d) after receiving and reviewing several similar comments from stakeholders. 8(b) now allows the applicant to demonstrate an adequate level of theoretical knowledge to the examiner during the skills test. Furthermore, the number of hours required under 8(d) has been changed to 50 hours flight time under IFR as PIC on aeroplanes.

comment *1310*

comment by: *AOPA France*

A.2. IR(A) – Competency-based modular flying training course
PRE COURSE ASSESSMENT9

AOPA France considers that a pre-course assessment flight is entirely unnecessary. There should be no doubt about credit for previous instrument flight time, provided that this has been properly recorded and it is not appropriate for any ATO to query credit allowed by the Agency's regulatory proposals. In any event, the subsequent instrument flight training will, if properly conducted, reveal any omissions or weaknesses resulting from the applicant's previous instrument flight training or experience.

response *Not accepted*

Thank you for providing this comment.

The pre-course assessment is a tool for an ATO to establish the standard of the

student and to determine the amount of credit. The Agency and the Review Group strongly believe that the assessment is an essential element for the course.

comment

1321 ❖

comment by: *David Sandells*

Inconsistency in the proposal between "Section 3.5 Privileges of Instructors and examiners (Sailplane cloud flying rating)" & Section B.I.7 - Ammendment to FCL.905.FI

Section 3.5 proposes FIs will provide training for cloud flying if they "hold a cloud flying rating and shall demonstrate the ability to instruct for that rating..."

Section B.I.7 suggests that FIs will require "at least 200hours of flight time under IFR"

The proposal in Section 3.5 seems reasonable.

200hours IFR experience is unreasonable for glider FIs and would essentially prohibit the instruction of the cloud flying rating. There would be few (if any) sailplane FIs with this amount of IFR experience.

Generally for the same level of ability - sailplane hours are usually much lower than powered pilot hours. This is due to the fact that sailplanes need to be constantly 'flown' and training flights generally have shorter durations. There is no real concept of 'cruise' with a sailplanes and therefore 100% of the flight time is spent monitoring and adjusting the flight path to maintain best height and follow lines of lifting energy.

Therefore despite fewer hours, the higher intensity of sailplane flight leads to the same competence in a shorter time.

The changes to FCL.905.FI should fall in line with the discussion in section 3.5. The 200hour IFR minimum should be **removed** for the cloud flying rating and replaced with "demonstrate the ability to instruct for that rating to an FI specifically qualified for this or to an FE.

response

Noted

Thank you for providing this comment. Both section 3.5 and section B.I.7 Amendment to FCL.905.FI contain the same requirement.

comment

1328

comment by: *Mike BROOKS*

In order to reduce costs to citizens in acquiring and renewing a SCFR, it is essential that TMGs be available for this specific purpose. This should be carefully worded to avoid the perceived danger of the regulation being used as a short cut to flying in IFR.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment	<p>1330 comment by: <i>David Sandells</i></p> <p>Section B.I.10 - Subpart K Examiners - Section 2</p> <p>The requirement for flight examiners to have 10 hours instruction of the cloud flying rating is excessive in comparison to requirements for other examination qualifications.</p> <p>The introduction of this requirement could prohibit the instruction of the cloud flying rating and therefore prevent it's take up.</p> <p>The requirement should be reduced to 5 hours in line with the intensity of flight instruction achieved in a sailplane and the typical short duration and weather dependency of sailplane flight.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment. After receiving various other stakeholders' comments, the drafting group reviewed the requirements and decided to reduce the requirement to at least 5 hours of flight instruction for cloud flying rating.</p>
comment	<p>1331 comment by: <i>Toby Wright</i></p> <p>This seems very sensible, at the moment sailpane pilots are more or less left to 'figure out' cloudflying for themselves. A more formalised training regime can only improve both the control and skill level of cloudflying.</p> <p>With accredited instructors, it will be easy for pilots to seek a formalised training program, and to gain a satidfactory skill level under supervision and a syllabus.</p> <p>Whilst in the past, sailplane cloud flying has very successfully been regulated on a voluntary basis by the BGA, it makes sense to bring this in line with the new EASA glider pilot licence.</p> <p>I fully support this proposal, it is by far the best compromise.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments and positive feedback.</p>
comment	<p>1332 comment by: <i>Peter BUSHILL</i></p> <p>FC830. As mentioned earlier, the first requirment is for a 'rating' that allows approach to cloud but not entry into it. Beyond a possible minimum number of PIC hours it is difficult to see what extra practical training is required as the pilot can legally do that same thing below 3000'. If a cloud flying rating is required, I believe that a smaller number of training hours should be considered. The control of a glider is considerably simpler as there are no power considerations and only 4 instruments are involved. Modern gliders are also extremely stable and not prone to spinning.</p>

response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/5 hours training) was also identified by BGA.</p>
comment	<p>1347 comment by: <i>René Meier, Europe Air Sports</i></p> <p>FCL.825. EIR (a) Privileges and conditions (1) Add, please "...and by night..." for holders of the Night VFR rating.</p> <p>Rationale: Looking at the actual Night VFR syllabus we think this addition is proportionate, as pilots have to remain in VMC for any take-off and for any landing.</p> <p>(2) Please add: "On approach the holder of the rating shall remain in VMC when descending below minimum Radar vectoring altitude or below MSA or another specified altitude compatible with IFR operations at the destination and/or the alternate aerodrome.</p> <p>Rationale: En-route parts are not difficult, normally. But, as a minimum approach training has to be maintained according to page 6, para 1.2 Flight Instruction, we propose that our idea becomes part of the rating. A solid training background relieves stress from the flight crew as well as from the ATC staff involved.</p> <p>(3) Add at the end of the para "...test referred to in (e) after completion of the regular training for the relevant class or type of aircraft."</p> <p>Rationale: To avoid misinterpretation.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please check the response to comment 1184.</p>
comment	<p>1348 comment by: <i>René Meier, Europe Air Sports</i></p> <p>FCL.825 EIR (f) Validity, revalidation and renewal (2) Is "...within 3 months..." more appropriate than "...within 90 days..."</p> <p>(4) And another question: Which date is the starting point for the calculation of the "7 years" we know from JAR?</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight the 3 months is a standard requirement used for the full IR rating and therefore the EIR follows the same principle. In addition, the 7 years requirement should be counted from the last expiry date of the rating.</p>

comment	1350	comment by: <i>Richard Palmer</i>
	Supporting comment on FCL.830 in NPA 2011-16	
	As an experienced glider pilot with 20+ years experience of cloud flying in gliders I support the introduction of the Sailplane Cloud Flying Regulation. I acknowledge that if sailplane pilots are to continue to enjoy the priveledge of cloud flying then it is reasonable to bring this within a regulatory framework.	
response	<i>Noted</i>	
	Thank you for your comments and positive feedback.	
comment	1351	comment by: <i>René Meier, Europe Air Sports</i>
	FCL.905.FI FI-Privileges and conditions (g)(2)	
	We did not find details about the structure of such an "assessment of competence". May we ask for clarification?	
	Rationale: In order to obtain a level playing field such assessments should be standardized.	
response	<i>Noted</i>	
	Thank you for providing this comment. The Agency agrees with your comment and would like to highlight that the requirements for the 'assessment of competence' can already be found in FCL.935 and AMC1 FCL.935.	
comment	1352	comment by: <i>Greg Monaghan</i>
	I believe the proposed minimum 5 hrs of dual instruction is exessive or even unnecessary. If it is considered that some formal training is required then 1 hr should suffice, especially considering that no formal training is required at the moment.	
	I also support the BGA's comments re TMGs. Any training should be possible in a TMG but the privileges of the SCFR shoyuld not be exercised in a TMG. I also support their proposal for a Restricted SCFR, for flight under IFR but clear of cloud.	
response	<i>Partially accepted</i>	
	Thank you for your comments.	
	Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/ Restricted SCFR) were also identified by BGA.	
comment	1353	comment by: <i>René Meier, Europe Air Sports</i>
	Modular training courses for the IR A.2. IR(A) Competency based modular flying training cours 3. Our question: Which is the starting point for the calculation of the "36	

	<p>months period" stated? Many thanks for a clarification.</p> <p>FLIGHT INSTRUCTION 6.(b) "...the applicant shall complete a pre-course assessment-flight at an ATO..." Our question is: What will be the form of such an assessment flight? Will there be GM?</p> <p>Rationale: Also this point is part of a level playing field, important to the ATO and to the student-pilot.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency reviewed the 36 month requirement and decided to amend the requirements in Appendix 6 and FCL.025 to clarify the requirement. Once a student commences the theoretical training course, he/she will have 18 months to complete it. After successful completion of the theoretical training examinations, the student will have 36 months (practical training and examination) for the issue of the IR(A).</p> <p>With regard to the pre-course assessment, the Agency would like to clarify that currently no AMC or GM to this requirement has been developed. It is the task of an ATO to establish the content of the pre-course assessment based on its training syllabus. If a need for GM or AMC is identified, the Agency may address this in a future task.</p>
comment	<p><i>1356</i> <i>comment by: Richard Palmer</i></p> <p>Concerns about FCL.830 in NPA 1022-16</p> <p>I support FCL.803 but I am concerned about the amount of training required for issue of the Sailplane Cloud Flying Rating. A minimum of 5 hours is excessive given that many if not most of the applicants will already be experienced in cloud flying and often will also be experienced in instrument flying as power pilots.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p><i>1357</i> <i>comment by: Bill Murray</i></p> <p>As a glider pilot of 30+ years, I support the introduction of the Sailplane Cloud Flying rating. This should give rise to a structured training framework, giving a greater level of competency, and therefore safety.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments and positive feedback.</p>

comment	1358	comment by: <i>Richard Palmer</i>
	Comment on Sailplane Cloud Flying Rating	
	<p>I understand that the proposal fo a Restriced SCFR has been dropped. I consider this to be a serious omission as a large amount of 'clear of cloud and in visual contact with the ground' sailplane flying technically falls into IMC. For the sport of gliding to continue without serious restriction it is essential for pilots who do not have the full rating to be able to continue to fly near cloud but not within it.</p> <p>For safe cross country flying using thermals it is nearly always necessary to fly to within say 100 feet of cloudbase to give oneself a reasonable chance of finding the next thermal. If it becomes necessary to break off climbs 1000 feet below cloudbase the safety margins of the sport will become seriously eroded as there will be a very large increase in the number of field landings. The alternative is a sharp decline in the attractiveness and popularity of the sport.</p> <p>Similarly mountain lee wave flying also often takes place in what is technically IMC.</p> <p>I hope that the authority will reconsider the Restricted SCFR.</p>	
response	<i>Not accepted</i>	
	<p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Restricted SCFR) was also identified by BGA.</p>	
comment	1367	comment by: <i>Royal Danish Aeroclub</i>
	One year validation is to short. We do suggest a two years interval. This is more in line with general license rules and in this case sufficient.	
response	<i>Not accepted</i>	
	<p>Thank you for providing this comment. The Agency would like to highlight that the 1 year revalidation period is in line with the full IR requirement. The EIR 1-year period will remain for standardisation purposes. However, the text was amended to allow EIR revalidation also via recent flying experience and a training flight of at least 1 hour with an EIR instructor. In any case, each alternate revalidation will require a proficiency check.</p>	
comment	1369	comment by: <i>Royal Danish Aeroclub</i>
	<p>There should be a possibility to extend EIR to conduct IFR flights en-route by night if the pilot have night flying qualifications (Night VFR rating).</p> <p>We do support the point of view from Danish Powered Flying Union.</p>	
response	<i>Accepted</i>	
	<p>Thank you for providing this comment.</p> <p>The Agency, after reviewing the issue, has decided to extend the privilege of</p>	

the EIR to IFR by night provided that a night rating is held in accordance with FCL.810.

comment 1371 comment by: Christopher RAMLER

I support the proposed Sailplane Cloud Flying Rating. Flight within cloud (generally a thermalling climb from below cloudbase, and exiting the side of the cloud somewhere near the top) has been practised by UK glider pilots for many years, with adequate safety, and it can at times be necessary to climb in cloud to gain sufficient height to complete a glider cross-country flight to the intended destination airfield. It may also be necessary on occasions to descend through cloud when a wave gap closes unexpectedly. It is essential that the privilege of gliders flying in cloud is retained, to cover those occasions where this is the best option.

response Noted

Thank you for your comments and positive feedback.

comment 1376 comment by: George Metcalfe

Cloud flying is an important dimension of sailplane flying and I therefore support the option to add a Sailplane Cloud Flying rating to the pilot's licence.

For those without previous experience, I also support the requirement for 30 hours minimum PIC sailplanes and a training course with an appropriately qualified training organisation.

I also support the requirement for a suitable skill test (regardless of previous experience).

However, the requirement for 5 hours dual flight instruction is excessive. Gliders are relatively stable, have the opportunity only for relatively short periods in cloud, within a short distance from their point of entry (because except when circling in lift, they will inevitably descend out of cloud within a few minutes) so the level of precision and complexity of tasks required do not require extensive dual training. Two to three hours is the maximum which would be required normally, and given that there is also a skill test, there is no need to specify a higher time-based training requirement.

For those with previous experience, given that there is a skill test, there should be no requirement for dual flight instruction at all. If the flight examiner finds in the test that skills are inadequate, he would of course recommend suitable remedial training, probably including dual flight instruction.

response Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1381 comment by: Dr Alistair NUnn

Comment on section 6, FCL.830 on sailplane cloud flying rating
Alistair.nunn@btconnect.com

I broadly agree with these proposed new rulings; although the UK already has this privilege, harmonisation is a good idea across the EU and would really open up the gliding in many countries. I am therefore in favour of the proposal. My only comment would be that many experienced pilots already fly in cloud and therefore would not need retraining; hence the 5 hours seems a bit unnecessary - a skills test would be sufficient.

On the flip side, not having this rating and having to conform with standard VMC rules could seriously hinder the UK gliding scene (making it less safe), as well as the gliding in other temperate/smaller countries exposed to the sea, for the following reasons:

1) The average cloud base in the UK varies from 2-4000 ft AMSL (so is much less than continental Europe). Moreover, it varies during the day, and from region to region, meaning that it would become a real challenge to stay within VMC rules without landing in a field (so increasing risk of injury or damage). Regulating this would be difficult; cloud bases can vary as much as 2000 ft near sea breezes, or showers - so how would the rules apply?

2) Being able to fly near cloud is essential, and becomes especially important on strong wind days, days with showers and near hills and mountains - otherwise the risk of landing out becomes very high. Thermal structure is badly distorted and makes them much more difficult to use lower down. Plus, it would also completely eliminate the possibility of wave flying, which often requires pilots to fly up to, and then along the edge, of lenticular clouds. Importantly, wave flying often takes place near mountains and to heights where very few other GA aircraft fly, so it would not improve the already very good safety record.

3) Because height is potential energy, and thus reduces pilot work load, staying high is most glider pilots' prerogative. As one gets lower, more and more mental capacity is devoted to selecting safe fields. Within the UK, especially around areas of funnelling airspace, this becomes really important when there is a lot of other GA activity (e.g. the choke point between Brize Norton and LTMA). In effect, most glider pilots will opt for a higher height band, which in my experience, acts as a very natural separator between gliders and other GA. And, in part, explains the excellent safety record. In effect, the current dispensation in the UK for glider pilots to fly near cloud acts to keep most GA and gliders apart.

4) Clearing ATC zones around airfields. Staying high often enables gliders to keep well clear of active airfields, as it gives the pilot more choices - this is especially important on lower cloud base days. The complexity and crowded nature of the airspace in several countries would severely limit the options of soaring on some days, and would again, tend to cause local high traffic densities near choke points of restricted airspace. Gliders, in general, cannot maintain a steady altitude and direction.

5) Thermal selection generally becomes easier the higher one is due to the life cycle of most thermals/clouds. On days where convection is deep, and clouds are also fairly deep, the optimal height band is often within a 1000 ft of cloud base (where the strongest and best formed lift is found). Again, on lower cloud base days, which are common in the UK, this would cause problems.

6) The ability of low experience pilots in low performance gliders to go cross-country would be severely limited if they had to comply to VMC rules and, in the UK, would probably (given the recent weather cycle), reduce the number of days they could go somewhere by at least 50-80%. Many older gliders have maximum glide angles of less than 38 to 1, furthermore, they can only do this at relatively low speeds. Thus, the ruling would potentially stop low performance gliders going cross-country, especially if in the hands of less

experienced pilots – which is often the case – as novice pilots are often young and cannot afford newer high performance machinery.

7) Summary. Losing the right to fly in or near cloud (so having to comply with VMC rules) will severely affect gliding operations in temperate countries, especially those with a large ratio of sea to land, due to the lower (and variable) cloud bases. It will increase the risk of injury/damage due to greater numbers of field landings, and will severely penalise low hour pilots flying older gliders. It may also increase the number of gliders near GA airfields and at choke points, so increasing risk. Hence, it may have the complete opposite effect on safety, which, to date, has been exemplary in the UK, where gliders have not had to adhere to VMC rules since the sport began. Finally, due to the nature of gliding (not being able to maintain a steady course and altitude), it would be almost impossible to regulate and police, and it is highly likely that the current ATC system could not cope. In conclusion, it is likely that imposing the VMC rule would finish the sport of gliding in the UK, apart from the very rich few who could afford it. In the current economic climate, this may be very few indeed. Hence, it is essential that the proposal for the glider cloud flying rating is accepted.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1391

comment by: *Mick Featherstone*

I am in broad agreement with the requirement for a SCFR. However I believe the requirement of instruction for 5 hours in many cases would be excessive. The requirement for training should be sufficient as determined by the instructor to pass the flight test.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1396

comment by: *EFLEVA*

Page 17, FCL825(a)(1)

EFLEVA is of the view that if a PPL holds a night rating as well as an EIR then he should not be restricted from operating at night under en-route IFR.

The holder of an EIR will have demonstrated the required capability to operate by sole reference to instruments. The holder of a Night Rating will have demonstrated capability to fly at night. If a PPL holds both ratings there is no purpose in restricting the privilege to day only.

Suggestion to modify the text to remove the reference to "by day".

response *Partially accepted*

Thank you for providing this comment. The Agency, after receiving several similar comments, decided to extend the EIR privileges to IFR by night provided a night rating is held in accordance with FCL.810.

comment

1397

comment by: *John Taylor*

The syllabus for the SCFR looks good. However, 5 hours dual training in a glider would be overkill for an experienced glider pilot with cloud flying experience. A gliding club CFI, working with guidance from the BGA and EASA, should be allowed to exercise judgement based on a pilot's previous experience. For example, I have about 1700hrs gliding over 50 years, and I once had a PPL and instrument rating. I don't think I would need 5 hours to demonstrate that I could fly safely in cloud. There is a practical consideration here too - the availability of suitable 2 seat trainers, instructors and weather could be a problem, and conflict with other training requirements. Hence the need to optimise the use of resources. Over many years, the BGA has proven itself well capable of managing such issues.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1400

comment by: *EFLEVA*

Page 21, paragraph 5.

EFLEVA is of the view that there is no need to include the requirement of 100 hours of theoretical knowledge training, since candidates must demonstrate their knowledge by passing an examination. Candidates who can pass the examination with shorter periods of instruction should not be forced to undertake longer courses.

response

Not accepted

Thank you for providing this comment. The Agency strongly believes that it is in the interest of a minimum quality standard, harmonisation and the student to set a minimum amount of required hours.

comment

1405

comment by: *Morag SAUNDERS*

The following comment applies to section 6 (2) (ii)

I fully support the need for additional training for sailplane pilots who wish to enter cloud. However, it cannot be stressed enough that a glider pilot who enters cloud would only do so as a means to gain extra height. The time spent thereafter in the cloud would be minimal, in the order of minutes.

However for sailplane pilots (like myself) who are unlikely to enter cloud by choice it would seem unreasonable to expect them to undertake 5 hours of cloud flying training both from a time and financial point of view. It is my opinion that this would have a negative effect on gliding activity within the UK when in the majority of cases a sailplane pilot will not need to enter cloud.

With the proposed SCFR the gliding activities of many glider pilots like myself would be severely curtailed. It is imperative for the future of the gliding movement in the UK that we are not restricted to VMC. I therefore strongly feel that the restricted SCFR as outlined in Option 2 is essential and therefore needs to be incorporated with Option 1.

Until now sailplane pilots have been flying close to cloudbase without any significant risk. If we are limited to VMC the future of gliding in the UK will be compromised.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment *1410*

comment by: *H James*

I can well see the benefits of pilots taking a skills test but 5 hours seems way over the top and inappropriate. most glider flights are of short duration and so this could take literally months (or longer) to complete and at great cost to the pilot. I propose far shorter training hours with both simulator and TMGs being utilised

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment *1412*

comment by: *H James*

As I have little interest in gliding outside the UK, there should be a National Rating with rules specific to gliding in the UK that would allow us to fly safely within allowed UK airspace without restricting us in the way that the new EASA rules (if implemented) will do

response *Noted*

Thank you for your comments and positive feedback.

comment *1414*

comment by: *FAA*

The conversion requirements for a foreign national pilot to apply for an EASA competency-based modular IR(A) appear to be excessive. The proposed minimum experience is at least 100 hours of instrument flight time as PIC in airplanes. This requirement is not in conformance with current ICAO Standards and Recommended Practices in obtaining an instrument rating as prescribed in Annex 1, Chapter 2, Section 7.

Reason: Current practice does not dictate the experience level a pilot may

possess but does view the qualifications associated with the pilot licenses held.

Recommendation: Modify the proposed NPA to not include an additional time requirement that the 100 hours of instrument flight time as PIC in airplanes imposes.

Safety Impact: Since a foreign national pilot has already accomplished the performance standards set forth by ICAO, an equivalent level of safety has been met.

response *Partially accepted*

Thank you for providing this comment.

After similar comments from other stakeholders, the Agency and the Review Group agree that the minimum time requirement was somewhat excessive and subsequently decided to change the minimum requirement to 50 hours flight time under IFR as PIC on aeroplanes.

comment

1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response

Noted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Restricted SCFR) was also identified by BGA.

comment

1425

comment by: *FAA*

The training requirements for a sailplane cloud flying rating outlined in FCL.830 appear to be inadequate for the type of flying that will be encountered.

Reason: The 30 hours required as PIC in a sailplane does provide a pilot with adequate experience; however, this is only required after the issuance of the

	<p>license. The 5 hour training requirement with reference to instruments does not provide a solid IMC foundation.</p> <p>Recommendation: FCL.830's training experience requirement should be accomplished in a currently approved aircraft and method that would generate the same level of safety any other instrument flying aircraft provides.</p> <p>Safety Impact: A lack of experience in the operation of IFR/IMC weather conditions may lead to unintended safety consequences.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1426 comment by: FAA</p> <p>The proposed EIR does not conform to ICAO standards and recommended practices set forth in Annex I: Personnel Licensing.</p> <p>Reason: The proposed hour requirements are substantially less than that of international law.</p> <p>Recommendation: The EIR should meet the minimum hour requirements that ICAO has set for international operations.</p> <p>Safety Impact: By lowering the hour requirements for a pilot to fly in IFR/IMC conditions, some unintended safety consequences may result.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency is aware that the EIR does not conform to ICAO standards and recommended practices. However, similar to the LAPL, the EIR is an EU rating only and should be viewed as a 'step in module' towards a full IR(A).</p>
comment	<p>1430 comment by: John Williams</p> <p>It is very important that glider pilots can fly legally in and close to cloud. Insofar as the proposed cloud flying rating helps to permit this in future I strongly support it.</p> <p>I am however concerned that a minimum training time should be specified; what matters is competence, not training duration.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>

comment	1431	comment by: Philip TAYLOR
	I support the implementation of the SCFR and consider it to be a practical solution to the obvious need to fly in cloud when flying gliders. Although historically there have been no safety related incidents regarding sailplanes flying in cloud, I can see that a formalised rating can only add to the already impressive safety record.	
response	Noted	
	Thank you for your comments and positive feedback.	
comment	1453	comment by: Alan HALL
	No additional restrictions, as called for by some parties, should be placed on operation of TMGs under a SCFR or RSCFR. Many TMGs have an adequate performance to function, in suitable weather conditions, in exactly the same manner as an unpowered sailplane and to exclude them from operation under a SCFR would be unreasonable. Indeed, given their inferior performance, such a restriction would be a disproportionate handicap and in many cases will make their use for soaring purposes unviable. To avoid deliberate abuse of the SCFR, should that be felt necessary, the regulation should make a distinction between prolonged cruising flight under power and operation as a sailplane.	
response	Partially accepted	
	Thank you for your comments.	
	Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.	
comment	1459	comment by: René Meier, Europe Air Sports
	Page No. 16 Paragraph: B.I.2) Subpart G Instrument Rating Section FCL.600 IR General	
	Comment: Under JAR-FCL, national ratings were permitted to be added to JAR-FCL licences, providing they were used in the airspace of the country issuing the national rating. Examples are the towing, aerobatic, and UK IMC ratings. It is noted that Article 4 of the Aircrew Regulation was amended by the EASA Committee to provide for Member States to allow pilots to exercise limited privileges in the airspace of the Member State before qualifying for the LAPL. It to It would seem sensible for the Agency to propose that similar provision is made in FCL.600 to cater for national ratings.	
	Justification: In the light of the Commission's and the Parliament's apparent desire for proportional regulation and flexibility, such a revised proposal would meet the needs of many pilots.	
	Proposed text: "FCL.600 IR General	
	a. Except as provided in FCL.600(b) and FCL.825, operations of an aeroplane, helicopter, airship or powered-lift aircraft under IFR shall only be conducted by holders of a PPL, CPL, MPL, and ATPL with an IR appropriate to the category of aircraft or when undergoing a skill test or dual instruction.	

	<p>b. In Member States where national permits flight in accordance with the IFR under specified circumstances, the holder of a pilot licence may fly under IFR in the airspace of that Member State only, provided that the pilot holds the national qualification of that Member State appropriate to the circumstances of the flight.”</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing your comment.</p> <p>It is correct that the Aircrew Regulation in its Article 4(7) provides an option for Member States to allow a LAPL holder under very specific circumstances (specific risk assessment) and by limiting the privileges to national territory to fly solo without supervision before he/she meets all the requirements for the issuance of a LAPL. This specific requirement was added during the political process of the review of the Aircrew Regulation as a very specific case and will not be introduced as a general principle in Part-FCL.</p> <p>Therefore, the Agency sees no need to propose a change to FCL.600 to allow national ratings for flying in IMC. The example provided is a stepping stone towards the European-agreed LAPL. The Agency believes that for flying under IFR in Europe the existing route (full IR), the proposed competency-based IR and the EIR will fulfil all the needs.</p> <p>‘National permits’ as proposed will therefore not be introduced.</p>

comment	<p>1460 comment by: René Meier, Europe Air Sports</p> <p>Page No. 19 Paragraph: FCL.830 Sailplane Cloud Flying Rating (b) (2) (ii)</p> <p>Comment: See comment under Explanatory Note - III Overview of the changes proposed in this NPA - 3. Sailplane Cloud Flying Rating section 3.2</p> <p>Justification: Change the requirement to ‘competency-based’ without a minimum airborne training time with an instructor.</p> <p>Proposed text: Amend to “a certificate of competency from an FI(S) holding the SCFR and supported by a minimum of 2 hours of dual flight instruction.....”</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>

comment	<p>1461 comment by: René Meier, Europe Air Sports</p> <p>Page No. 19 Paragraph: FCL.830 Sailplane Cloud Flying Rating (c)</p> <p>Comment: See comment under Explanatory Note - III Overview of the changes proposed in this NPA - 3. Sailplane Cloud Flying Rating section 3.4</p>
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Revalidation criteria should allow for pilots to self certify a certain amount of time flying (successfully!) in cloud in the 24 month period - say a minimum of one hour in total during the period - to count as revalidation.

Justification: As described above, and proportionality for sailplane pilots
Proposed text: Amend text to "The Sailplane Cloud Flying Rating shall be valid for a period of 24 months. For the revalidation and renewal the applicant shall provide either a self-certification of practical experience of a minimum of one hour cloud flying in total over the relevant 24 month period, or in the absence of sufficient practical experience shall pass a proficiency check."

response *Accepted*

Thank you for providing this comment. The 24-month period now only has a recency requirement, but no revalidation. During the 24-month period the rating holder needs to exercise the cloud flying privileges for a minimum of 1 hour or 5 flights as PIC. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

1462

comment by: *René Meier, Europe Air Sports*

Page No. 21

Paragraph: A.2. IR(A) Competency-based modular flying training course. Theoretical Knowledge section 5

Comment: In line with comment under Explanatory Note - III Overview of the changes proposed in this NPA 1. En-route Instrument Rating section 1.3 and 2. Competency based modular course for the IR(A) section 2.5, EAS recommends that the minimum 100 hours be removed.

Justification: A competency-based approach should not specify a time factor.

Proposed text: "The applicant shall complete an approved IR(A) theoretical knowledge course. The approved....."

response *Partially accepted*

Thank you for providing this comment.

After receiving several similar comments from stakeholders, the Agency and the Review Group experts discussed the proposed minimum hours theoretical knowledge again. As a result, the Agency decided to reduce the requirement to 80 hours.

comment

1466

comment by: *Alan HALL*

The safe operation of sailplanes near to, but outside cloud has been demonstrated over many years and is mainly unrelated to the formal pilot knowledge or skills as specified for the issue of a full SCFR. A restricted sailplane cloud rating, as per the original option 2, should be introduced in addition to option 1. The requirements for grant of this rating, if any, should be restricted to a minimal theoretical knowledge to convey an awareness of the potential hazards in such operation. This already forms an integral part of contemporary sailplane training in most cases, and merely requires formalising

within the normal syllabus.

The requirement for a minimum of 5 hours flight training for grant of a SCFR is excessive. This whole process should be competence based, and many sailplane pilots will already have acquired these elementary skills by several routes. In many cases they will be considerably more skilled or experienced than the instructor/examiner. If an minimum is considered essential, 1 hour would be appropriate.

It is not clear to me how, physically, this training will be done. The additional risks of extensive operations under screens or foggles in a gliding environment do not seem to have been considered, and I wonder if these risks may exceed the historically low figures for actual sailplane IMC operation. This is especially the case if a RSCFR is not made available, with associated minimal practical training, as this rating would satisfy the great majority of glider pilots while minimising these risks.

response *Partially accepted*

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 1469

comment by: Alan HALL

Consequences for sailplane tow pilot operations have not been considered. Normal towing operations frequently entail flight close to cloud and the current proposals will require a tow pilot to hold an EIR. Many years of experience in the UK alone demonstrates that this is not required or proportionate in these circumstances. Very few volunteer tug pilots will be able to achieve this rating and the consequences for gliding operations will be severe. This is not catered for in the RIA. A appropriate solution might be to require the tug pilot to hold a SCFR.

response *Not accepted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. Therefore, a tow pilot will have to hold an EIR or IR(A). However, this will not prevent Member States from defining certain airspace zones with specific visual flight rules for sailplane and tow operations.

comment 1470

comment by: Alan HALL

It is reluctantly acknowledged that the UK IMCR is not acceptable to the majority of European authorities, however the promised requirements for continuation of UK IMCR privileges within the UK have not been addressed with any clarity. The IMCR is a positive contribution to safety, and its loss is not compensated by the EIR. As a minimum, national exemptions should be

response	<p>permitted to allow continuation of existing privileges for current IMCR holders, and it would be preferred if the IMCR could continue to be issued to new applicants on this national basis.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating. This conversion process is the responsibility of the Member State in consultation with the Agency. In this case the Agency will support the UK CAA in finding a solution to this issue.</p>
comment	<p>1471 comment by: <i>Alan HALL</i></p> <p>Given the relatively simple nature and limited privileges of the EIR, annual revalidation seems an unnecessary burden. A 24 month period would be more appropriate and could then be accomplished at the same time as the PPL.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for this comment.</p> <p>The Agency would like to keep the revalidation period in line with the 1 year requirement for the full IR(A) revalidation for standardisation purposes. However, the Agency has added an alternative revalidation method. This method requires 6 hours of PIC experience in IFR and a 1 hour flight with an instructor holding the privilege to instruct for the EIR. In any case, each alternate subsequent revalidation will require a proficiency check.</p>
comment	<p>1487 comment by: <i>Michael MANGION</i></p> <p>The ability to fly in cloud - and therefore the SCFR - is crucial for the safe conduct of gliding in the UK. Typical cloud bases of under 4000 feet are common and the inability to fly within 1000 feet of cloud let alone within it would erode the margin we already have to unsafe levels. Gliding would be restricted to local soaring and, even then, activities such as stall and spin recovery training would be difficult or unsafe without being able to climb to at least 4000 feet on the typical day with 4000 foot cloud bases.</p> <p>At the very least it is my opinion that glider pilots should be able to fly in IFR but clear of clouds. This would allow pilots to climb to cloud base even if they do not penetrate clouds, something that many pilots who are not currently qualified to fly in clouds routinely do.</p> <p>Indeed I feel that the Restricted SCFR should be re-considered for those pilots who would like to continue climbing to cloud base without necessarily ever wanting to penetrate cloud - and thus require the additional practical training to do that. It is entirely acceptable that the theoretical knowledge be required in this case.</p> <p>I would also like to comment on the proposed requirement for 5 hours of dual flight instruction. It seems to me that a skills test is more appropriate to judging whether someone is qualified to fly in cloud. Firstly some people may</p>

	<p>require more than 5 hours training and others may already be highly skilled to do so and wouldn't need much if any. Even if a minimum number of hours is required I feel that this should be set at a lower level of 2-3 hours but then ensure that a proper skills test is passed before issuing the rating.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training/Restricted SCFR) was also identified by BGA.</p>
comment	<p>1491 comment by: <i>Cecilia Craig</i></p> <p>I support the idea of having a specific rating for cloud flying for sailplane pilots as this demands skill that needs to be learned.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments and positive feedback.</p>
comment	<p>1492 comment by: <i>Cecilia Craig</i></p> <p>I support that there should be criteria outlined for a training course in order to achieve the SCFR including the minimum of 30 hours solo flying. However, I do not support the 5 hours minimum for the flying time for the SCFR. This is excessive. This would be difficult and impractical for the ordinary glider pilot to achieve particularly on a winch site. A typical winch flight lasts for 5 minutes – this would require approximately 60 flights. There is also no need for this amount of training. With adequate ground instruction and air practice two to three hours would suffice: basic flying skills are already there and it would not take as much as 5 hours to learn how to read the instruments etc.. I support the idea of revalidating this rating every 24 months.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1493 comment by: <i>Peter Pengilly</i></p> <p>I support the introduction of an En-route IR</p> <p>The requirement to obtain instruction in an ATO is un-necessary. Adequate training can be given by an IRI(A). Requiring training to be given in an ATO only increases the cost and decreases the accessibility of this rating. All measures should be taken to reduce the cost of gaining this rating, which is vital to safety to reduce the number of VMC into IMC accidents.</p> <p>It should be possible to use an instrument rating gained in another country (eg USA) to gain an EIR without further training, testing or experience.</p>
response	<p><i>Partially accepted</i></p>

Thank you for providing this comment.

The Agency believes that most training should be conducted at an ATO which has a safety management system in place and holds specific course approval. This will ensure a minimum quality standard of the training received by a student.

With regard to your comment on an instrument rating gained in another country and the EIR, the Agency has amended FCL.825 to include requirements to convert an ICAO-compliant third-country IR(A) into an EIR with a skills test for the EIR, an oral demonstration of an adequate level of theoretical knowledge (air law, meteorology, flight planning and performance (IR)) and 25 hours PIC instrument flight time.

comment

1496

comment by: *Peter Pengilly*

I support the introduction of a SCFR.

I suggest that the requirement to have 5 hours of dual flight instruction for this rating is excessive, particularly for pilots who have previous instrument flying experience. Provided the candidate can demonstrate the required skill level, no minimum training level should be set.

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1497

comment by: *Cecilia Craig*

The use of TMGs for SCFR training for glider pilots is essential. Glider pilots have been using TMGs for other parts of glider training in the past.

It is already a stipulation in the Flight Manuals of TMGs that they are not allowed to fly other than VFR so they will not be using the SCFR. There could be a reference entered to indicate that TMG pilots should not be allowed to use their SCFR when flying TMGs

response

Partially accepted

Thank you for your comments.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment

1498

comment by: *Cecilia Craig*

When gliding cross country it is essential that gliders are allowed to fly near cloud without having a full SCFR. Cloud base is variable and is frequently not high enough to be able to go distances in the UK. Not being able to fly near cloud while taking advantage of the rising air would put glider pilots at a higher risk of landing out with its own risks of injury or damage to the glider. There

response	<p>should be a special or as recommended by the BGA a restricted SCFR to allow glider pilots to fly near cloud. It is not practical to expect all pilots to achieve the full SCFR.</p> <p><i>Not accepted</i></p> <p>Thank you for your comments. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Restricted SCFR) was also identified by BGA.</p>
comment	<p>1499 comment by: <i>Peter Pengilly</i></p> <p>Comment on (f) (1) Validity should be longer than 1 year - I suggest 2 years minimum, and should be assessed at the same time as the biennial flight review.</p> <p>on (f) (2) Revalidation should be required every 2 years at the same time as the biennial flight review, and should be within 6 months of the expiry of the rating.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for this comment.</p> <p>The Agency would like to keep the validity period and revalidation requirements in line with the full IR(A) requirements for standardisation purposes.</p>
comment	<p>1502 comment by: <i>Peter Pengilly</i></p> <p>Comment on 8 (d)</p> <p>The need to have a minimum of 100 hours of instrument flight time as PIC on aeroplanes is excessive and unreasonable. A candidate who has a valid IR(A) from a third country and can successfully complete a skills test should not be required to have any minimum experience above the minimum required dual training requirement.</p> <p>If a candidate is appropriately skilled (by passing the skills test), and has the required knowledge (by passing the written test), and has undergone the required training time, then a rating should be issued. The jurisdiction under which the flight training was given is not relevant - the candidate has shown s/he can meet the EASA standards in the tests.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>After receiving similar comments from other stakeholders, the Agency and the Review Group agreed that the minimum time requirement was somewhat excessive and subsequently decided to reduce the minimum requirement to 50 hours PIC instrument flight time.</p>
comment	<p>1504 comment by: <i>Gordon Craig</i></p>

I support EASA and the BGA in having a SCFR. I think the requirement for 5 hours training is excessive as only fairly basic instrument flying is required and not procedural type flying.

I would like to see a restricted SCFR as this is very suitable for ordinary glider pilots that want to be able to fly to cloud base but not necessarily into cloud. This gives glider pilots a much greater range of operation than if they have to stay 1000ft below cloud base reducing the risk of a field landing which is the greatest cause of damage and injury. Flying higher also, separates gliders from the lower flying light aircraft and the associated risk of collision.

The use of TMGs for the training would be essential. Since the time in the air is longer than would be the case of a winch launch this would help to consolidate the learning.

response *Partially accepted*

Thank you for your comments.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/ Restricted SCFR) were also identified by BGA.

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p. 24-53

comment

11

comment by: *P. Holy*

I have mostly skimmed the theory syllabus but found this

"State where flight level zero shall be located"

What does this mean? There is no such thing as FL000 because nobody has a transition level on the surface.

I have very recently sat and passed the seven JAA IR exams, and have never seen so much irrelevant and ambiguous nonsense in my life. At least 90% of the questions are rubbish, irrelevant to any type of IFR flying. I have 1400hrs and have held an FAA IR since 2006, and have flown all over Europe with it, and it was frankly depressing to have to memorise nonsense like that.

You really need to get somebody (a real pilot, please) to read through the new QB and weed out the nonsense. This is not JAA anymore; you now have a chance to get this relevant.

response *Not accepted*

Thank you for providing this comment on one specific Learning Objective dealing with the term 'Flight Level zero'.

The drafting group together with the Agency (only 'real pilots' as proposed by you were involved) did a very thorough review of the Learning Objectives established under JAR-FCL. Regarding this specific Learning Objective, the experts were of the opinion that it should be kept like all the other Learning Objectives under the item 'Altimeter setting procedures' - 010 06 06 00.

The Agency checked this issue again and would like to confirm that the aviation

literature introduces the Flight Level 0 (or Zero value of QNE height) as the height corresponding to the air pressure or the height at the 1013,25 hPa pressure level.

The Agency decided to keep this Learning Objective also for the EIR and the competency-based IR. However, as another Rulemaking Group (FCL.002) is actually in parallel reviewing the Learning Objectives in general, this issue and your proposal will be forwarded to the group so that it can be checked with experts if this LO should be amended.

comment

55

comment by: *John Richardson*

010060300 Departure procedures

It is illogical to have TK questions on departure procedures for the EIR when it is not possible to depart under an IFR clearance using the EIR rating. I understand the requirement to standardise the questions as much as possible for the EIR and CBM IR but including questions which are clearly irrelevant will only lead to similar problems which exist with the current TK questions when PPL IR candidates constantly question the relevance of certain topics to GA flying and the whole process is devalued. I suggest that you remove the questions covering departure procedures for the EIR TK which should be an easy process to achieve. Candidates moving to a CBM IR from a previously achieved EIR could take a short exam on departure procedures which is administered by the ATO as part of the course.

response

Not accepted

Thank you for providing your comment.

The Agency understands that Learning Objectives dealing with IFR departure or arrival procedures are not necessarily classified as mandatory items for the theory for the EIR.

However, it was proposed by the experts (and the Agency supports this view) that it would be more important and useful to allow full crediting of the theoretical knowledge examination for the EIR to the full IR instead of creating a new and additional theory syllabus and examination for the EIR by deleting a few LOs from the syllabus.

In addition, the Agency would like to highlight that at least two IFR approaches in the context of an emergency situation will be included in the training. Departure procedures will also be a briefing item for the EIR student pilot when taking off at an airfield with published SIDs in order to establish his/her VFR/IFR change when taking off at the same airfield.

These issues are the reason why the theoretical knowledge for the EIR and the newly developed competency-based IR should not be different. The Agency will keep this proposal unchanged.

comment

98

comment by: *Peter KEUTGENS*

Upon review of the proposed learning objectives for the competency-based modular course it does not appear that anything has been taken out of the objectives that would have been required knowledge for the PPL or CPL

	<p>instrument rated pilot. I applaud the Agency's efforts in this regard and would argue that there should little reason left for the private pilot considering an instrument rating to prefer the FAA syllabus. I can only hope that the syllabus is implemented as proposed.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this supportive comment.</p> <p>Based on the comments received, a few technical changes and amendments have been included in the AMC containing the Learning Objectives; however, the general approach is kept.</p>
comment	<p>189 comment by: <i>Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</i></p> <p>Section: AMC.FCL.615 Page: 25-179 Relevant Text: Learning objectives</p> <p>Comment: One of the justifications given for the reduction of the learning objectives is that the content is taught during a PPL or CPL course. However, there are things that are removed in the proposal that most likely are not included in the PPL syllabus.</p> <p>Here are some examples:</p> <p>010 05 03 00 Com failure. (only VFR is taught for PPL) 010 06 08 02 ACAS 010 08 04 00 Large parts of this area is missing 010 09 00 00 Large parts of this area is missing 022 03 00 00 Magnetism 033 06 00 00 Flight monitoring and in-flight re-planning 040 01 03 00 Threat and error management (this is an ICAO requirement for the IR) 062 02 05 00 ILS. Some important parts are not included 062 06 00 00 GPS. Some important parts are not included</p> <p>Proposal: A further review of the learning objectives is required. If EASA feels that some subject matters are not important it should be put to question if they need be required for the "normal" modular IR.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing your comment.</p> <p>When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.</p> <p>The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with</p>

the experts and will introduce certain changes.

In your case the Agency decided the following:

010 05 03 00: To be kept as only VFR is taught for PPL.

010 06 08 02: No change as GA aircraft is not equipped with ACAS - operation of ACAS is not relevant/basic knowledge of the advantage when using ACAS will be taught during the lessons about the transponder and its use.

010 08 04 00: Will be kept as proposed as exactly these issues which have been deleted (AIP/NOTAM/AICs) will be covered during PPL. No LOs with specific IFR content have been deleted.

010 09 00 00: The same as above - the Agency will keep this unchanged as most of the LOs mentioned here have either no clear IFR relevance or they are already covered by PPL/CPL.

022 03 00 00: The same as above - the Agency will keep this unchanged as most of the LOs on magnetism mentioned here have either no clear IFR relevance (Flux valve) or they are already covered by PPL/CPL (such as earth magnetic field or Magnetic Compass).

033 06 00 00: The same as above - the Agency will keep this unchanged as all of the LOs on flight monitoring and in-flight replanning are already covered by PPL/CPL (such as in-flight fuel management) - no specific IFR difference has been identified and you have not provided any detailed proposal to which LO you are referring to.

040 01 03 00: Although the syllabus for the PPL covers also the principles of threat and error management, the Agency agrees with your comment. In order to fully comply with ICAO Annex 1, the LOs on Threat and error management will be reintroduced.

062 02 05 00: The Agency disagrees with the proposal to reintroduce some of the very technical and specific LOs dealing with the radiation pattern, the difference of depth of modulation or how the signals at the receivers vary with angular variation. As these topics are dealing with highly abstract technical questions and are not seen as necessary or 'important parts' of safe IFR operations, these deletions will be kept.

062 06 00 00: As above. The Agency disagrees with the proposal to reintroduce some of the very technical and specific LOs dealing with the orbiting of the satellites, the fact that SPS is a positioning service on frequency L1 or that the navigation message contains Ephemeris. As these topics are dealing with highly abstract technical questions and are not seen as necessary or 'important parts' of safe IFR operations, these deletions regarding the GPS will be kept.

Finally, the Agency would like to respond to your proposal to also review the content of the full (already existing) IR. The Agency sympathises with this proposal. However, as the review of the existing IR syllabus and the reduction of LOs would potentially also influence the content of the existing CPL/ATPL/MPL theory courses and would need more time, this task was postponed and might be initiated at a later stage.

comment 410

comment by: *Dr. Bert F. Smits*

Following the arguments outlined in my general comment, I would propose this amendment, as an addition between §8 and §9 :

Grandfathering procedure :

9. Applicants for the competency-based modular IR(A) holding a Part-FCL PPL or CPL and a valid IR(A) issued **before 8 April 2012** in compliance with the requirements of Annex 1 to the Chicago Convention by a third country may be credited in full towards the training course mentioned in 4 above. In order to be issued the IR(A), the applicant shall:

(a) demonstrate that he/she has acquired knowledge of English in accordance with FCL.055;

(b) have a minimum experience of at least 100 hours of instrument flight time as PIC on aeroplanes.

this would enable **existing** PPL and especially CPL holders to continue exercising their flight privileges without jeopardizing safety and without EASA or the European Commission risking litigation under the recently adopted FCL.001

In addition, it would contribute positively to the MCA scores highlighted in the regulatory impact assessment :

impact on safety would be negligible

impact on the environment would be positive (no unnecessary flight training, often an noise and pollution hindrance)

impact on the economy "level playing field" would be non-existent, as we are considering existing PPL/IR holders only

impact on proportionality would be positive (avoid unnecessary burdens on the GA community)

impact on regulatory harmonisation would be positive.

Furthermore, it would be good to specify that, in the particular case of an FAA-license/certificate, as the ability to read, write and speak the English language is a prerequisite to obtain such a certificate, that compliance with the requirement to "*demonstrate that he/she has acquired knowledge of English in accordance with FCL.055*" is automatically fulfilled for 3 years from the original date of issuance of the certificate. This saves pilots the unnecessary expense of sitting a language test, when a competent FAA designated examiner has already established functional language proficiency of the candidate.

response

Not accepted

Thank you for providing this comment.

Please see also the response to your comment (no 409) on general comments regarding crediting of prior flight experience as PIC in IFR/IMC for holders of Part-FCL licence and ICAO Annex 1 instrument rating.

You proposed to delete the skill test and the demonstration of theoretical knowledge. The Agency reviewed the requirements for the acceptance of third-country IRs and amended a few of the proposed requirements (amount of required IR flight time was reduced - demonstration of TK clarified) but will keep the skill test and the demonstration of theoretical knowledge in general. The reason for this is that the skill test level and the theoretical knowledge required in third countries might be different from the European level. It is seen as necessary by the experts and the Agency to keep the skill test and the demonstration of knowledge for the subjects mentioned (Human Performance

was deleted) also for IR holders having received their third-country rating before April 2012.

Regarding the proposed 'grandfathering procedure', the Agency does not agree with the proposed approach to develop specific additional crediting criteria for rating holders who received their rating issued by a third country before April 2012. As no justification for this proposal is provided and as the Agency does not see any reason for distinguishing between third-country ratings issued before or after 2012, there will be only one requirement for the crediting. An additional requirement is not needed and cannot be justified.

Your additional proposal to introduce a specific requirement for FAA licence/rating holders and to allow them to pass automatically the language proficiency requirements cannot be followed although the logic is understood. The Agency is of the opinion that holders of an FAA IR should also be required to demonstrate the acquired knowledge of English like all the other third-country ICAO Annex 1 instrument rating holders. The reason for this is that Part-FCL rules cannot favour above others a certain group of licence holders having issued their rating by a specific country. Furthermore, the Agency is not informed about the level of English required for example by the FAA, Transport Canada or the CAA Australia during an IR skill test.

However, please take into account that the method of assessment shall be established by the competent authority (see FCL.055 (e)). This means that the language skills could also be checked during the skill test or the oral exam by the examiner. The Agency does not believe that this requirement will impose a specific problem or burden on pilots who have passed an examination in English before and will keep this requirement unchanged.

comment

477

comment by: *Eisten Nilsson*

Overall I see the LO well balanced to the requirement for the PPL IR(A) and EIR, with some exemptions regarding ADF/NDB and weather radar.

response

Noted

Thank you for providing this supportive comment.

Based on the comments received, a few technical changes and amendments have been included in the AMC containing the Learning Objectives but the general approach is kept.

comment

830

comment by: *Timothy Nathan*

I have been through the LOs and compared the requirements with my (fairly considerable) experience as an IFR GA pilot in Europe over the last 35 years. I agree that the balance is now right, and support EASA in removing the LOs as described.

There are one or two points where I might want to engage in conversation, but they are not important enough to warrant detracting from the overall goal, which is to be thoroughly supported.

response

Noted

Thank you for providing this supportive comment.

Based on the comments received, a few technical changes and amendments have been included in the AMC containing the Learning Objectives but the general approach is kept.

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comment

188

comment by: *Swedish Transport Agency, Civil Aviation Department
(Transportstyrelsen, Luftfartsavdelningen)*

Section: AMC.FCL.615

Page: 25-179

Relevant Text: Learning objectives

Comment: There are items that might be included in the PPL syllabus but needs to be further reviewed in the IR-course.

Proposal: Add the following for A.2

022 03 03 00

033 04 02 02 Confirm true altitude...

050 01 06 02 Altimeter settings

response

Partially accepted

Thank you for providing your comment.

Please see also the response already provided to your comment no 189 dealing with the Learning Objectives as well. The same principles as already provided apply also for the AMCs in this segment.

When reviewing the existing JAR Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 main principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

In your case the Agency decided the following:

022 03 03 00: The Agency will keep this unchanged as the topic 'Magnetic Compass' is definitely sufficiently covered by the PPL or CPL syllabus.

033 04 02 02: The Agency agrees with your proposal and will reintroduce the LOs dealing with the true altitude.

050 01 06 02: The Agency does not agree and will keep these LOs deleted as the altimeter settings will be covered during PPL theoretical knowledge instruction. This is no specific IFR content and a theoretical review seems not necessary as potential missing elements like the altimeter settings will anyway

be discovered during the practical training. However, these issues are basic theory items for the PPL.

comment 1181 comment by: *General Aviation Manufacturers Association / Hennig*

GAMA members have reviewed 022 13 03 03 with respect to Navigation Display (ND) and notes that the requirement to "List and describe the following four modes displayed on a Navigation Display (ND) unit: - MAP (or ARC): - VOR (or ROSE VOR) - APP (or ROSE LS) - PLAN" actually are modes that **do not** apply to the most common EFIS in general aviation (Garmin and Avidyne).

As a result, GAMA recommends that EASA review this proposed requirement and determine its applicability as well as whether it is too prescriptive in nature.

response *Accepted*

Thank you for providing your comment.

When reviewing the existing JAR Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 main principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

In your case the Agency decided to accept the proposal as GAMA is right by stating that this LO contains certain modes which do not apply to the most common EFIS in General Aviation aircraft. As the LOs in this section do not seem to be applicable, the Agency will delete them from the syllabus for the EIR and the competency-based IR.

comment 1194 comment by: *John Wright*

Page 61-62

TCAS? In a glider? While I would like a Sailplane Cloud Flying Rating, is knowledge of TCAS really relevant when no glider has such a system fitted???

Please don't let such theoretical instrument knowledge requirements be considered important for glider pilots, who just wish to fly in cloud occasionally.

response *Noted*

Thank you for providing this comment.

Please be advised that page 61-62 contain Learning Objectives for the competency-based IR theoretical knowledge course. As such, TCAS is not relevant to obtaining the SCFR.

comment 1197 comment by: *General Aviation Manufacturers Association / Hennig*

Generally, GAMA notes that the proposal seems to focus the training requirements more on "old technology" than current technology encountered in the general aviation fleet. As an example, the proposal expends significant LO / time on gyros and gyro principles, etc., while little time is focused on new technology such as AHRS.

response *Noted*

Thank you for providing your comment.

When reviewing the existing JAR Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 main principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

However, the general issue of including even more LOs dealing with the 'old technology' than current equipment will be taken into consideration when performing the final review of the question bank. The syllabus as established now will also be given to another Rulemaking Group (FCL.002) in charge of conducting a general review of these Learning Objectives. This might lead to additional thematic changes in the near future. It was therefore never intended for this task to introduce additional new topics.

B. Draft Opinion and Decision - II. Draft Decision - AMC4 FCL.615

p. 72-96

comment 12

comment by: *P. Holy*

response *Noted*

No comment provided.

comment 1056

comment by: *Djam*

Dear Sir or Madam

I am concerned that certain organisations would like to ban gliders from cloud flying and force them to remain below 1,000 below cloud base.

The vast majority of good good gliding days provide a cloud base around or just below 3,000 feet.

Restricting gliders to 1,000 feet below cloud base would therefore prevent most flights!

Such restrictions on our sport are unacceptable.

Any sport which would see their legitimate activities being curtailed so drastically would be outraged.

From a practical point of view also it is difficult to see how this would be policed; how would such restrictions be monitored and controlled?

The safety records of the gliding community are second to none and generally gliders are rarely the cause of traffic conflict with other aircraft. I have witnessed on the other hand business aircraft 'dropping out' of the cloud base into Class E airspace in VFR areas taking no account of the fact that other aircraft might be flying below clouds. The trajectories took them well below the 1,000 feet below cloud base!

I would prefer to keep the status-quo on this matter but if this is not possible then I would support the British Gliding Association and indirectly the EASA to retain a fair use of airspace.

With regards
Daniel jamin

response *Noted*

The Agency is aware that the UK has introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

B. Draft Opinion and Decision - II. Draft Decision - AMC5 FCL.615

p. 97-126

comment

1388

comment by: *Phil GASCOIGNE*

AMC1 FCL.830 2.2 and AMC2 FCL.830

I disagree with the exclusion of use of a TMG for this one hour minimum instruction and skills test. Many UK pilots will not have reasonable access to a 2 seat powered sailplane and the cost of any access to this type will be disproportionately excessive. Use of a true sailplane for the purpose will not be sensible at many sites, requiring the addition of several short flights. This would especially be the case during winter months, when such training and testing would otherwise best be undertaken. Use of a TMG at a reasonable cost will be more available to many, though not all pilots, and would encourage valuable training.

Any risk that the SCFR privilege would be abused by TMG pilots is so low that it is no real concern but, if felt really necessary, could be written as an additional clause stating the exclusion of use for TMG.

In addition to the SCFR, there are many more pilots who would benefit greatly by the creation of a new restricted SCFR (RSCFR) to allow flight close to but not in cloud. This is a safety consideration, especially in some controlled airspace, where the additional volume of airspace opened up to sailplanes would provide a separation from much other traffic and the additional height available would allow best use of conditions to expedite airspace crossing and minimise risk of

	outlanding.
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (use of TMG/restricted cloud flying rating) were also identified by BGA.</p>

B. Draft Opinion and Decision - II. Draft Decision - AMC6 FCL.615

p. 127-174

comment	13	comment by: <i>P. Holy</i>
response	<p><i>Noted</i></p> <p>No comment provided.</p>	

comment	14	comment by: <i>P. Holy</i>
response	<p><i>Noted</i></p> <p>No comment provided.</p>	

comment	15	comment by: <i>P. Holy</i>
response	<p><i>Noted</i></p> <p>No comment provided.</p>	

comment	474	comment by: <i>Eisten Nilsson</i>
response	<p>I suggest that many of the LO related to NDB and ADF are deleted, as the NDB/ADF system will be out within a few years.</p> <p><i>Not accepted</i></p> <p>Thank you for providing your comment.</p> <p>When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.</p> <p>The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.</p>	

You proposed to delete more LOs dealing with the 'old' NDB/ADF system since you indicate that these non-precision approaches and the radio navigation aids will not be used any more in only a few years. The Agency supports this view but at this stage the systems are still in place. It was therefore decided to keep the remaining questions on NDB/ADF-related issues but to monitor closely the development. As the LOs will be published as AMC, there is always the option to correct the Los, if needed.

It should be mentioned that an additional task (FCL.002) was initiated to perform a general review of the LOs for the CPL/ATPL and the IR. Your comments will be forwarded to this group.

comment

475

comment by: *Eisten Nilsson*

I suggest that a lot of the LO's related to VOR/DVOR are deleted as they are more related to radio tech requirements, than to pilots need. Set focus on what the pilot need to know during practical flying.

response

Not accepted

Thank you for providing this additional comment on the LOs dealing with NDB/ADF issues. As you addressed the same issue in comment No 474, please check the response provided to this comment.

comment

476

comment by: *Eisten Nilsson*

I suggest that LO for weather radar are included only for pilots who want to fly HP airplanes.

response

Not accepted

Thank you for providing your comment.

When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

You proposed to delete more LOs dealing with the airborne weather radar and to also move them to the HPA syllabus. This issue was discussed with the experts during the preparation phase of the NPA and, based on the fact that some General Aviation aircraft are equipped with these systems, these LOs should stay in the syllabus for the new IR. Based on this, the Agency will keep them.

comment

1190

comment by: *General Aviation Manufacturers Association / Hennig*

Per GAMA comment 1171, does EASA see safety benefits to the pilot that is

	<p>flying with an EIR in knowing the information in 062 01 01 03 about Frequency bands, sidebands, single band sideband and having the ability to "List the bands of the frequency spectrum for electromagnetic waves" such as VLF, LF...? If EASA elects to retain this requirement, GAMA would encourage the agency to identify the practical safety benefit (real-world operations for a general aviation pilot) and the learning objective from this information.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your comment.</p> <p>However, the Agency would like to clarify that the 4 LOs under the number 062 01 01 03 dealing with frequency bands, sidebands and single sideband are already excluded from the theory for the EIR and the competency-based IR.</p> <p>The Agency appreciates the supportive comment and would like to highlight that it is not intended to change the proposed syllabus in this regard.</p>
comment	<p><i>1191</i> comment by: <i>General Aviation Manufacturers Association / Hennig</i></p> <p>In follow-up to GAMA comment 1171, GAMA requests that EASA identify and discuss the learning objective achieved from the information in 062 01 02 03 with respect to 'Types of Antennas' results in a safer general aviation pilot when operating in the real-world environment. How does the ability to describe a "loop antenna", parabolic antenna used in weather radars", "slotted planar array used in modern weather radars" and a "Helical antenna used in GPS transmitters" make a PPL with an EIR a safer pilot or prevent common safety issues or accidents such as CFIT or LOC?</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your comment.</p> <p>However, the Agency would like to clarify again (as for the comment No 1190 above) that the LO on the types of antennas had already been excluded from the theory for the EIR and the competency-based IR before the publication of the NPA. Please check the NPA on page 130 to verify that there is no mark for this LO in the right column for the competency-based IR.</p> <p>The Agency appreciates in general the supportive comment on the substance and would like to highlight that it is not intended to change the proposed syllabus in this regard.</p>
comment	<p><i>1192</i> comment by: <i>General Aviation Manufacturers Association / Hennig</i></p> <p>Following up on GAMA comment 1171, GAMA requests that EASA clarify the safety benefit from a PPL with an EIR to achieve Learning Objective (LO) 062 03 01 00 and have the ability to "Calculate the maximum theoretical unambiguous range if the [pulse repetition frequency] is given using the formula: $\text{range in km} = 300,000 / \text{PRF} \times 2$" on a pre-flight or real-time basis. Similarly, "[c]alculate the PRF if the maximum theoretical unambiguous range of the radar is given using the formula $\text{PRF} = 300,000 / \text{range (km)} \times 2$."</p> <p>In short, is the intent to teach the PPL with and EIR the science of radar or how to operate safely using the EIR privileges?</p>
response	<p><i>Noted</i></p>

Thank you for providing your comment.

When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

You proposed with this comment (and several others) to delete more LOs. In this case, the 8 LOs for subject matter 062 03 01 00 (pulse techniques) were checked by the experts and only 3 of them kept as they were seen as necessary elements to understand the subject in general. The given example referring to the formula is included in one of the LOs which have already been deleted from the syllabus. Therefore, the Agency believes that you misunderstood the proposal. Please check the resulting text (or the NPA on page 144/145) to review it.

comment

1195

comment by: *General Aviation Manufacturers Association / Hennig*

With respect to 062 06 01 00, GAMA notes that the LO is identified as "State that there are two main Global Navigation Satellite Systems (GNSS) currently in existence with a third which is planned to be fully operational by 2011. They are:

- USA NAVSTAR GPS (NAVigation System with Timing And Ranging Global Positioning System
- Russian GLONASS (GLObal NAVigation Satellite System)
- European GALILEO"

Assuming Galileo is the third GNSS, it is not true that Galileo is planned to be fully operational by 2011. In fact, per a 4 Nov 2011 European Space Agency (ESA) article at

http://www.esa.int/SPECIALS/Galileo_IOV/SEMT5FLUBUG_0.html: Europe's first two Galileo satellites have reached their final operating orbits, opening the way for activating and testing their navigation payloads. As EASA is aware, two satellites are not enough for an operational constellation. Per the ESA Galileo fact sheet at http://download.esa.int/docs/Galileo_IOV_Launch/Galileo_factsheet_20111003.pdf (page 2):

2. The Full Operational Capability (FOC) phase consists of the deployment of the remaining ground and space infrastructure, including an intermediate initial operational capability phase with 18 satellites in operation (the four IOV satellites plus 14 others). By 2015, 18 satellites should be in place, followed by the rest in 2020. The full system will consist of 30 satellites, control centres in Europe and a network of sensor stations and uplink stations installed around the globe.

Based on this information, it would appear that Galileo will not be fully operational until at least 2020.

Additionally, and as a follow-up to GAMA comment 1171, GAMA requests that EASA review LO 062 06 01 00 in its entirety and determine the safety value of a pilot being able to describe GNSS to this level of detailed as opposed to how to safely use and operate in the European operating environment as an EIR (or IR) PPL.

As an example, with respect to the description of NAVSTAR GPS, while a complete description of the GPS would include the Precise Positioning Service (PPS) at L2, it is unclear what practical use this has to a pilot since only the Standard Positioning Service (SPS) at L1 is used by TSO-C129 or TSO-C146 equipment. Additionally, if a complete description is deemed necessary, then the description also should include the L5 frequency, which is a civilian frequency, and GPS satellites are now being placed into orbit with the capabilities to broadcast L5. Aviation is particularly interested in the L5 frequency to allow the avionics to compute the ionospheric corrections without the need for a separate SBAS, like WAAS or EGNOS.

Similarly, for the other constellations:

- Page 168-170 (Description of GLONASS):
 - While a description of GLONASS does acknowledge the existence of this satellite service, it is unclear why most pilots should need to know about it since there are no avionics equipment standards for use of GLONASS.
- Page 168-170 (Description of Galileo):
 - While a description of Galileo will be useful at the point there are actually avionics that are able to use its signals, it is unclear why most pilots should need to know about it at this time since there are only two satellites currently in orbit, there are no avionics equipment standards, and full operation is not expected until 2020.
 - The last LO on page 170 includes the phrase "GPS, EGNOS and GALILEO are compatible". This is the first mention of "EGNOS" but the discussion of SBAS, including EGNOS, doesn't begin until page 171 and that discussion doesn't mention EGNOS until page 173.
- Page 172-174 (Description of SBAS):
 - The description includes mention of GAGAN in India (page 173), it is unclear why most pilots should need to know about it at this time since GAGAN's timeframe for coming on-line can't even be found on the internet

These examples go to the core of the issue of many Theoretical Knowledge (TK) requirements identified by EASA in this proposal and lends itself to a comprehensive review of the 100 hour TK proposed training requirement with a view to reduce to relevant LOs as well as appropriate length (that is, less than 100 hours) for a PPL operating with EIR privileges per GAMA comment 1171.

response

Partially accepted

Thank you for providing your comment.

When reviewing the existing Learning Objectives (LOs), the Rulemaking Group tried to perform a thorough review by following 2 principles. LOs already covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs had been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

You proposed to delete or to amend more LOs dealing with the LOs under 062 06 01 00 and under 062 06 01 02. The Agency agrees in general that a general review of the instruction items for the subject GNSS is needed. However, as the syllabus and the LOS are based on the former JAR material and as such a review needs more technical input and discussion with GNSS experts, it was decided to keep the remaining LOs for the general syllabus unchanged but to delete a few which seem to be too detailed or not relevant. Furthermore, the Agency decided to monitor closely the development in this regard. As the LOs will be published as AMC, there is always the option to correct the Los, if needed.

It should be mentioned that an additional task (FCL.002) is actually initiated to perform a general review of the LOs for the CPL/ATPL and the IR. Your comments will be forwarded to this group.

Regarding your actual proposal the items were given to the Review Group and it was finally decided:

- to keep the 2 remaining LOs but ask FCL.002 to update the text of this LO and take out the 2011 reference;
- to review at a later stage the questions developed for this Learning Objective and check if the level of knowledge is equivalent to the knowledge really needed for the EIR/IR operations;
- regarding your comment on the NAVSTAR GPS, to keep the 4 general LOs dealing with it;
- to keep the decision to delete all the LOs dealing with GLONASS and GALILEO as already proposed in the NPA;
- regarding your comment on the last LO on page 170, to keep the decision not to include this as already proposed in the NPA (please check the marks in the right column);
- to keep the LO on EGNOS, WAAS, MSAS and GAGAS as this is only a general statement not requiring further knowledge about the systems and to review the related questions in the data bank to ensure that only relevant issues are examined.

Regarding the last item, the Agency has already indicated in other responses the issue of the total amount of theoretical knowledge that was further discussed during the review. Based on the comments and a detailed discussion with the Review Group members, the Agency decided to further lower the total amount of TK instruction to 80 hours.

B. Draft Opinion and Decision - II. Draft Decision - AMC7 FCL.615

p. 175-179

comment 1002

comment by: *Mike Lindsay*

As a glider pilot I broadly support the the initiative to regularise cloud flying by

the creation of a Sailplane Cloud Flying Rating.

However I foresee severe difficulties in its implementation. There are not many, if any instructors qualified to give the necessary training.

response *Noted*

Thank you for providing this comment.

Based on the input received from experts in the drafting phase, the Agency does not share the view expressed in your comment and cannot identify a problem in the future regarding the sufficient number of sailplane instructors holding a cloud flying rating and being allowed to provide this training. There is no specific training foreseen for an FI(S) holding a cloud flying rating before being allowed to provide this training. FCL.905.FI only requires a demonstration of skills. The Agency therefore believes that with the introduction of the new system there will be a sufficient number of FI(S) with the privilege to provide training towards the SCFR.

B. Draft Opinion and Decision - II. Draft Decision

p. 180-196

comment *10*

comment by: *P. Holy*

The ban on flying departure or arrival procedures (which presumably means SIDs and STARs) is a big problem because many of them terminate (join onto the enroute section of the flight) many miles away from the airport.

Forcing IFR enroute traffic to cancel IFR at e.g. the first waypoint of a STAR is going to create problems for ATC, which normally expects the traffic to continue to the approach. They are not going to like VFR traffic there either, doing "its own thing", perhaps requesting a descent below controlled airspace and conflicting with traffic flying the arrival route at a lower level. The result would be that the VFR traffic will end up being requested to fly the STAR routing anyway, potentially being faced with entry into IMC (which is illegal once you have cancelled IFR).

Another thing is that when the EIR is used as intended, the pilot will be required to check the destination weather meets the criteria. But with the ban on flying a STAR, he now needs to check that the weather at his enroute terminating waypoint is legal VFR also, at the altitude filed for the route. So e.g. he needs to check he will be legally VFR at FL150, 50nm before the destination. There is no practical way to do that, given today's weather services.

A STAR is a simple extension of the enroute segment and banning it does not have any logic.

Same with banning SIDs, which are mostly perfectly simple things to fly. If one cannot fly a SID, one will be unable to depart from many controlled airports unless the conditions are practically CAVOK.

response *Not accepted*

Thank you for providing this comment. The Agency would like to clarify that using SIDs and STARs are merely methods used when these flight phases are

conducted under IFR in controlled airspace. It is equally acceptable for departure, arrivals and approaches to be flown in VFR. Many aerodromes throughout Europe are not IFR capable. There are also many IFR aerodromes where there is no practical access for light aircraft. Therefore, a significant portion of General Aviation IFR flights at present transit from IFR to VFR in order to arrive at VFR aerodromes. As a result, the Agency has decided not to include SID and STAR training and checking to EIR requirements. The EIR privileges and requirements, needed to be kept at minimum in order to have an easily accessible rating as a stepping stone to IFR for VFR pilots.

comment

17

comment by: *P. Holy*

The ban on flying departures (SIDs), taken together with the typical Eurocontrol airway MEAs (FL070 min, FL090/FL100 more usually) means a departure requires VFR conditions all the way from the runway to the first waypoint of the filed route, which means a departure is impossible unless the conditions are totally blue-sky, all the way along that route segment.

I think the ban on arrivals and departures is a drafting error.

response

Not accepted

Thank you for providing this comment. Please refer to comment 10, as the response also covers the issue you raised.

comment

77

comment by: *PPL/IR Europe*

In general we have no comments on this section other than to support the NPA as drafted. In particular, we think AMC1 FCL.825 and GM1 FCL.825 are well worded.

We fully agree with the wording of AMC4 FCL.825(e)(f) except that we suggest that para J of Section 3 of the EIR test should be:

Simulated diversion and simulated emergency IFR approach to an alternate aerodrome

because we think it may be useful for both the initial test and subsequent revalidations to include a practice simulated emergency IFR approach

response

Not accepted

Thank you for providing this comment.

After receiving several comments on this issue, it was reviewed again. The Agency decided to include two IFR approaches to be demonstrated in the context of an emergency situation during training. As the conduct of an IFR approach will not be a privilege of the EIR, it was decided not to include it in the skills test and subsequent proficiency checks.

comment

84

comment by: *George Knight*

AMC1 FCL.830

"2.2. At least one hour must be flown in a sailplane or powered sailplane (excluding TMG). The remainder may be flown in a sailplane or powered sailplane (including TMG), or may be credited in the case of pilots who hold, or have held an IR or EIR."

This rule does not adequately cover the transition from national to EASA rules or the case of glider pilots with military instrument qualifications. For example holders of the UK IMC rating will have done a minimum of 15 hrs training plus a flight test but the proposed rule does not allow this to be credited. Military pilots may have instrument qualifications equivalent to the IR.

May I suggest that the wording be changed to the following:

"2.2. At least one hour must be flown in a sailplane or powered sailplane (excluding TMG). The remainder may be flown in a sailplane or powered sailplane (including TMG), or may be credited in the case of pilots who hold, or have, within the last five years, held an IR, ~~or~~EIR,UK IMC or European military instrument flying qualification."

response *Not accepted*

Thank you for providing this comment. The Agency would like to highlight that, in accordance with Part-FCL cover regulation Article 10, military experience may be credited to a Part-FCL licence or rating. This is the responsibility of the Member State in consultation with the Agency.

comment

86

comment by: *George Knight*

AMC1 FCL.830 SCFR
1. Theoretical Knowledge.

The flight instruction requirement is reduced for pilots who hold, or have held, an instrment flying qualification (2.2 on page 191), however the theoretical knowledge instruction is not.

May I suggest that the same be done for the theoretical knowledge instruction.

I propose:

1.2 The theoretical knowledge requirement may be credited in full in the case of pilots who hold or have, within the last 5 years, held an IR, EIR, UK IMC or European military instrument flying qualification.

response *Not accepted*

Thank you for providing this comment. The Agency would like to highlight that, in accordance with Part-FCL cover regulation Article 10, military experience may be credited to a Part-FCL licence or rating. This is the responsibility of the Member State in consultation with the Agency.

comment

104

comment by: *Irish Aviation Authority*

In relation to AMC1 FCL.825 -

It is not sufficiently clear what type of airspace that may be used here. For instance, arriving in busy Class C airspace, a pilot may be expected to accept 'vectors' under IFR in order to sequence in with arriving traffic. A refusal or a request to continue VFR could cause disruption to controllers and loss of traffic separation minima.

Also, can the pilot enter or transit Class A airspace (IFR only allowed).

Generally, it is highly undesirable to consider a situation where a pilot arriving in IMC conditions at an airport is required to declare an emergency (MAYDAY) in a IFR-capable aircraft due to his "EIR limitations".

Consider - how would the pilot declare the nature of the emergency (MAYDAY MAYDAY - Cessna XXXX requires an IFR approach - Be aware Pilot not qualified) and what reaction would the pilot expect from ATC ?

response *Noted*

Thank you for providing this comment. The Agency would like to clarify that the holder of an EIR, flying under IFR may enter any airspace normally accessible for IFR flights. Furthermore, the EIR(A) holder will have filed a flight plan indicating Y or Z at item 8 and a transition point specified in 15 indicating to the ATC the intention to transition to VFR. In this case, the ATC may reject the flight plan if their airspace is too busy. Finally, in the unlikely event of an emergency, the ATC should treat this in the same way as other emergencies, such as pilot incapacitation. The Agency does foresee that ATC units need to be made aware of the existence of the EIR and its privileges.

comment *105*

comment by: *Irish Aviation Authority*

In relation to AMC FCL 825(c) En-Route Instrument Rating Flight Instruction - transition from instrument to visual conditions"

As the EIR pilot will not be permitted at any time to accept an IFR clearance to fly a departure, arrival or approach procedure - which is the normally established method of transitioning to and from IMC, it is highly likely that other untested methods of transition to and from instrument flight en-route will be attempted which will not comply with the normal safety parameters of officially designed IFR en-route procedures (e.g. GPS descents at pilot discretion below minimum safe altitude in order to try to make visual contact with the surface).

In the above connection, it should be borne in mind that the navigational assistance available to pilots , attempting to regain VMC from en-route IMC, varies widely across the EU. For instance, in the UK there is a Radar Information service, which is not available in other EU States.

response *Noted*

Thank you for providing this comment. The Agency would like to highlight, that it is possible and common to transit to and from IMC also during the en-route phase of the flight (Y and Z flight plans). Furthermore, the navigational assistance of 'Radar Information' is of no practical value in a descent to establish VMC, because the minimum altitude at which radar coverage is available is well above 1 000'.

comment *106*

comment by: *Irish Aviation Authority*

In relation to GM1 FCL.825 En-Route Instrument Rating 1 and 2 -

1) How is an 'Emergency IFR Approach' to be examined on a Skill Test and how is the approach defined - Precision or non-precision? What minima apply? Is there a Mayday call required ?

2) How are ATC controllers to be trained or informed about this type of 'Emergency Approach'?

response *Noted*

Thank you for providing this comment. The Agency and the Review Group discussed the issue. As a result, the Agency decided that the 'IFR approach in the context of an emergency' will not be examined during the skill test. The text has been amended to include 2 IFR approaches to be demonstrated by the instructor. It should be made clear to the students that they do not hold the privilege to conduct an IFR approach under normal circumstances. The reasoning is that if you train and check pilots to conduct an IFR approach, then it will not be an emergency. Pilots would be more tempted to regard it as acceptable. With regard to the comment part 2, please refer to comment 105 as the response covers the issue raised.

comment 126

comment by: *Alastair MacGregor*

It must be possible for the training and testing of the SCFR to be performed in a TMG. It is not practical to achieve the required time in a pure sailplane.

5 hours is excessive for many pilots.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 138

comment by: *Peter GILL*

AMC1 FCL.830 Sailplane Cloud Flying Rating - Theoretical Knowledge Instruction is appropriate

response *Noted*

Thank you for providing feedback.

comment 143

comment by: *Andrew Reid*

Sailplane Cloud Flying Rating

I am a holder of a UK IMCR and an experienced glider pilot.

I strongly support the provision of a sailplane cloud flying rating if it is considered necessary in order for gliders to continue to fly in IMC in the UK. I note that the statistics do not suggest that the lack of a rating in the UK has

had any adverse effect on our accident rate with IMC related accidents forming a negligible proportion of the total. The ability of gliders to fly in IMC is essential to the sport of gliding, particularly in the UK where cloudbase is often low and visibility limited.

It would be desirable to have an additional restricted rating that permitted flight in IMC but clear of cloud for those pilots that wish to continue their current practice flying close to cloud but with visual references. For the full sailplane cloud flying rating, the current requirements seem reasonable other than the prescriptive 5 hours of practical training. Some pilots, including experienced cloud flying pilots and perhaps those holding a UK IMCR may need virtually no practical training before taking and passing the skills test. Others will undoubtedly need more than 5 hours. I would suggest that the requirement should be that the pilot can achieve the required level of competency rather than that they have achieved a specified number of hours under training.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 144

comment by: *Eugene Lambert*

As a relatively experienced glider pilot (500+ hours) I welcome the formalisation of a cloud flying (instrument) SCFR rating. However, give the practicalities of instrument training in gliders, I strongly object to a 5 hour minimum for the training. All glider training currently provided by the BGA is competency based. I see no reason to impose arbitrary and difficult to achieve hours limits, which are far more appropriate for power flying training. I therefore would propose the deletion of such hours minima in favour of a competency based approach using a suitably qualified examiner.

I would also like to see a Restricted SCFR rating being made available, as recommended by the BGA, for flight under IFR but clear of cloud. In the UK's weather conditions, and with our UK airspace categories, such a RSCFR is vital.

Eugene Lambert

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 146

comment by: *Roy Pentecost*

I agree with the theoretical knowledge required for a sailplane cloud flying rating and with the scope of the proficiency test.

However I believe that 5 hours of training is excessive. In the age of computer based flight simulators, and indeed very realistic glider simulators, 5 hours of actual flight instruction is excessive. I believe that my personal two seat training in cloud flying totalled no more than 30 minutes. 5 hours should be reduced to no more than 1-3 hours of actual flight training.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

In addition, as long as there is no certified 'Glider simulator' (FSTD) available, the training for sailplane licences and ratings has to be provided in a sailplane.

comment 147

comment by: *David Ashby*

Regarding AMC1 FCL.830 on page 190 of NPA 2011-16. I would like to offer my **total support** for this excellent proposal.

In the UK, the practice of cloud flying in gliders is a very useful addition to our flying skills, given the maritime climate and often lower cloud bases we have to soar in. It can mean the difference between safely continueing a flight to our chosen destination when the cloud bases are low (say 2000ft AGL) and the operating glide height is low. This leads to increased stress on the pilot with an increased risk and the potential danger of "landing out". Gaining height in cloud and increasing the margin between the glider and the ground, in my view, improves the safety of the flight. Obviously, such activities are well outside of controlled airspace.

I applaud the creation or a formal syllabus and training programme to boost our skills to a higher common standard. The rating will be a benefit to many glider pilots.

Thank you.
David Ashby
Yorkshire Gliding Club

response *Noted*

Thank you for providing this positive feedback.

comment 148

comment by: *Jonathan Coote*

The definitions for AMC1 & AMC2 of FCL.830 appear well-motivated but unnecessarily prescriptive. The definitions will require maintaining with time as experience is accrued, which is not wholly compatible with fixing them directly within this text. The definitions might be maintained better if defined outside this document, and perhaps more appropriately, by individual national agencies e.g. BGA.

response *Noted*

Thank you for providing this comment.

comment	<p data-bbox="359 237 414 280">157</p> <p data-bbox="1037 237 1447 280">comment by: <i>Steve BARBER</i></p> <p data-bbox="359 302 1447 436">The theoretical knowledge topics stipulated at subpart I para 9 (1.1-1.6) seem reasonable and necessary; the flying skill instruction at 2.1 is also reasonable and necessary. Similarly the skill and proficiency checks in para 10 are reasonable and necessary.</p> <p data-bbox="359 459 1447 694">However, the stipulation at para 9 (2.2) that there must be 5 hrs of flight instruction is excessive. Many pilots will be able to reach the standard required in far less than 5 hours. Once the standard is reached, it is an unnecessary expense, a burden on the student and instructor (most gliding instructors are unpaid volunteers) and waste of recourse (eg airframe time) to complete several hours flying with no specific benefit. Para 2.2 serves no useful purpose and should be deleted.</p> <p data-bbox="359 716 1447 884">Few training gliders are equipped with engines, and meteorological conditions suitable for soaring training are not frequent. It is necessary that training can be carried out when soaring is not possible, and TMGs are the ideal tool. Therefore training in TMGs must be permitted, even if the resulting privileges are not applicable to pilots-in-command of TMGs.</p> <p data-bbox="359 907 1447 1041">Whilst creating the regulation, future possibilities should not be precluded. Training in simulators is generally accepted as highly beneficial. Therefore there should be a clause permitting it (the tests must be in real flight though).</p>
response	<p data-bbox="359 1052 598 1097"><i>Partially accepted</i></p> <p data-bbox="359 1120 885 1164">Thank you for providing this comment.</p> <p data-bbox="359 1187 1447 1288">Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training/use of TMG) was also identified by BGA.</p> <p data-bbox="359 1310 1447 1388">In addition, as long as there is no certified 'Glider simulator' (FSTD) available, the training for sailplane licences and ratings has to be provided in a sailplane.</p>
comment	<p data-bbox="359 1456 414 1500">183</p> <p data-bbox="526 1433 1447 1523">comment by: <i>Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)</i></p> <p data-bbox="359 1545 901 1579">Section: AMC 1 FCL.720.A (B) (2) (i) 3.</p> <p data-bbox="359 1579 574 1612">Page: 182-183</p> <p data-bbox="359 1612 782 1646">Relevant Text: Course syllabus</p> <p data-bbox="359 1680 1447 1747">Comment: The Learning Objectives numbers does not correspond to the current LO (or the proposed) for the VFR operation section.</p> <p data-bbox="359 1780 1029 1814">Proposal: Refer to the correct version of the LO.</p>
response	<p data-bbox="359 1825 438 1870"><i>Noted</i></p> <p data-bbox="359 1892 901 1937">Thank you for providing your comment.</p> <p data-bbox="359 1960 1447 2027">The Agency left the VFR part of AMC1 FCL.720.A(b)(2)(i) unchanged and transferred it directly from the final published text of Annex I of the aircrew</p>

Regulation 1178/2011.

It is not part of this task to review and change the existing regulatory material already in force with no direct relevance to the proposed new qualifications to fly in IMC.

However, your comment will be forwarded to the Rulemaking Group FCL.002 currently performing a review of the published rules. This group will review your comment and address the issues if a text change is needed.

comment

184

comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Section: AMC 2 FCL.825(c)

Page: 186

Relevant Text: (11) at least one emergency IFR approach

Comment: What is an "emergency IFR approach"? Needs definition. If a normal approach is the intended meaning this should be clarified.

Proposal: Create definition for emergency IFR approach.

response

Noted

Thank you for providing this comment. After receiving several similar comments, the Agency reviewed the issue and decided to amend the text. The resulting text includes 2 IFR approaches, to be demonstrated by the instructor, in the context of an emergency situation. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test. The type of IFR approach is left to the discretion of the instructor and depends on the type of approaches available at the aerodrome used for training.

comment

185

comment by: *Swedish Transport Agency, Civil Aviation Department (Transportstyrelsen, Luftfartsavdelningen)*

Section: AMC 2 FCL.825(c)

Page: 186

Relevant Text: (11) at least one emergency IFR approach

Comment: If a normal IFR approach is the intended meaning this should be amended to include two approaches, one precision approach and one non-precision approach. To practice flying an ILS does not help you much if you in an emergency only have a VOR or NDB approach to fly.

Proposal: (11) At least one precision approach and one non-precision approach.

response

Partially accepted

Thank you for providing this comment. Please refer to comment 184 as it also deals with the issue you raised.

comment

200

comment by: *Chris LEWIS*

	<p>I am pleased to see that the SCFR is awarded on the basis of a skills test.</p> <p>However, given that this is the case, I doubt the necessity of the proposed requirement for a minimum of 5 hours of dual flight instruction - this may be too little for some pilots, or too much for others.</p> <p>The trainee should receive sufficient instruction for the instructor to be confident that the trainee will be successful in the skills test.</p> <p>In order to avoid excessive training costs, it is essential that SCFR <u>training</u> in a TMG is allowed, even if the use of the SCFR for any other form of TMG operation is prohibited.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>215 comment by: <i>Richard Abbott</i></p> <p>Theoretical Knowledge Instruction - these are all disciplines of safe flying when flying cross country that sailplane pilots already utilise.</p> <p>Flight Instruction - I think that any pilot who wants to cloud fly should have these exercises demonstrated and should also demonstrate competence in performing these exercises. In reality this happens now - pilots only think about cloud flying when they have reached a certain level of confidence in their abilities; with this comes a recognition that learning to cloud fly should be done with an experienced cloud flying pilot. Mandating this syllabus will involve mandating instructors to train pilots and simply will not happen - it is difficult enough to find instructors to fly with in normal conditions. Also, it will prove near impossible to train the instructors - cloud flying happens too occasionally to be successfully planned. Current self regulation works very well.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to clarify that training for cloud flying rating may be completed under simulated IMC conditions. In addition, existing instructors with cloud flying experience will be able to convert into Part-FCL with cloud flying instructor rating. The Agency therefore believes that there will be sufficient instructors available to train for cloud flying rating.</p>
comment	<p>217 comment by: <i>Richard Abbott</i></p> <p>As per my comment above, in reality it will prove impossible to plan a skills test in cloud. The current system works very effectively - why change it?</p>
response	<p><i>Noted.</i></p> <p>The Agency acknowledges your comment.</p> <p>The reasoning for the common rules is the harmonisation of licences and</p>

ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment 226 comment by: *Stephen HALEY*

Gliders rarely cruise in IMC normally only climb within a single cloud cell so not sure how relevant DR is to the glider licence.
15deg angle of bank is way to small for the glider test. Normal bank angles for a glider are 25-45 deg.

response *Not accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency and the Review Group discussed the issue again. As a result, the Agency would like to clarify that a climb and then glide, as described here, is exactly how gliders do progress en-route. Also DR navigation is essential to cross-check GPS information. With regard to your comments on the angle of bank, the Agency, supported by experts of the UK's British Gliding Association (BGA), have found the quoted limits to be practical.

comment 230 comment by: *Stephen Lynn*

I welcome the introduction of the SCFR.

The requirement for 5 hours dual instruction is excessive. 1 hour would suffice in most cases.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issue you raised (5 hours training) was also identified by BGA.

comment 243 comment by: *Ed Johnston*

My Background is as follows:

I am a sporting pilot having flown Sailplanes competitively for over 30 years. I am also a member of the British National Team and have extensive experience both flying blind in cloud and in technical IMC conditions but clear of cloud.

Summary

In summary the IMC rules are designed primarily for powered aircraft that either do not need to fly near cloud, or intend to go into fully blind flying, thus act under IMC for some significant distance from cloud.

Neither of these apply to sailplane flight which needs to operate near cloud, their source of lift and continued flight. This is often done without any intention of flying into cloud and can be much more safely accomplished without reference to blind flying instruments. In fact, referring to instruments only during this phase of flying could be murderously dangerous.

Conclusion

Flight training for sailplanes must focus on visual reference flight near cloud and can be best achieved by the BGA who understand the real dangers associated with this style of flight.

Imposing rules on sailplanes designed for light aircraft will make both sailplane and light aircraft flying more dangerous not less so. Alternatively flight safety will be enhanced by allowing the BGA to provide training for flight near cloud and (as a distinct exercise) flight inside cloud without reference to the horizon.

Specific Comments:

1. The nature of IMC flight in sailplanes has not been fully appreciated by proposals and as such will lead to inappropriate rules and restrictions.
2. The actual risk being mitigated is perceived and not real and thus is targeted at in the wrong way
3. The objectives of these proposals are likely to have a contrary affect on flight safety for glider pilots.
4. To comply with the training requirements is nearly impossible to accomplish in any meaningful way

To Explain:

Nature of IMC for Sailplanes

Over around 3000 flight hours I have in sailplanes, I have experienced true blind flying without reference to natural horizon for less than 10 flying hours. Conversely, anything up to 20% of these hours is spent close to cloud but below it, technically IMC but clear of cloud. This is because persistently low cloud bases in the UK and that near cloud the lift gets stronger and more predictable.

Most often a pilot will climb to near cloud base, often with other gliders within 2-300m, then leave the thermal always retaining a visual horizon.

If entering cloud, a pilot will find lift in VMC, then climb into IMC conditions and subsequently exit cloud in a straight line after a few minutes flying without reference to the horizon.

Conclusion

Any rules, training and awareness must focus on flying near cloud but not in it, with training provided for this mode of flight.

Actual rather than Perceived Risk

The implication of requiring formal ratings and rules excluding pilots from IMC is that there is a substantial danger of collision associated with Sailplane flight within IMC conditions.

In actual fact the chances of collision in IMC conditions are very small indeed as borne out by statistics which show the major risk being related to field landings, not mid-air collisions near, much less in cloud.

The main (but still small) risk of mid-air collision is near cloud not in it, where the vast majority of technical IMC flight is undertaken but still with a clear view of the horizon.

Conclusion

Ensure regulations do not increase the likelihood of field landings while also ensuring pilot awareness of flight near cloud (which is part of the existing BGA training regime).

Risks Associated with IMC

Moving many Sailplane Pilots out of IMC will increase pilot work load and field landings, increasing flight risk. Most accidents in sailplanes occur in relation to field landings.

While the risk of collision near or in cloud are not to be ignored, the far greater risk to sailplanes and their pilots is in field landings. The likelihood of a field landing accident is disproportionality increased when a pilot is excluded from the altitudes near the base of cloud as it is much more difficult to find lift from lower altitudes and more thermals must be found to complete the flight.

Conclusion

Excluding pilots from altitudes deemed within IMC but clear of cloud greatly increases risk to Sailplane pilots while reducing risk of collision by a tiny

amount.

Training Compliance

It is relatively simple to train power pilots in IMC under a hood for extended periods of time. This is nearly impossible in gliders which have to first find lift, then turn tightly in lift to gain height, manoeuvres that are not representative of real soaring practice and exceptionally difficult to train for.

Training in motor gliders is irrelevant as it does not provide representative of flight in gliders gaining height in cloud.

Conclusion

Be less prescriptive in training requirement. The BGA has the experience to design training for flight near cloud and an alternative and representative rating for pilots wish to fly in cloud.

This has worked very efficiently for many years and will be substantially more effective than prescriptive and inappropriate rules.

Overall Conclusions:

1. The proposed rules and ratings do not represent the actual flight regime in Sailplanes
2. If applied to the letter, training will be incredibly difficult to accomplish
3. Pilots with IMC ratings in gliders will not be trained for the most dangerous phase of flight, namely with reference to the horizon but near cloud.
4. Pilots that stay outside IMC will be taking greater risk of emergency landing in fields hence significantly increasing flight risk.
5. Flight safety will be enhanced if the BGA are given the authority to design and issue IMC ratings for flight close to cloud and blind flight with no horizon.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States. Please also check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raise have also been identified by it.

comment

249

comment by: *Roy Nuza*

I have been an active glider pilot for the past twenty-five years and flying in cloud for about twenty of these.

My initial training in cloud flying was carried out in a Touring Motor Glider (TMG) to a level considered acceptable by my Chief Flying Instructor. The training and acceptance exercises took less than two hours. Much of the cloud flying I (and many of my colleges) do in sailplanes consists of a descents through 8/8 cloud from a high altitude flights, normally on a straight course on a compass heading with GPS backup and basic cloud flying instruments.

In general I support the conditions set out for the Sailplane Cloud Flying Rating. However I consider the training requirement as disproportionate to the level of skill and knowledge required for safe cloud flying in gliders.

I also consider that where possible, it would benefit efficiency and reduce costs if all the training could be done in a TMG.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment	250	comment by: <i>Michael Cartney</i>
	Sailplane Cloud Flying Rating	
	Skill Test and Proficiency Check	
	This will form an excellent training for safe flying in cloud particularly in an emergency situation or where a descent has to be made through cloud.	
response	<i>Noted</i>	
	Thank you for providing positive feedback.	

comment	295	comment by: <i>Andrew Sampson</i>
	p 190 SCFR Theoretical Knowledge	
	Re 1.3 Instrumentation - the details will need to recognise the particular nature of glider instrumentation, which in some respects is different to those in powered aircraft.	
	p 190 - 2 Flight Instruction	
	It is important to understand the nature of glider flight in cloud. The most common scenario is a glider circling tightly in thermal lift, and continuing the climb into cloud, either exiting the cloud at the top, or, turning onto a heading to exit the cloud laterally in the desired direction. Generally gliders do not enter cloud as part of en-route navigation and DR is less relevant.	
	p 191 Theoretical Knowledge Instruction, cl 2. 2.2	
	It may be difficult to achieve the minimum 1 hour cloud flying instruction in a sailplane or powered sailplane (excluding TMG) due to availability of such (dual) aircraft (dual powered sailplanes are relatively rare and very expensive).	
response	<i>Noted</i>	
	Thank you for providing this comment.	
	After receiving several similar comments, the Agency and the Review Group discussed the issues again. As a result, the Agency would like to clarify that a climb and then glide, as described here, is exactly how gliders do progress en-route. Also DR navigation is essential to cross-check GPS information.	
	With regard to your comments on achieving the minimum 1 hour of cloud flying, the Agency strongly believes that there will be sufficient sailplanes or powered sailplanes (except TMG) available to provide cloud flying training at a reasonable cost.	
	Finally, the Agency would like to highlight that Part-NCO contains the	

instrumentation requirements for cloud flying sailplanes.

comment

314

comment by: *Thomas GARDNER*

My fundamental principle is to **strongly support any measure that increases safety**. However, I **oppose "safety theatre measures"**, that is measures that at first glance appear to increase safety but which on closer inspection do not measurably achieve that objective -- such "comfortable warm fuzzy feelings" have no place in aviation.

As a relatively inexperienced sailplane pilot (approx 80 hours), **I support the formalisation of a cloud flying rating for sailplanes (SFCR)**.

Many, probably most, sailplane pilots do not want to fly *inside* cloud, but most want and need to be able to fly close to cloud while flying out of gliding range of an airfield, in particular to *fly up to cloudbase in uncontrolled airspace*. Thus the BGA's proposed Restricted SFCR would increase safety in the UK's meteorological conditions, for the reasons discussed in NPA2011-16. **To increase safety, I propose adoption of the BGA's RSFCR rating**, as per the BGA recommendation.

I **strongly support ratings that are based on competency**, since that will clearly increase safety. I **oppose a specified training time** since that is clearly merely "safety theatre".

For practical reasons, it is necessary that the SFCR/RSFCR training be done in motor gliders (TMGs). It would be acceptable if pilots TMGs are not allowed to exercise the privileges of SFCR.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) were also identified by BGA.

comment

319

comment by: *Mike Armstrong*

Page 190 Sailplane Cloud Flying Rating As an experienced cloud flying sailplane pilot, I commend the Agency for preparing a proportionate syllabus, proficiency check and skill test.

response

Noted

Thank you for providing positive feedback.

comment

334

comment by: *Julian RICHARDSON*

The following response applies to two paragraphs on page 191 of the NPA, which are quoted below in **bold** for clarity:

9) Subpart I - Additional Ratings
AMC1 FCL.830 Sailplane Cloud Flying Rating

Theoretical knowledge instruction and flight instruction
2.2 (Flight Instruction)

'At least one hour must be flown in a sailplane or powered sailplane (excluding TMG).'

AND

10) Subpart I - Additional Ratings

AMC2 FCL.830 Sailplane Cloud Flying Rating

SKILL TEST AND PROFICIENCY CHECK

First paragraph **'The skill testshould be conducted in either a sailplane or powered sailplane...'**

Response to both above paragraphs:

The use of TMGs is absolutely vital for training for the Sailplane Cloud Flying Rating (SCFR) and TMGs are currently widely used for successful sailplane cloud flying training & assessment in the UK. To prevent or limit the use of TMGs for SCFR training would therefore considerably reduce training effectiveness.

Further, it would be virtually impossible to meet the requirement for 5 hours of dual flight instruction for the SCFR in a reasonable time and at reasonable cost without the use of TMGs, since the duration of typical training flights in sailplanes are measured in minutes.

Considerations: I understand that a possible reason for excluding or limiting the use of TMGs may be prevent the SCFR being used to circumvent the requirement for an instrument rating for IFR flight in a TMG (though I understand TMGs are normally restricted to VFR-only by their Flight Manuals). Fortunately there is a simple solution, which is to mandate that the privileges of the SCFR may not be exercised in a TMG.

In summary, please do not exclude the use of TMGs for any aspect of the training and assessment for the SCFR.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) are also identified by BGA.

comment 336

comment by: *Dick Dixon*

AMC1 FCL.830 2. Flight Instruction.

In my opinion it would not be practical to carry out the proposed training in a sailplane because of the impracticality of remainig airborne for sufficient time to attend to the necessary exercises. I therefore recommend that the restriction regarding trainig in TMGs be removed. However, as a holder of an NPPL TMG, I do agree that the proposed Instrument Ratings should not apply to TMGs.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issue you raised (use of TMG) was also identified by BGA.

comment

338

comment by: *Martin Day*

The majority of cross country gliding in the UK is carried out between 2,000 and 5,000 feet AMSL mostly within a few hundred feet below cloud base and so usually in IMC. Gaining the proposed additional rating to continue this seems excessive because almost all the training will not be used as the vast majority of glider pilots never fly in cloud. A restricted rating for flight within 1,000 feet of cloud would seem a practical way forward.

Cloud flying is carried out by relatively few glider pilots. Gaining an additional rating to continue this seems appropriate and I welcome it as it will make sharing clouds with other glider pilots safer.

The theoretical training proposed looks appropriate for the cloud flying rating and any restricted rating for flying within 1,000 feet of cloud.

The practical training looks inappropriate for the cloud flying rating because some pilots are likely to require more than five hours training whereas others will require less or even none. Indeed, many current cloud flying glider pilots will have much more experience than the instructors carrying out the training / testing.

I conclude that:

1 - I support the new cloud flying rating for pilots intending to fly in cloud.

2 - I strongly support the call for a restricted rating for pilots flying within 1,000 feet of cloud but not in cloud.

3 - I support the proposed theoretical training for both ratings.

4 - Practical training should be to a standard rather than for a specified number of hours.

MARTIN DAY
CFI - Norfolk Gliding Club, England
07803 123997

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issues you raised (5 hours training / restricted cloud flying rating) were also identified by BGA.

comment

342

comment by: *Edmund FOGGIN*

As a reasonably experienced glider pilot and full category BGA instructor with

750 hours I welcome the formalisation of cloud flying rating (SCFR). I do not welcome the arbitrary 5 hour training requirement as it takes no account of a student's aptitude or past experience. It would no doubt; prove difficult to manage while training in gliders when flight times can be very short. All currently approved BGA training is competency based and this training should follow suit. I therefore propose that the hours minima be deleted from the training requirement.

The British Gliding Association (BGA) recommends the introduction of a restricted cloud flying rating (RSCFR) which permits flying under IFR but clear of cloud. I support this recommendation as gliding in the UK will be severely curtailed without it. For example given the low cloud bases we often experience, cross country flights will be required to be flown at lower altitudes thereby eroding the pilot's landing options in the event of deteriorating weather conditions. This can only have adverse safety implications.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 343

comment by: *Stuart NORTH*

Sailplane Cloud Flying Rating
FLIGHT INSTRUCTION

The use of TMG for training for the Sailplane Cloud Flying Rating is absolutely essential; it would be highly impractical to attempt to deliver instrument flying training solely using a sailplane. This is because training flights would become unavoidably short once the objective of delivering instrument training overrides the objective of soaring.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issue you raised (use of TMG) was also identified by BGA.

comment 344

comment by: *MarkDAVIS*

Theoretical knowledge & flight instruction:

Sailplane flight by nature does not warrant skills at flying a fixed heading and is not practiced as part of the VFR skills test. Therefore requiring skill at turning onto a heading or holding a heading is contrary to normal sailplane skills. Similarly as most flight in cloud is only temporary and the exit position is normally within 1NM of the entry point, the ability to be able to give position fixes using GPS and DR is superfluous to requirement.

The requirement to hold angle of bank and heading within the stated limits is

over arduous as construction of sailplane instruments does not give such precise reading as standard power instruments.

response *Not accepted*

Thank you for providing this comment. After receiving several similar comments, the Agency and the Review Group discussed the issue again. As a result, the Agency would like to highlight that the quoted limits are considered to be practical. In addition, the Agency believes that there are many volumes of European airspace where position fixing is essential. Within gliding, GPS equipment is both ubiquitous and cheap. Also DR navigation is essential to cross-check GPS information. Requiring pilots to be trained in its use is therefore not an onerous requirement.

comment 358

comment by: *Alec STEVENSON*

For AMC1 FCL.830 2.2 I recommend that the UK IMC rating be included in the list of ratings which justify credit towards the flight instruction. UK pilots who have held an IMC rating on their PPL have been adequately trained to handle IMC conditions safely and there seems to be no reason to exclude it.

Given the proposal to allow credit based on previous experience, it follows that the imposition of a minimum number of hours of instruction is unnecessary. Some pilots will require several hours of training while others may be able to demonstrate adequate skills straight away.

I support the general principle of compliance for the SCFR by means of a theoretical knowledge test and a skills test, but instruction should be on an "as required" basis.

response *Partially accepted*

Thank you for providing this comment. The Agency would like to clarify that only a certain amount of prior experience as PIC instrument flight time will be credited to the EIR and competency-based IR(A) course requirements. Further credit may be given based on the UK IMC rating during the conversion process when converting the existing licence or rating into a Part-FCL licence or rating. This process is the responsibility of the UK CAA in consultation with the Agency. With regard to your comment on the SCFR, the Agency agrees that the theoretical knowledge training and the test should be based on the experience level of the student. However, all prescribed practical exercises must be trained and tested.

comment 361 ❖

comment by: *Colin Hamilton*

RESPONSE TO NPA 2011-16

I have been a sailplane pilot since 1976; a gliding instructor since 1983; I have all 3 FAI diamonds and a UK 750km diploma for cross-country soaring. I have recently been appointed a British Gliding Association Regional Examiner for Scotland. Additionally, I have a CAA Flight Instructors Rating for NPPL (SLMG).

I therefore have over 35 years experience as a participant and instructor and have a keen interest in the regulatory environment pertaining to both sailplane and light aircraft pilots.

It is important that any regulation is proportionate to the problem perceived to require regulation. The British Gliding Association as the Governing body of Gliding in the UK has successfully governed the sport for over 35 years and has managed the safety of UK gliding in a self regulated environment during this time. This is seen by all pilots as being proportionate. The safety record of UK gliding demonstrates that this arrangement has worked satisfactorily and there is therefore no need for further complex regulation.

In my time gliding, flight within and near to cloud has been an essential part of the sport. I find it quite worrying that proposals should exist, which would effectively prohibit *flight near cloud* unless pilots meet additional training and licensing requirements. There are significant additional hazards that would be introduced to gliding activity if pilots weren't allowed to fly near cloud. An Acceptable Means of Compliance with the absolute minimum amount of additional training or licensing should be brought forward within these proposals which will allow sailplane pilots to continue to fly near to cloud without requiring extensive additional training.

Gliding flight *within cloud* has been practiced in the UK for many years. Often competency in this has been gained in an informal manner but nevertheless competency has been demonstrated as evidenced by the very minimal incidence of accidents occurring in this flight environment. Perhaps some degree of formal training / testing needs to be introduced. This needs to be proportionate and should only be competency based and not have a minimum number of training hours associated with it.

Generally, I support, the main elements of the proposed Sailplane Cloud Flying, however I would offer the following detailed comments:-

1. SPL & LAPL(S)

The SCFR is a welcome proposal.

It essential that this privilege is available to both SPL and LAPL(S) holders.

2. Flight Training for the SCFR

This qualification should be competency based. If a specified skill test is in place, there should be no requirement to specify a minimum amount of dual flight instruction. It takes whatever it takes to reach the required level of competency.

3. Touring Motor Gliders

If the SCFR is to become a reality then there must be suitable aircraft in which to train pilots for it. The typical club training 2 seater sailplane would not be suitable as the number of times they could be taken to fly in cloud would be limited. TMGs however would be the ideal aircraft in which to train students for the SCFR.

4. Restricted SCFR

At earlier stages in the development of this NPA there had been proposals that, in addition to the SCFR, a Restricted SCFR be made available for flight under IFR but clear of cloud. For the reasons described in my initial comments above, I believe such provision to be essential in order not to introduce additional hazards into our sport. In this respect, I support the BGA's suggestion for a RSCFR.

Summary

	<p>1. I support the proposal for a SCFR for both LAPL(S) & SPL holders.</p> <p>2. I do not support the requirement for 5 hours dual training for the SCFR. A competency test along with theoretical study is all that is required.</p> <p>3. Training in TMGs is essential for the SCFR to be readily achievable for the majority of sailplane pilots new to the practice of cloud flying.</p> <p>4. A Restricted SCFR option is essential for flying near cloud in certain classes of airspace and should be included in the EASA proposals.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (SPL and LAPL/5 hours training/restricted cloud flying rating/use of TMG) were also identified by the BGA.</p>
comment	<p>368 comment by: <i>Philip James Warner</i></p> <p>Whilst I support the introduction of the SCFR in principle some of the requirements appear to be inappropriate for sailplanes.</p> <p>No all sailplanes are fitted with artificial horizon, so the requirement should be based on use of the turn and slip indicator.</p> <p>The requirement to achieve and maintain a heading is onerous in a sailplane environment.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to clarify that an artificial horizon is not necessarily required. The NPA gives the option to either use an artificial horizon or turn and slip instrument as appropriate.</p> <p>With regard to your comment on the heading requirement, the Agency believes that these techniques are needed and that the proposal at this stage is still supported.</p>
comment	<p>373 comment by: <i>peter HICKS</i></p> <p>FCL.830 SCFR 2 Skill Test Glider pilots don't usually fly on a heading, except during final glide. They fly on an approximate heading that makes best use of meteorological lift. This is often 40 degrees off course. A cloud escape manoeuvre will also be flown on an approximate heading.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency and the Review Group discussed the issue again. As a</p>

result, the Agency would like to clarify that the proposed skill test does not require the pilot to achieve this nominated heading instantly. Instead, the test allows normal practice; first, to recover to approximate straight flight, and then to refine the heading with small adjustments. This is achievable with all compass types. In addition, the Agency would like to emphasise that the combination of escape manoeuvre leading to a nominated heading is an important skill that must be demonstrated by a pilot under test.

comment 376 comment by: A Darby

Comment already made regarding the requirement to have 5 hours but if this is the case please consider cross crediting of time in any aircraft (with an instructor) regardless of an IR or EIR for example if a pilot has 5 hours of instrument time as part of a PPL licence or towards a complete or non completed UK IMC rating.

response *Noted*

Thank you for providing this comment.

After receiving several similar comments, the Agency and the Review Group discussed the issue and, as a result, decided to credit holders of an EIR or IR(A) to the requirements of a training course at an ATO. However, in any case, 1 hour of dual instruction in a sailplane or powered sailplane (except TMG) must be conducted at an ATO. In addition, to obtain the cloud flying rating, the applicant will be required to pass a skills test. Also, holders of an UK IMC rating may receive credit to the cloud flying rating. Any such credit would be established by the Member State, in consultation with the Agency, during the conversion process. This process converts an existing licence or rating into a Part-FCL licence or rating.

comment 377 comment by: A Darby

Glider turn and slip are often 9 degrees/second (rate 3) rather than 3 degrees/second (rate 1). The Angle of bank and turn rate should therefore be specified in degrees and degrees/second (or Rate as in Rate 1 turn) as one glider may have a rate 1 turn and slip and another a rate 3.

response *Not accepted*

Thank you for providing this comment. The Agency and the Review Group discussed the issue and would like to clarify that neither examiner, nor instructor, nor pilot have any display of rate of turn expressed as degrees/second. It would therefore be meaningless to quote test limits in these units. The test limits proposed have been found to be practical with different turn needles.

comment 387 comment by: Sahib BLEHER

On the issue of conversion of third country IR ratings to a European instrument rating, with regard to the need to "demonstrate the appropriate knowledge of Air Law, Meteorology, Flight Performance and Planning and Human Performance", may I suggest that this should only be necessary - preferably as part of the skills test - for pilots applying for conversion who have not previously used their third party licence to fly IFR in European airspace. For

instrument rated pilots applying for conversion who have previously used their rating to fly in European airspace in a third country registration aeroplane (e.g. flown IFR in European airspace on an FAA rating in an N-registered aircraft), logbook evidence of such flights having been conducted should be sufficient to meet the requirement to "demonstrate the appropriate knowledge".

response *Partially accepted*

Thank you for providing this comment.

The Agency and the Review Group discussed the issue after several similar comments from stakeholders. As a result, the FCL requirement for establishing an 'adequate level of theoretical knowledge' was amended to allow an applicant to demonstrate this to an examiner during the skills test. This requirement applies to Part-FCL PPL or CPL holders holding a third-country IR issued in accordance with ICAO standards and recommended practises.

comment 396

comment by: *John Weddell*

AMC1 FCL 830 Sailplane Cloud flying rating.

The level of theoretical knowledge required is practical and sensible and is what a experienced glider pilot should be fully conversant with.

A practical skills test that may be conducted by a CFI or designated senior instructor is a good idea. An arbitrary specified minimum is unnecessary. I held an instrument rating for 35 yrs as an airline pilot and practise limited panel instrument flying on a regular basis. However, there are pilots in our club who have never flown on instruments so will need far more than 5 hrs. The ability to pass the specified skills test is the point, the time taken to achieve proficiency is irrelevant.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 417

comment by: *UK CAA*

Page No: 186 and 189

Paragraph No: Page 186 Para (10), (11) - Page 189 (h), (j)

Comment: It is noted that the proposal for the EIR includes some training in instrument approaches to be used in an emergency and the UK CAA agrees with this. However, this only appears to be required for initial training and it is not clear that competency is ever tested. It should be made clear in the Skill Test/Proficiency Check - Page 189 - that an instrument approach is required at each revalidation / renewal.

Justification: It is appropriate that applicants for the EIR receive some instrument approach instruction but this skill must be refreshed/tested at each renewal/revalidation.

	<p>Proposed Text: Page 189. Include "Complete one emergency IFR approach"</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.</p>
comment	<p>441 comment by: <i>Warwick HORNE</i></p> <p>The restriction of the use of TMG's in the training and examination is an unnecessary obstical. These motor gliders would be vital in our training operations, due to their availablity and relative low operating cost. There would be no requirement to use them for any other sort of cloud flying.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issue you raised (use of TMG) was also identified by BGA.</p>
comment	<p>446 comment by: <i>Lasham gliding society</i></p> <p>AMC1 FCL.830 Sailplane Cloud Flying Rating Theoretical knowledge instruction and flight instruction</p> <p>Although I broadly agree with the need for some kind of theory paper for a sailplane cloud flying rating I feel that the suggested content of the theory requirements are somewhat excessive bearing in mind that virtually all sailplane cloud flying will be done in class G airspace and the pilots will not be receiving a procedural service</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency does not share your view on the theoretical training requirement. No minimum theoretical knowledge training time has been stipulated, as it will be up to the instructor to determine the level of instruction required depending on the applicant's previous experience and abilities.</p> <p>In addition, the Agency disagrees with your statement that 'virtually all sailplane cloud flying will be done in class G airspace'. This is not correct as it depends on the airspace management system in place at a Member State. Therefore, cloud flying may be allowed in several different airspace categories.</p>
comment	<p>447 comment by: <i>Lasham gliding society</i></p>

response	<p>AMC2 FCL.830 Sailplane Cloud Flying Rating SKILL TEST AND PROFICIENCY CHECK.</p> <p>It is important the we retain the right to train and test sailplane pilots in TMG's using a blind flying hood or goggles due to the limited number of suitable days that are available to us in the UK to do real cloud flying in a two seater sailplane</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issue you raised (use of TMG) was also identified by BGA.</p>
comment	<p>458 comment by: <i>Alison Mulder</i></p> <p>I support the Sailplane Cloud Flying Rating, the requirement for 5 hours dual flight instruction in some cases is a little excessive. The rating should exclude pilots exercising the priviledges of SCFR in TMGs although training in TMGs for the SCFR is necessary. The RSCFR option should be reconsidered by EASA.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) were also identified by BGA.</p>
comment	<p>508 comment by: <i>IAOPA(Europe)</i></p> <p><u>GM1 FCL.825 En-Route Instrument Rating</u></p> <p>IAOPA(EU) agrees that the EIR shall require all departures, arrival and approaches to be flown in accordance with VFR. The EIR holder must also be made well aware that a need to fly an 'Emergency IFR approach' must only be declared in exceptional conditions and that the use of the EIR may of consequence be restricted, other than in the en-route segment, to fair weather conditions only.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency has included 2 IFR approaches, in the context of an emergency situation, to be demonstrated during the training. An IFR approach will not be included in the skills test and the student will be made aware that the EIR does not grant him/her an IFR approach privilege.</p>
comment	<p>509 comment by: <i>IAOPA(Europe)</i></p> <p><u>AMC2 FCL.825(c) En-Route Instrument Rating</u></p>

response	<p><u>FLIGHT INSTRUCTION (a)(6)</u></p> <p>IAOPA(EU) does not consider that sub-paragraph (a)(6) is relevant for a rating whose privileges do not include flight in the instrument pattern. Hence we recommend that sub-paragraph (a)(6) is deleted.</p> <p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that the 'instrument flight pattern' exercise is part of basic instrument flight training. Therefore, the Agency believes that this is an essential element of the EIR practical training syllabus.</p>
comment	<p>510 comment by: IAOPA(Europe)</p> <p><u>AMC2 FCL.825(c) En-Route Instrument Rating</u> <u>FLIGHT INSTRUCTION (a)(14)</u></p> <p>IAOPA(EU) considers that sub-paragraph (a)(14) lacks objectivity. For example, 'controlled airspace with a high density of traffic' is a somewhat subjective requirement and may be difficult to achieve in practice. The general aim of this sub-paragraph will undoubtedly be recognised by training providers, but we do not consider that sub-paragraph (a)(14) is necessary and recommend that it should be deleted.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency believes that the proposed text is appropriate and will be kept as it is an important experience element for EIR students. An instructor/ATO should endeavour to subject them to this kind of environment where possible.</p>
comment	<p>511 comment by: IAOPA(Europe)</p> <p><u>AMC4 FCL.825(e)(f) En-Route Instrument Rating</u> <u>Skill Test / Proficiency Check Section 3 Item j</u></p> <p>IAOPA(EU) considers that Section 2 item (j) should be amended to read '<i>Simulated diversion and simulated emergency IFR approach to an alternate aerodrome</i>'. Although the privileges of the EIR are limited to en-route flight under IFR, the safe conduct of an 'Emergency IFR approach' is a perishable skill which requires periodic re-testing.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.</p>
comment	<p>532 comment by: P Williams</p>

	<p>Please see general comments also.</p> <p>AMC1 FCL.830 para 2.2 and AMC2 FCL.830 para 2: If "escape from cloud" implies some sort of emergency manouvre there is no obvious need for a sailplane pilot to be able to escape cloud on any particular heading. There is clearly no need for any particular skill level needed to fly near to cloud.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. After receiving several similar comments, the Agency and the Review Group discussed the issue again. As a result, the Agency would like to highlight that modern, complex airspace can require a pilot to escape from cloud on a nominated heading. When reading the requirements it is good to remember that the sailplane cloud flying rating does address requirements for glider flight both near cloud and also <u>within</u> cloud.</p>
comment	<p>535 comment by: <i>Sunay Shah</i></p> <p>It is my view that training in TM should be retained.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by it and as the issue you raised (use of TMG) was also identified by BGA.</p>
comment	<p>537 comment by: <i>Chris Fox</i></p> <p>AMC1 FCL.830 2.2. Whilst it is sensible to require an applicant for the SCFR to demonstrate their competence in a sailplane or powered sailplane, the requirement that at least one hour must be flown in this type of aircraft is (along with the total of five hours dual) excessive.</p> <p>Recommendation: It should be possible to complete all the required dual training in a sailplane, powered sailplane or TMG, provided only that the applicant demonstrates competence in the essential elements of section 2.1 in one or more flights in a sailplane or powered sailplane (excluding TMG). This could take place as part of the skill test.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comments sent by them and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>547 comment by: <i>David Evans</i></p> <p>In AMC2 FCL280 SCFR SkillTest The writer notes the intention to permit a proportion of the instruction to take place in a TMG. This is important and welcome as it permits instruction for simulated IMC flying to take place in a practical and economic manner. To organise all necessary instruction to take</p>

place in a sailplane would be difficult to arrange and make the process impractically lengthy. It is noted that TMGs are not permitted to fly IMC and this restriction should remain until otherwise changed.

response *Partially accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issue you raised (use of TMG) was also identified by BGA.

comment 552

comment by: *JMA Shannon*

AMC1 FCL.830, 1.4 (.3) & AMC2 FCL.830 2 (.6)

Use of DR is not really applicable to sailplane flights which are never intended to be simple longtime cruises through cloud. Sailplanes will not enter and have no use for entering wide area cloud except to pass through it as quickly as possible and basically over the same spot on the ground. Cloud is only used as a means to gain height at a particular spot over the ground.

Impact Assessment 2.2, p231

The accident statistics create a wrong impression of the effect of clouds in mid-air collisions.

Most sailplane mid-air collisions occur in 3 situations,

- in the circuit
- circling during thermal turns
- high speed running along ridges or well under cloud streets

in all 3 the presence of cloud is not a safety factor, so clouds will not have been a factor in the accident analysis. Even the case labelled 'proximity to cloud' could be as much as 1000' from cloud by the definition in this document.

3 Objectives, p231

There is no evidence to suggest that there have been any safety problems due to a lack of training, and so no demonstrated proportional need to increase the amount required.

4 Identification of Options, p231

Of these, option 0 should never have been included by a group set up to enhance safety as it clearly reduces safety.

Only option 1 creates a viable operating practice.

However, as noted previously, the concept of continuous longtime cloud flying is not part of sailplane flying. Sailplanes traverse clouds for very short time periods. So the extended 5 h. training time for cloud flying is overly onerous.

While it is not unreasonable to expect a minimum PIC time requirement to show a degree of experience in a range of conditions, the time taken for instrument flying training is irrelevant. The training time should be whatever is necessary to pass the skill test. Indeed perhaps the entry requirement to cloud training should be enhanced to require the skills to be shown first in ordinary VFR flight.

response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA. In addition, after consulting the Review Group, the Agency would like to highlight that DR navigation is essential to cross-check GPS information.</p>
comment	<p>558 comment by: <i>TOM SAGE</i></p> <p>Ref : Sailplane Cloud Flying Rating: 2. Flight Instruction: 2.2 Use of TMGs. It may prove impracticable to achieve the 1hour training in a non-TMG in the UK because of the lack of engined 2-seaters (e.g. expense) and the conditions; thus substantially barring many pilots who would otherwise achieve the rating.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issues you raised (use of TMG) were also identified by BGA.</p>
comment	<p>559 comment by: <i>Stephen Barter</i></p> <p>As far as the training is concerned, five hours is excessive, It should be borne in mind that sailplane pilots do not need skills for cruising in cloud; although thermal climbs may occasionally enter cloud, and appropriate training and skills are certainly required for this, most pilots would only circle perhaps to, or near cloudbase and then return to straight and level flight in VMC as they descend when leaving the lift.</p> <p>Thus for most pilots two hours training is found to be adequate even for acquiring the skills to continue a thermal climb into cloud and then to exit on a heading.</p> <p>Glider pilots of necessity do not fly fixed courses in terms of heading, speeds or altitude - we cannot, being inherently reliant on sources of rising air in order to make cross-country flight. Insisting on certain aspects of training as listed is not proportionate or relevant.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>562 comment by: <i>Colin HUNT</i></p> <p>I support this syllabus.</p>
response	<p><i>Noted</i></p>

Thank you for your positive feedback.

comment

569

comment by: *Peter BROWN*

I wish to comment specifically on the training requirement for sailplane cloud flying, as contained within pages 190 - 192.

The proposal is that the instruction should include straight flight, maintaining a heading, and position estimating using dead reckoning.

I submit that this assumes a level of competency requirement that is really totally inappropriate for sailplane flying, and does not demonstrate an understanding of how sailplanes fly cross country in particular. Setting aside the fact that by far the greater majority of sailplane pilots will choose not to enter cloud, having reached cloudbase, in the event they do enter the cloud, it will be to continue to use upcurrents, and to do so they will be circling within the cloud, not flying straight and level.

The requirement to be able to fly straight and level, and to maintain a heading, is therefore practically irrelevant, and for the same reason the requirement to demonstrate position estimating using dead reckoning also superfluous.

As presently drafted, the instructional requirements are excessive and unnecessary, and I submit that they should be reviewed more closely so that the training is more accurately aligned to the nature of sailplane IMC flying.

response

Not accepted

Thank you for providing this comment. Firstly, the Agency would like to emphasise that the sailplane cloud flying rating does address requirements for glider flight both near cloud and also within cloud. Secondly, modern complex airspace can require a pilot to escape from cloud on a nominated heading. The proposed skill test does not require the pilot to achieve this nominated heading instantly. Instead, the test allows normal practice; recover to approximate straight flight and then refine the heading with small adjustments. This is achievable with all compass types. Finally, DR navigation is essential to cross-check GPS information. With reference to the information above, the Agency deems the requirements to be appropriate.

comment

581

comment by: *Cairngorm Gliding Club*

This comment relates to pp190-192.

As a comprehensive skill test is proposed, something as a gliding instructor of 27 years I enthusiastically support, I cannot see the relevance of a minimum period of dual instruction. This can only be construed as a classic bureaucrat's rule. If a pilot is good enough to pass then he/she passes. How long the dual time has been is irrelevant

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you

raised (5 hours training) was also identified by BGA.

comment 597 comment by: *Bill LONGSTAFF*

The British Gliding association has made its qualified acceptance of the proposed rules and training requirements, skills etc. for the proposed cloud flying rating. I endorse those recommendations of the BGA where I am qualified to do so and accept their recommendations where these are beyond my knowledge/skill base.

response *Noted*

Thank you for your comments.

comment 598 comment by: *Bill LONGSTAFF*

My comments above apply to this next section too.

response *Noted*

Thank you for your comments.

comment 605 comment by: *Ted Richards*

Reference p190 AMC1 FCL.830. The syllabus in terms of theory and practical appear very well structured.

response *Noted*

Thank you for your comments.

comment 608 comment by: *Graham Morris*

Theoretical Knowledge Instruction.

1.6 Under Hazards and Emergency Procedures; I very strongly recommend that a specific item regarding use of airbrakes to reduce the probability of overspeed be included. I believe that a recommendation to fully open the airbrakes whenever speed approaches VA would be a most important addition.

response *Noted*

Thank you for providing this comment. The Agency would like to highlight that the use of airbrakes is an inherent and crucial part of the escape manoeuvres and thus already an integral part of the proposal.

comment 614 comment by: *Eric Smith*

The practical skills test is not realistic for cloud flying by glider pilots. Based upon over 40+ years of flying including cloud flying the suggested practical skill test is not a true measurement of the skills needed for glider pilot flying in cloud.

response *Noted*

Thank you for your comments.

comment 616 comment by: *William Pope*

The over riding reason for licensing and regulation is safety and I believe that the BGA (and CAA) have demonstrated that the current UK cloud flying regulations have been intrinsically safe for many, many years. I do, however, understand that a homogeneous approach is needed to this and other matters.

I feel that the 5 hours minimum requirement is excessive having had some experience of power instrument flying in the past and feel that a lesser minimum of, say, 3 hours would be entirely reasonable as it is sufficient time to demonstrate a reliable ability.

It is my belief that currently, relatively few glider pilots enter cloud and for this reason a restricted cloud flying rating seems entirely reasonable especially as there is no evidence to suggest that there are any safety implications.

In summary, I suggest that the minimum requirement for the SCFR be dropped from 5 hours to 3 hours and a restricted SCFR be implements.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment 623 comment by: *Frank Bradley*

I support this proposal for gliders to be able to fly in and near cloud. Having attained a great deal of high quality training to reach the level required before cloud flying is even considered I feel 3 hours training is more than enough time to learn what is required for a glider pilot to do this safely.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 640 comment by: *ngl*

As a glider pilot, I wish to register my support for AMC1 (and AMC2) FCL.830 Sailplane Cloud Flying Rating. I also agree with the BGA's suggestion for a reduced level of dual training.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment

643

comment by: *Vincent EARL*

AMC1 FCL.830.

The theoretical knowledge requirements for the Sailplane Cloud Flying Rating (SFCR) appear sensible and proportionate to the requirements of safe flight by gliders in IMC. This is an important measure of any regulation, that it be seen by those governed by its requirements to be necessary, proportionate and does not pander to vested interests not concerned with Safety.

IMC flight by gliders in the UK has been carried out safely for decades and it is critical to the ongoing viability and safety of the sport that this privilege be retained. I therefore strongly support the main requirements of this NPA. I do however have some observations I would like to be considered further by EASA.

The training requirement for a minimum of 5hrs before issue of the SCFR is in my opinion completely unnecessary and potentially expensive. The NPA already has the welcome provision for a skill test before the issue of the Sailplane Cloud Flying Rating and this measure alone will ensure that all candidates have reached the required standard. This will be the case for all candidates, regardless of the means or the amount of training they have completed prior to the skill test. Some candidates will obviously need more than 5hrs but some will not and it is unreasonable to burden these pilots with a minimum training hours requirement when they will be subjected to the same skill test as those that require more hours to reach the required standard.

Furthermore, the use of Training Motor Gliders (TMG) must be retained as a means of completing the training for the SCFR and for any re-validation checks if the cost is not to be excessive or the training opportunities unduly restricted for any candidates that wish to take the training.

I suggest that the NPA be amended so that while training for the issue of the rating can be performed in TMGs, a provision should be added to exclude the **exercising** of the privileges of the rating while operating a TMG.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

644

comment by: *Derek Wilson*

Five hours training is excessive. Glider pilots do not need skills for cruising in cloud even though thermal climbs may occasionally enter cloud, and appropriate training may be beneficial for this, most pilots would only circle the base of cumulus clouds and then return to VMC as they descend when leaving the lift.

Appropriate levels of training in these skills (for most pilots two hours training is found to be adequate even for acquiring the skills to continue a thermal climb into cloud and then to exit on a heading) should be left to the discretion of the

gliding clubs as has been successfully delivered since the 1930's.
Glider pilots do not fly fixed courses in terms of heading, speeds or altitude, being reliant on sources of rising air in order to make cross-country flight. Insisting on certain aspects of training as listed is not proportionate or relevant.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 646

comment by: *william shears*

Five hours of training is excessive. It should already be common sense for the glider pilot that you do not need skills for cruising in cloud. Although thermal climbs may occasionally enter cloud, appropriate training and skills are definitely required for this. Most pilots would only circle to or near cloudbase and then come back to VMC as they descend when leaving the lift.

For most pilots two hours training is seen as being adequate even for having the skills to continue a thermal climb into cloud and then to exit on a heading.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/Restricted SCFR) were also identified by BGA.

comment 647

comment by: *Eric Norman*

Glider pilots do not need skills for cruising in cloud; although thermal climbs may occasionally enter cloud, and appropriate training and skills are certainly required for this, most pilots would only circle perhaps to, or near cloudbase and then return to VMC as they inevitably descend when leaving the lift.

Thus for most pilots two hours training is found to be adequate even for acquiring the skills to continue a thermal climb into cloud and then to exit on a heading.

Glider pilots of necessity do not fly fixed courses in terms of heading, speeds or altitude - we cannot, being inherently reliant on sources of rising air in order to make cross-country flight. Insisting on certain aspects of training as listed is not proportionate or relevant.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 652

comment by: *East Sussex Gliding Club*

I believe that 5 hours of training for the rating is too great. Most glider pilots only circle to within a distance near to the cloudbase before leaving the thermal although there may be occasions where cloud is entered, skills for specific prolonged cloud flying are excessive. I therefore believe that 2 hours of training would satisfactorily prepare glider pilots with a safe means of climbing within a thermal up to / into cloud and then a safe exit.

Sailplane pilots do not fly specific fixed tracks due to the variant nature of lift and the proposed rules are therefore excessive.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 656

comment by: *Will Harley*

As a glider pilot I feel that the requirement for 5 hours training is excessive. It is in the nature of sailplane operation that some flying within cloud is necessary, however this is generally of very limited duration before a new thermal is sought, at a new heading. Gliders do not cruise for extended periods of time. It is accepted that some form of training is essential but a training time of 2-3 hours would be more appropriate.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 664

comment by: *George SANDERSON*

2.2 As previous comment TMG must be permitted for all this aspect.

response *Partially accepted*

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment 680

comment by: *Pete Whitehead (Edensoaring)*

AMC1 FCL.830 (Sailplane Cloud Flying Rating- theoretical knowledge instruction and flight instruction)

The syllabus seems reasonable and I would support it.

It states that the "Flight Instruction" should "be repeated as necessary" to achieve " a safe and competent standard". I would support this.

This makes it clear that only a pilot who gains the necessary skills and standard should go on to take the proficiency test - so no need to put a minimum time on this (based on "hunch" and "seems like a good idea" rather than evidence. In view of the above comments, **the idea of 5hrs minimum Dual Flight Instruction , as in pages 18-19, is therefore superfluous).**

AMC2 FCL.830 (SCRF , Skill Test and Proficiency checks)

I would support this.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 695

comment by: *Melissa Jenkins*

The list looks comprehensive and sensible. I would support this approach, especially if it is using material that is tailored to gliding rather than powered flight.

response *Noted*

Thank you for providing this comment.

comment 696

comment by: *Melissa Jenkins*

5 hours seems to be an excessive amount of training time, it is more than most pilots require to learn to fly solo.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 697

comment by: *Air League*

As a glider / sailplane pilot

response *Noted*

Thank you for your comment.

comment 699 comment by: *Air League*

As a glider / sailplane pilot I see the SCFR as essential to ensuring the safe development and evolution of our sport in the EU whilst ensuring the safety of all airspace users.

Having a rating that is based on competency and not arbitrary figures in terms of hours to achieve the rating is also vitally important. With such a diverse community in the sailplane world having a rating based on ability instead of arbitrary hrs requirements means that appropriate resource can be directed to those requiring in depth training to reach the standard.

I would also suggest that TMGs be able to be used for this training. Being able to use a motor gliders and pure sailplanes for the training of this rating will allow for more consistent and appropriate training. Motor Gliders have the benefit of being similar in handling characteristics to gliders whilst allowing the occupants to stay airborne for longer in certain Wx conditions.

The safety of gliders in cloud has historically shown few if any issues. The addition of this rating has the ability to ensure that all pilots are adequately equiped and allow these sports people to maintain the high safety record that they have managed over the last 100 years.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 705 comment by: *Peter Gray*

9) subpart I. AMC1.830 sailplane cloud flying rating

Section 1 and 2.1. Couldn't agree more!

However, I don't understand the logic of 2.2. *"At least one hour must be flown in a sailplane or powered sailplane (excluding TMG). The remainder may be flown in a sailplane or powered sailplane (including TMG), or may be credited in the case of pilots who hold, or have held an IR or EIR."*

Why the exclusion of using a TMG for the first hour?

Initial training could be done in a light aeroplane, conversion to glider fly-alikes coming later. As an AMC this seems partially back to front and restrictive.

The training facility currently within gliding is very small to the extent that it would be a bar to success. Utilising the facilities within wider GA with transference to high aspect ratio glider fly-alikes later would make a lot of sense.

Training in VMC for an IFR rating is not the same as exercising the privileges of the rating in real cloud so anxieties about the cloud flying allowances in the flight manuals for TMGs seem irrelevant.

Training for the rating needs to be not only feasible but practicable.

response

Noted

Thank you for providing this comment.

The Agency would like to clarify that a TMG may be used for both training and testing, as already foreseen by this NPA. However, 1 hour of training must be completed in a sailplane, as some specific cloud flying techniques can only be demonstrated in a sailplane.

In addition, the Agency will not allow the use of light aeroplanes for the conduct of initial training, as aeroplane flight characteristics are different from sailplanes.

Finally, with regard to your comment on the issue of training facilities, the Agency would like to highlight that training facilities can make use of a prescribed transition period to establish an approved training organisation (ATO). Every gliding club/school intending to provide training must establish an ATO.

comment

711

comment by: *Jim Thomson*

Training for the Sailplane Cloud Flying Rating is most readily achieved in a TMG. Most clubs own or have access to this equipment for training in field landings, navigation etc. TMGs should not be excluded as a method of training for the SCFR. Section 2.2 should be amended to read "At least one hour must be flown in a sailplane or powered sailplane. The remainder may be credited in the case of pilots who hold, or have held an IR or EIR"

As TMGs are usually restricted to VFR this means that training has to be under simulated conditions but this is likely to be the conditions for most if not all training.

response

Partially accepted

Thank you for providing this comment.

The Agency would like to clarify that a TMG may be used for both training and testing, as already foreseen by this NPA. However, 1 hour of training must be completed in a sailplane, as some specific cloud flying techniques can only be demonstrated in a sailplane. Training with reference to instruments may be completed in simulated instrument conditions.

Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However, in any case, 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment

716

comment by: *Simon Kahn*

Five hours minimum training requirement is excessive for sailplanes, who will normally only require to thermal (circle) close to cloud and then straighten up to a heading exiting the cloud. sailplanes do not cruise significant distances keeping a straight heading so this skill is not required. They are already trained to fly efficiently to make track to a heading, and to climb by thermalling

response	<p>(circling in rising air). A minimum of 2 hours is reasonable as the rating would be granted on a skills test in any case. In fact sailplane rating could be granted by difference training, without a minimum training period. Many Uk sailplane pilots already have the privilege of flying in IMC near or in cloud so a skills test may be all that is required.</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.</p>
comment	<p>726 comment by: <i>Graham BARTLE</i></p> <p>I would suggest that a fair proportion of glider pilots in the UK, in particular owners of older aircraft like me, are not equipped for cloud flying and would be foolish to attempt it. Climbs to cloud base are, of course, imperative and brief entry into cloud before deployment of air brakes a distinct possibility, therefore some theoretical training and skill assessment would be welcome, but the over-complicated requirements - maintaining course, maintaining air speed, use of GPS instrumentation - are, for many glider pilots and certainly for me, irrelevant.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Firstly, the Agency would like to emphasise that the sailplane cloud flying rating does address requirements for glider flight both near cloud and also <u>within</u> cloud. Experience gained in several Member States shows that the proposed theory and exercises is practical and essential for operation within cloud.</p>
comment	<p>727 comment by: <i>John Ferguson</i></p> <p>I fully support the need for a cloud flying rating for sailplanes. I have been flying sailplanes in the UK for 20 years and have used the privilege of cloud flying many times. That a syllabus is now proposed is excellent and I would like to see this qualification embodied in the NPA 2011-16 regulations.</p>
response	<p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>745 comment by: <i>Martin Roberts</i></p> <p>Page 190-191 AMC1 FCL.830 Saliplane Cloud Flying Rating</p> <p>THEORETICAL KNOWLEDGE INSTRUCTION</p> <p>These would seem to be valid and relevent learning objectives.</p> <p>Page 191-192 AMC2 FCL.830 Saliplane Cloud Flying Rating</p>

SKILL TEST AND PROFICIENCY CHECK

1. ORAL EXAMINATION

These would seem to be valid areas for assessment.

2. PRACTICAL SKILL TEST

These are not demanding objectives for an average glider pilot of average currency. The standards described could easily be obtained by a competent pilot in around 1-2 hours under dual instruction. The proposed "5 hours under dual instruction" is quite unnecessary to reach the standard described here.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 749

comment by: *Colin Cownden*

For the purposes of the skill test, it should be noted that this can be taken in a TMG. This to allow availability to all pilots who wish to achieve the rating whilst ensuring the test is carried out in a safe and sustainable manner.

response *Noted*

Thank you for providing this comment. The Agency would like to clarify that a TMG may be used for the skill test. Please also refer to the response provided to the British Gliding Association (BGA) comment No 121 regarding the use of TMG.

comment 750

comment by: *Colin Cownden*

The item relating to using Dead Reckoning to estimate position should be removed as this has no relevance to flight in a pure sailplane and as no TMG is cleared for flight in cloud, is also not relevant to TMGs.

response *Not accepted*

Thank you for providing this comment. The Agency strongly believes that DR navigation is essential to cross-check GPS information. This may also be applicable to training using a TMG in simulated cloud flying.

comment 758

comment by: *R Watson*

I fully support the objectives of SCFR licencing. I would, however, suggest that the 5 hour minimum training requirement is both costly and unnecessary. This is because sailplane flight in cloud tends to be restricted to a very narrow handling regime (either thermalling up during thermalling flight or blind let-down during wave flight). There is no need to complicate the rating with skills necessary for powered straight and level flight and navigation in IMC.

	<p>To this end, I would suggest the removal of the minimum hours requirement to be replaced by a training syllabus and instructor sign-off with mandatory proficiency checks every two years.</p> <p>Gliding in the UK has operated successfully for decades with one of the best safety records in Europe. A no point has glider pilot training in the UK been based on a minimum hours requirement. It has always been based on skills and proficiency tests with instructor sign off.</p> <p>This system has been effective in the past and will be effective in the future if it is used as the basis for the SCFR rating.</p> <p>Thank you</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>761 comment by: <i>Michael D Miskimmin</i></p>
	<p>I believe the training (theoretical & practical) are sound both for the Instructor and the pupil.</p>
response	<p><i>Noted</i></p>
	<p>Thank you for your positive feedback.</p>
comment	<p>776 comment by: <i>Liz SPARROW</i></p>
	<p>pp190 - 192 AMC1 FCL.830 SCFR Section 1 Theoretical Knowledge - appears to contain appropriate content Section 2 Flight Instruction and 10) Subpart I additional ratings A<C" FCL.830 SCFR Skill test and proficiency check I can see no reason why all the flying cannot be in a TMG - I suspect that many more pilots will have access to a TMG eg Falke, a common type, than will have access to a powered or otherwise sailplane which is equipped for cloud-flying training. Again, as the test is competence-based, which I also strongly support, I can see no reason to have such a high minimum training hours requirement. Gliding has been very effective in using competence-based decision points rather than hours-based decision points for passing training milestones, and I suggest that there is no reason and should be NO requirement for a minimum training period. If the pilot can safely demonstrate all the elements required in a flight test, then that must by definition, be sufficient.</p>
response	<p><i>Partially accepted</i></p>
	<p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA)</p>

comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 784 comment by: *Shaun McLaughlin*

While suitable for Power flying this practical skill test is not suitable for gliders as the instruments used are not as sensitive and the scenario for a sailplane in cloud is the climb and then continue on a general heading. A general handling skill test for safety would be better to determine the skill of the pilot and be applicable to the general scenario a sailplane would be in.

response *Not accepted*

Thank you for providing this comment.

The Agency has received other comments proposing the skills test. However, the Agency does not agree with introducing a 'general skills test for safety'.

comment 835 comment by: *Liam Brady*

Page 190 : Under SailPlane cloud flying section . It may be sensible to add cloud flying to the gliding syllabus . This should be a skill test and much less than the 5 hours suggested perhaps 1 hour dual flying , 3 hours dual max .

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 842 comment by: *Vic Blaxill*

Ref:- Flight Instruction
2.1 If the exercises have to be repeated until competent why is there a specified 5hrs of dual flight instruction in "Overview of the changes in this NPA" Para 3.2 (page 11)?

2.2 It is imperative that TMGs are used for training in all aspects of this rating otherwise the training may become impractical. This is due to the inability to fly an unpowered sailplane in cloud for an hour and the very limited availability of dual seat powered training sailplanes in the alternative option.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 847 comment by: *Diana King*

AMC1 FCL.830 Sailplane Cloud Flying Rating training.

The theoretical knowledge instruction or revision seems in general reasonable.

The exercises described for FLight Instruction seem appropriate and reasonable. However, I am concerned about the proposals for the amount of Flight Instruction required. The preamble in para 2.1. includes the statement "the exercises .. should be repeated as necessary until the student achieves a safe and competent standard". This seems entirely sensible. To require a minimum of 5 hours training would greatly inhibit the ability of many pilots to achieve this training. The length of time that a sailplane actually flies in cloud at any one time is usually a matter of a few minutes, and it can be difficult to find suitable conditions where genuine and effective cloud flying training can be undertaken. The number of flights that might be required to achieve 5 hours in cloud could be significant, involving a substantial cost in launch fees and flying time.

Based on an estimate of 30 minutes cloud flying per session (which is optimistic), completing the flight training at my club would cost me a minimum of £600 (700 Euros) and it is more likely that it could cost twice that figure. This cost is more than many glider pilots spend in a year on their flying. I suggest that the amount of training required should be described simply as the amount required to ensure that the student achieves a "safe and competent standard". In some cases, this might be more than 5 hours, but in most cases, with competent pilots, it would be less.

If this is unacceptable, then I support the BGA's proposal for a maximum of 3 hours instructional time.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 852

comment by: *Private individual*

It is very important a sailplane cloud flying rating is available to enable cross country soaring to continue in the UK.

My view is that 5 hours practical training is too much before the grant of a sailplane cloud flying rating and a minimum of 2 hours is appropriate.

I think those with an IMC rating under a JAR PPL should be granted a sailplane cloud flying rating automatically.

Finally training for such a rating must be possible in a TMG.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

861

comment by: *Andy Jupp*

With regard to a five hour training period; this is far too long, consideration should be given that a glider pilot does not need the skills for cruising in cloud. Thermal climbs can sometimes enter cloud, in which case the appropriate training & skills would indeed be required. However, the majority of pilots would only thermal to or near the cloudbase before reverting to VMC as they would invariably descend when leaving the lift.

Therefore the majority of glider pilots would find two hours of training adequate even for the skills to continue the climb to the cloud & then exit on their chosen heading.

In terms of speed, altitude & heading, a glider pilot, out of necessity, does not fly a fixed course. This is not possible due to our reliance on rising air to remain airborne for the purpose of cross-country or local flying.

The insistence of some aspects of training is neither proportionate or relevant

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment

867

comment by: *rob belsey*

glider pilots do not cruise in cloud and only enter as necessity requires to gain height, however some training, which already can be done voluntarily with a BGA, is useful because of the dangers of spinning in cloud and disorientation. i feel some basic training or cloud flying experience should be included in the pre or post solo training, but a mandatory five hours of training is excessive.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment

877

comment by: *BAKER*

Page 191, item 2.2: Use of TMGs is by far the most practical way of instructing in cloud flying techniques.

Use of pure sailplanes will greatly increase the time taken to attain the rating - the reliance on weather conditions alone to be able to fly for extended training periods within cloud is impractical, particularly where a club has a large number of pilots requiring training. It is imperative that use of TMGs be permitted for this role.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA)

comment No 121 as you refer to the comment sent by it and as the issue you raised (use of TMG) was also identified by BGA.

comment 885 comment by: *CarlSORACE*

As a UK glider pilot of some twenty years standing, I feel that the proposed SCFR is a welcome addition to the ratings currently held by active fellow glider pilots. To date, the skills and theoretical knowledge required for safe cloud flying have been well taught in the UK, as is evidenced by the minimal accident rate. However, the formal training and testing, with a minimum of three hours dual flying for the SCFR is welcomed.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 895 comment by: *Keith Natrass*

I am all for training and a recognised competency for cloud flying as the BGA suggests. The duration of training should be decided by the instructor. A 2 year review should keep things safe.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 900 comment by: *Colm Farrell*

The EIR requires the holder to only commence or continue the flight if the forecast for the destination or alternate aerodrome one hour before and one hour after arrival indicates VMC.

VMC conditions does not indicate that the pilot will be able to complete the flight under VFR. For example an overcast cloud base of 2500ft, and 10km visibility would be VMC conditions. However if there was an obstacle close by the aerodrome extending up to 2000ft, the pilot could not descend below 3000ft, and therefore could not enter the VFR conditions within the limitation of his rating.

This wording should be change from requiring VMC conditions to requiring that the pilot can complete the transition to VFR and complete the arrival under VFR, within the privileges of his licence and ratings.

response *Not accepted*

Thank you for providing this comment.

The corresponding rule and AMC texts have been reworded and clarified. The Agency would like to highlight that a significant proportion of GA IFR movements, across Member States, at present use transition from IFR to VFR in order to arrive at VFR airports. In addition, the proposal clearly states that the pilot must be in VMC 1000 ft above the highest obstacle within 5 nm of the aerodrome reference point. Therefore, a pilot should not commence such a flight if the VMC conditions are below this requirement.

comment 901 comment by: *Colm Farrell*

An EIR requires 100 hours TK course. The 100 hours is a pointless requirement and should be removed. The candidate should demonstrate their acquisition of the knowledge by examination, and how long it took them to acquire that knowledge is irrelevant.

response *Not accepted*

Thank you for providing this comment. The Agency would like to emphasise that the requirement was further reduced to 80 hours. In addition, the Agency strongly believes that, in the interest of harmonisation and standardisation, a minimum amount of hours must be stipulated and as such will keep the proposal as is.

comment 902 comment by: *Colm Farrell*

The 100 hours of TK for the Modular IR is inappropriate. A candidate demonstrates their knowledge by examination. How long it takes the candidate to acquire that knowledge is irrelevant. If the examination is insufficient to demonstrate the required knowledge, then it should be extended.

response *Not accepted*

Thank you for providing this comment. The Agency strongly believes that, in the interest of harmonisation and standardisation, a minimum amount of hours must be stipulated.

comment 903 comment by: *Roger STARLING*

**AMC1 FCL830 SCFR
Theoretical Knowledge Instruction**

The proposed theoretical syllabus seems entirely reasonable.

response *Noted*

Thank you for your comments.

comment 907 comment by: *Alexandra Pentecost*

I am pleased that EASA continues to recognise that sailplanes have a place in the aviation world. It is important to ensure that private individuals continue to have access and freedom in the skies when there are numerous commercial interests that have more resources to apply to lobbying for change.

	<p>In principle I welcome the SCFR. I consider that setting a minimum of 5 hours dual training imposes an onerous requirement on those who already have a degree of experience. I suggest that 2 or 3 hours would be suitable minimum. Some will require more but a reasonable threshold.</p> <p>It is a shame that the proposed amendments don't include an RSCFR to cover flying IFR but clear of cloud.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>
comment	<p>908 comment by: Roger STARLING</p>
	<p>FCL830 SCFR Flight Instruction</p> <p>2.2 There is no reason why one hour of instruction has to be flown in a sailplane or powered sailplane. This is totally impractical - under normal conditions it would be impossible to train for an hour in a sailplane without having many, many flights. Availability of powered sailplanes is limited and this requirement would jeopardise the whole of the SCFR. TMGs are much more widely available and it is essential that training is permitted in TMGs.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. The Agency would like to clarify that the use of a TMG for training and checking purposes will be allowed. In addition, the Agency strongly believes that because the rating privileges are not allowed for TMGs, at least one hour of training must be completed on a sailplane or power sailplane (except TMG) within cloud or simulated IMC conditions to ensure that a student experiences their use in such an environment.</p>
comment	<p>911 comment by: Roger STARLING</p>
	<p>FCL830 SCFR 2. Practical Skill test</p> <p>There is no reason why the skill test has to be flown in a sailplane or powered sailplane. This is totally impractical - under normal conditions it would be impossible to conduct the test in a sailplane without having many, many flights. Availability of powered sailplanes is limited and this requirement would jeopardise the whole of the SCFR. TMGs are much more widely available and it is essential that the test can be conducted in TMGs.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please refer to comment 908 as the response given also covers the issue you raised.</p>
comment	<p>917 comment by: Peter Thomas</p>

I agree with the main content of the flight instruction syllabus, but consider emphasis on achieving and maintaining a heading as having minimal relevance to glider cloud flying. Gliders do not generally cruise in cloud flight and gliding flight in general is not flown to specific headings, but between areas of lift adjacent to the desired track. Cloud flying is mainly circling in thermals followed by departure from the cloud on a general heading.

response *Noted*

Thank you for providing this comment.

The Agency believes that this technique is needed and that the proposal at this stage is still supported.

comment 919 comment by: *Nick Bowers*

In respect of AMC1 FCL.830 Sailplane Cloud Flying Rating:-

I support the proposal to implement Option 1, the establishment of a Sailplane Cloud Flying Rating.

The proposal to impose a minimum of 5 hours dual instruction is overly onerous and unnecessary, bearing in mind the safety record achieved in Member States where, currently, no formal minimum training requirement exists.

Recognising that some formality in training requirements is indeed desirable, a minimum requirement of 3 hours dual instruction would be an acceptable alternative requirement. Some pilots will naturally need more than the minimum requirement to acquire the necessary skills to pass the test, but those with any previous instrument experience (even that gained via the instrument appreciation element of the PPL syllabus) may well achieve the required standard in far less than 5 hours of training.

There appears to be no supporting logic for the proposal that at least one hour dual instruction must be flown "in a sailplane or powered sailplane (excluding TMG)". Most, if not all, TMG types are ideally suited to the role of training for the SCFR. All elements of the training syllabus, and indeed testing, could be adequately completed in a TMG. Allowing the use of either sailplane, or TMG, for all parts of the training would maximise the flexibility of the training organisation to deliver the necessary training without compromising the quality of that training.

It would not be appropriate for pilots holding a SCFR to exercise the privileges of that rating in a TMG, other than for the purposes of rating revalidation under the supervision of an instructor/examiner.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 923 comment by: *John T Donovan*

Text:

AMC2 FCL.830 Sailplane Cloud Flying Rating
SKILL TEST AND PROFICIENCY CHECK

The skill test for the issue of the cloud flying rating or the proficiency check for the revalidation or renewal should be conducted in either a sailplane or a powered sailplane...

Comment:

See my earlier comment #922.

I request that EASA clarify that TMG's may be used (in VFR only) for the instruction towards the issue, skill test and proficiency checks of a SCFR.

Recommended changes to text:

AMC2 FCL.830 Sailplane Cloud Flying Rating

SKILL TEST AND PROFICIENCY CHECK

The skill test for the issue of the cloud flying rating or the proficiency check for the revalidation or renewal should be conducted in either a sailplane or a powered sailplane **(including TMG's)** and should contain the following elements.....

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (use of TMG) was also identified by BGA.

comment 925

comment by: *Jim Lyell*

AMC2 FCL830 Sailplane Cloud Flying Rating
Skill Test and Proficiency test

This section would seem to preclude the use of a TMG to carry out the skills test and revalidation check. For many gliding clubs the TMG would be the most readily available aircraft to carry out these check flights and I can see no safety, or other reason for excluding their use for this purpose.

I recommend the following amendment to the text "The skill test for the issue of the cloud flying rating or the proficiency check for the revalidation or renewal should be conducted in a sailplane, a powered sailplane or a TMG and should contain the following elements:"

response *Partially accepted*

Thank you for providing this comment. Please refer to comment 908 as the response given also covers the issue you raised.

comment 931

comment by: *F Wilson*

I am writing this as a UK glider pilot with 28 years flying experience, I have flown in cloud every single year I have been gliding and I have 29 years of professional engineering experience working with some of Europe's leading aerospace companies.

Whilst I would welcome a degree of relevant cloud flying training and instruction for gliderpilots, the proposal presented in this proposal are wholly inappropriate for this task. Flying a glider within cloud is totally different to that of a power aircraft as it involves relatively short periods of high banked turns in order to follow rising thermal lift with a nominal time in cloud of around 10 minutes per penetration. No SLMG are currently rated IFR conditions, and training in a powered aircraft would be wholly unrepresentative. Trying to obtain 5 hours in cloud given suitable glider availability, instructor availability, and suitable conditions is completely unrealistic and hence infringing my current freedoms/human rights.

What I would suggest is required to safely qualify a glider pilot has to be practical and sufficiently representative. From my experience I would recommend that the qualification would be an annual qualification, in a twin seat sailplane only, based on 6 consecutive cloud penetration of at least 10mins each where the instructor does not handle the controls. The initial instruction would be however much dual flying it took for the student to achieve this standard.

Parts of this proposed regulation draws inappropriately from power flying IFR i.e.:-

"Maintain a heading"

Note - A Turn and Slip (TS) turn rate is controlled by a pre-set spring within the instrument normally set to 1.5deg/sec for a rate 1 turn. A TS set up for glider cloud flying will be pre-set for at 12 deg/sec for a rate 1 turn to allow for the much tighter turning demanded in this environment. This desensitising of the TS means it is impossible to maintain the heading requirement in para 2 page 191, with a TS set up for a glider cloud flying but given that a glider will only be in a cloud exiting stage for a matter of a few minutes any heading drift over this time is insignificant.

It's vital for the RSCFR to be made available as given the UK's weather conditions, and with our UK airspace categories the UK gliding movement will be decimated.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

937

comment by: *Dr Stephen Gibson*

Hours "on instruments" in a sailplane are excessively onerous and difficult to achieve. This is a disproportionate requirement carried across from power flying and seems to forget the unpowered nature of sailplanes. To achieve hours of

experience "on Instruments in sailplanes" the use of entirely TMGs must be fully allowed and credited, but to do so should not mean that EASA should impose training requirements other than a skill test. The UK has a good sailplane cloud flying safety record without even a skill test...

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 958

comment by: *Tim Lean*

The proposed syllabus for training pilots for the SCFR looks very sensible. However, it is my opinion that the TMG will provide easily the most efficient means of instruction. The stipulation that the final hour of instruction must not be in a TMG is a potential stumbling block and may be very costly and time consuming to achieve. I propose that all training and evaluation may be carried out in a TMG.

I also believe that the minimum instruction time of 5 hours will be a draconian requirement for many experienced sailplane pilots and an unnecessary financial burden. Surely the student should receive sufficient training to achieve the required standard. I understand the BGA position and their offer to agree to a 3 hour minimum: however I would urge the Agency to reconsider this point and stipulate a certain standard of flying, not a minimum instructional time requirement.

response *Partially accepted*

Thank you for providing this comment. Please refer to both comment 121 and 908 as the responses given also covers the issues you raised.

comment 970

comment by: *Mark Hawkins*

The requirement of 5 hours dual flying training in a glider is not practical nor can it be justified. The training should be competency based and no minima need be set. Should a minima be absolutely necessary 3 hours should be the absolute maximum but this would not be a good solution.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 989

comment by: *Raymond Blewett King*

I find the proposals to subject Glider Pilots to a training requirement of 5 hrs to be strange and indeed unnecessary.

Most Glider Pilots will enter cloud for a limited period of time to access clear

	<p>visibility. All is required is to show an ability to control an aircraft solely with reference to instruments. This can be carried out adequately in a simulator. Furthermore, my experience as a past IMC instructor and examiner all training in aircraft, when simulated for the pilot, was conducted, when the instructor could maintain VMC. Those of us with considerable past experience, holding a professional licence or PPL IMC ratings should be exempt from the new proposals.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p> <p>In addition, as long as there is no certificated 'glider simulator' (FSTD) available, the training for sailplane licences and ratings has to be provided in a sailplane.</p>
comment	<p><i>1009</i> comment by: <i>Kathy SCOTT</i></p> <p>There is no need to require as much as five hours training for glider pilots. Glider pilots do not need to be able to cruise in cloud. They sometimes need to climb near or into cloud on thermal climbs, so need the skills for this. They will normally climb to or near cloud base, then return to VMC when they leave the lift and have to descend. For most pilots, two hours training should be enough to learn the skills needed to climb into cloud and exit on a heading.</p> <p>Glider pilots cannot fly a fixed course at a particular heading, speed or altitude. It is not possible as they rely on finding rising air to continue flying. Therefore certain aspects of the training listed are not relevant or necessary for glider pilots.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p><i>1017</i> comment by: <i>Liddiard</i></p> <p>As a glider pilot with 40 years experience I frequently enter cloud during thermal climbs, following the standard procedures. I have also made occasional extended flights in cloud when conditions suited me.</p> <p>Most glider pilots will thermal up to cloud base and then carry on their flight on the heading or to the next area of lift, not necessarily on the chosen course due to weather conditions in the area they are flying.</p> <p>I think that all glider pilots should undergo theoretical training for cloud flying</p>

as I have in the past, to cover events like very powerful thermals, orographic cloud and wave flights where the cloud has closed below you, and make a safe recovery.

I think that two hours training would be more than enough for cloud flying in gliders as we would be climbing through them not cruising along on a fixed course.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 1022

comment by: *Francis RUSSELL*

AMC2 FCL.830: Practical Skill Test detailed on pages 191-2 is fine as an aspiration but most gliders go into cloud in order to climb and being normally remote from controlled airspace do not need to keep to a heading of 10 or even 20 degrees: it is more important to keep in the strongest lift to achieve the quickest rate of climb. Particularly with some older gliders or those with good airbrakes maintaining airspeed within even 20 kts does not seem essential - simply desirable.

response *Noted*

Thank you for providing this comment. The Agency would like to highlight that modern, complex airspace can require a pilot to escape from cloud on a nominated heading. Therefore, the exercise was included in the practical skill test and will remain as proposed.

comment 1027

comment by: *Roger WARREN*

As a now, somewhat elderly and with a good deal of experience under my belt, UK(BGA) fully rated gliding instructor, I am delighted to see that steps are now in hand to maintain the rights of glider pilots to fly in an around clouds by the introduction of a SCFR. I feel I must comment, however, that I find the proposed training requirements to be somewhat excessive. Although I later went on to obtain a UK IMC rating, my initial training in gliders amounted to no more than one, or it may have been two) flights of about ten minutes in a two seat trainer with a cloud flying hood. Having compared notes with my contemporaries over the years, it would appear that I received more training than most.

Having undertaken the training for the UK IMC rating, I am aware that most of it is not relevant to the glider pilot. Our flights in cloud will be confined to:- continuing to climb in a thermal, particularly near the end of the day when conditions are deteriorating; and occasional descents through cloud when conditions have changed, particularly when around wave systems. Glider pilots do not need to fly accurate headings and courses, they are unable to hold accurate heights, as the glider will always be either climbing in lift or descending, and we would need to consider any instrument approach requirements.

We do however often need to fly in IMC but clear of cloud as this is often where the lift is to be found.

In my opinion, the flying training requirement for the SCFR should be limited to one or at most two hours. I think this would be more than adequate for most pilots to continue a climb into cloud and to hold the aircraft steady during a letdown through cloud.

I believe that very few UK glider pilots have had even one hour formal cloud flying training and to support my argument for a minimal requirement, would cite the number of cloud flying problems encountered over previous years. I know, personally, of no incident or accident caused by a glider flying in cloud, nor can I recall of ever reading of any such incident.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment *1040*

comment by: *Michael Thorne*

AMC1 FCL.830. Sailplane Cloud Flying Rating

Theoretical knowledge instruction and flight instruction

It is hard to argue with the syllabus and test procedures for the rating ***IF*** the pilot is learning to fly competently within cloud. This sort of flying is, however, done by a very small percentage of glider pilots, and it is unlikely that this number will grow unless everyone is required to take such a rating just to permit them to fly clear of cloud and in sight of the ground above 3000 ft, which is what most glider pilots do now and wish to continue to do in the future.

If the licence becomes a requirement the most likely consequence will be a significant reduction in the number of glider pilots across Europe, as the restriction to full VFR will cripple the sport. I contend, however, that the number of pilots flying in cloud would increase if the licence is imposed, as those newly trained pilots feel the need to exercise and practise their newly found skills by actually flying within cloud. The consequence of this would inevitably be more fatal crashes within cloud whereas there are currently virtually none as hardly anyone flies in cloud today.

For safety and practicality any training and testing for the rating should be conducted in Touring Motor Gliders using vision restricting devices worn by the trainee.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by them and as the issues

you raised (restricted cloud flying rating/use of TMG) were also identified by BGA.

comment

1042

comment by: *Michael Thorne*

AMC2 FCL.830. Sailplane Cloud Flying Rating

Skill Test and Proficiency check

It is hard to argue with the syllabus and test procedures for the rating **IF** the pilot is learning to fly competently within cloud. This sort of flying is, however, done by a very small percentage of glider pilots, and it is unlikely that this number will grow unless everyone is required to take such a rating just to permit them to fly clear of cloud and in sight of the ground above 3000 ft, which is what most glider pilots do now and wish to continue to do in the future.

If the licence becomes a requirement the most likely consequence will be a significant reduction in the number of glider pilots across Europe, as the restriction to full VFR will cripple the sport. I contend, however, that the number of pilots flying in cloud would increase if the licence is imposed, as those newly trained pilots feel the need to exercise and practise their newly found skills by actually flying within cloud. The consequence of this would inevitably be more fatal crashes within cloud whereas there are currently virtually none as hardly anyone flies in cloud today.

For safety and practicality any training and testing for the rating should be conducted in Touring Motor Gliders using vision restricting devices worn by the trainee.

response

Noted

Thank you for providing this comment.

The Agency can confirm that both training and testing may take place in a TMG, as already foreseen by this NPA. However, please note that at least 1 hour of training has to be flown in a sailplane. Several methods, including vision restricting devices, may be employed to simulate instrument conditions during training and testing.

comment

1043

comment by: *Graham Northcott*

Glider pilots usually enter cloud for a relatively short time in order to climb and do not have to navigate for long distances in cloud. For this it is perhaps excessive to insist on more than 3 hours training.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment	1044	comment by: Rowland Ogden
	<p><i>As far as the training is concerned, five hours is excessive, It should be borne in mind that glider pilots do not need skills for cruising in cloud; although thermal climbs may occasionally enter cloud, and appropriate training and skills are certainly required for this, most pilots would only circle perhaps to, or near cloudbase and then return to VMC as they inevitably descend when leaving the lift.</i></p> <p><i>Thus for most pilots two hours training is found to be adequate even for acquiring the skills to continue a thermal climb into cloud and then to exit on a heading.</i></p> <p><i>Glider pilots of necessity do not fly fixed courses in terms of heading, speeds or altitude - we cannot, being inherently reliant on sources of rising air in order to make cross-country flight. Insisting on certain aspects of training as listed is not proportionate or relevant</i></p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>	
comment	1050	comment by: Richard Hayden
	<p>I am very worried by the proposal to limit flying near cloudbase. When attempting to fly cross-country in a glider, we need as much height as we can get - cloudbase if possible.</p>	
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p>	
comment	1053	comment by: Colin Troise
	<p>AMC2 FCL.830:</p> <p>I am in broad agreement with the regulation that will create a Sailplane Cloud Flying Rating.</p> <p>However, I have the following reservations about the rating as drafted:</p> <p>a) The figure of five (5) hours instruction seems like an arbitrary figure, and appears to have no justification within the document. In my opinion, a lesser figure, say two (2) hours, would be sufficient, subject to acceptance by the qualified Flight Instructor.</p> <p>b) If there is to be a practical, skill-based, test, supplemented by an oral examination, is there a logical requirement to stipulate any minimum time?</p> <p>c) Is a rating based on a skills test using a Turn-and-Slip, sufficient if then</p>	

	<p>using an Artificial Horizon, and vice-versa.</p> <p>I should prefer to see the introduction of some form of Restricted Rating, since the use of both thermals and wave in normal sailplane flying requires only that one be near cloud (nearer than the proposed licensing limits), rather than actually in the cloud itself.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying) were also identified by BGA.</p> <p>In addition, the Agency does not require a minimum amount of time for the skills test. The examiner determines the minimum time as required based on the content described in the AMC and the candidate's abilities.</p>
comment	<p>1055 comment by: <i>RogerBURGHALL</i></p> <p>The theoretical knowledge is probably the most commonly missing element and I support the requirement for theoretical instruction.</p> <p>Gliders normally have a Turn-and-Slip indicator of deliberately reduced sensitivity so that full scale is not reached in a tight thermalling turn. Requiring a demonstration of a turn of between half and full scale may be a more severe requirement than necessary.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that in the turbulent conditions of a thermal the rate of turn variations can be normal, with no implications for the control exercised by the pilot.</p>
comment	<p>1086 comment by: <i>Danish Powered Flying Union</i></p> <p>Danish Powered Flying Union strongly support AOPA Denmark's comments on AMC1 FCL.825.</p>
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p>
comment	<p>1093 comment by: <i>Andy Cobbett</i></p> <p>There should be exemptions from these exams on a subject by subject basis for pilots who have already been examined in these subjects as part of gaining existing qualifications.</p> <p>Why have an examination on navigation if someone is going to be navigating using a gps or moving map in cloud? This seems inappropriate.</p> <p>I welcome the practical skill test. However, it is not necessary to have a minimum number of hours as well as a skills test.</p>

response	<p><i>Accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to clarify that the content of theoretical exams will be based on prior experience and knowledge; the examiner should focus on specific sailplane items for someone holding an EIR or IR. In addition, all practical exercises shall be flown; however, the examiner may shorten exercises based on the level of ability of the applicant. The duration of a skill test is therefore variable and will be determined by the examiner. Hence, no minimum time will be stipulated.</p> <p>Finally, with regard to your comment on the 'examination on navigation', the Agency would like to highlight that working with a GPS/moving map requires some navigation skills and that basic navigation skills should be kept for the event of losing your GPS/moving map system.</p>
comment	<p>1094 comment by: <i>Andy Cobbett</i></p> <p>Training in TMGs is essential for the SCFR, however this rating should not be allowed to work as an instrument rating that can be used in TMGs for touring purposes as distinct from training in cloud flying.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please refer to comment 121 as the given response also applies to the issue you raised.</p>
comment	<p>1099 comment by: <i>Danish Powered Flying Union</i></p> <p>AMC 1 Appendix 6, 2.: Danish Powered Flying Union assume "150 hours" is a typing error and the correct text should be "100 hours".</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment. Please note that in addition the Agency has further reduced the hour requirement to 80 hours.</p>
comment	<p>1121 comment by: <i>HILTON THATCHER</i></p> <p>As an experienced glider pilot with over 50 years experience I feel 5 hours training is most excessive. Cruising in cloud is infact very unusual and I can't remember when I last carried out this aspect (if ever). A glider pilot may skirt the base of the cloud at times or fly around the base and we are well trained to carry out this aspect of flying. Glider pilots rely on thermals in the main to increase their height. Often the pilot will follow the thermal, if possible , to the base of the cloud for maximum lift and benefit from the height gain then withdraw onto the task heading asap using VMC to navigate. The main object is to soar under the cloud to gain as much height as possible in order to carry out the task and not to cruise and lose valuable time in cloud. Cruising as such in cloud is not a viable option</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p>

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment *1152* comment by: *AOPA Denmark*

The statement in AMC 1 FCL.825 that the forecasts should "indicate VMC" is unclear and could be misinterpreted so that basic VFR conditions are sufficient.

It should be clearly stated that "the forecasts from one hour before to one hour after the planned time of arrival should indicate that the approach and landing can be conducted in VFR conditions".

response *Noted*

Thank you for providing this comment.

The corresponding rule and AMC texts have been reworded and clarified. The Agency would like to highlight that a significant proportion of GA IFR movements, across Member States, at present use IFR-compliant methods to transition to VMC and to arrive at VFR airports. In addition, the proposal clearly states that the pilot must be in VMC 1 000 ft above the highest obstacle within 5 nm of the aerodrome reference point. Therefore, a pilot should not commence such a flight if the conditions are below this requirement.

comment *1156* comment by: *Chris Shepperd*

This requirement seems a little odd. One hour in a sailplane or powered sailplane would seem sensible. The primary requirement of this training should be basic cloud escape manoeuvres and recovery from unusual attitudes and this for a 30 hr solo pilot should be easily achievable in one hour's training. In contrast is unlikely to be possible in many TMGs hence 4hrs of additional training in such a machine seems excessive . The proficiency check will ensure that the required standard is achieved and this could require more than 5 hrs . I would support option 1 with a reduction to 1hrs. training but in a sailplane or powered sailplane only .

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/us of TMG) were also identified by BGA.

comment *1165* comment by: *Guttery*

The suggested practical skills test for the SCFR requires recovery onto a nominated heading.

This is only possible in an aircraft fitted with a direction indicator, and in forty years of gliding I have never seen any glider that has one. I agree that it is essential to be capable of exiting the cloud in a specified direction, but the way we teach it in gliders (where we are usually circling if in cloud) is to recover to straight flight, check the heading, make an appropriate adjustment,

	<p>and check again. May I suggest therefore that this procedure is accepted in the practical skills test?</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that the proposed skill test does not require the pilot to achieve this nominated heading instantly. Instead, the test allows normal practice: recover to approximate straight flight and then refine the heading with small adjustments. This is achievable with all compass types.</p>
comment	<p>1182 comment by: <i>Michael Slatford</i></p> <p>I think the proposed 5 hours cloud flying training is unrealistic. As a member of a small gliding club with an altitude restriction (FL 25) it would take a very long time to achieve and would result in many pilots giving up, thus depriving them of an exciting and rewarding hobby. Many pilots, including myself, do not fly cross country, and avoid cloud flying at all times.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1183 comment by: <i>Martin Gregorie</i></p> <p>FCL.830 Flight Instruction seems reasonable, though 2.2 may be hard to achieve, since days with 5/8 or more cloud may have insufficient lift to climb above cloudbase and the proposed qualifications do not permit aero towing into cloud.</p> <p>There is no indication of how much of the required air time must be continuously in cloud as opposed to crossing between clouds above the cloud base. There should be no time limit on elapsed time while getting the required flight time if it is required to be done in a dual control glider.</p> <p>The oral and practical tests look fine, though my glider, like many, has a T&S but no Artificial horizon, so training and/or a practical test in an AH-equipped aircraft is less useful.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p> <p>In addition, the Agency would like to clarify that training and the test may be completed in simulated instrument conditions with sole reference to instruments. Therefore, specifying a time requirement for flying in cloud is not required.</p>

Finally, for training and the test either an artificial horizon or turn and slip instrument may be used. However, it would be advisable to conduct training and testing in a similar equipped sailplane to the one you normally fly with or to ask for some familiarisation when operating different types.

comment

1196

comment by: *John Wright*

Page 190-191

Sailplane cloud flying rating

This theoretical knowledge section for sailplanes seems acceptable, and I assume that none of the more technical stuff for powered aircraft, such as TCAS, will actually be considered for glider pilots. The required knowledge seems good to me and quite sensible, and I can easily support this sort of thing for people who wish to fly in or near clouds in a sailplane. The practical skills test, for someone with my experience anyway, looks very straightforward and fair. Nothing excessive seems to be required and I would be very surprised if I had trouble meeting the requirements.

I think it is very important that glider pilots be allowed to fly in or near cloud, especially the latter, as it occurs very frequently indeed.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1211

comment by: *CAA Finland*

Page 183:

"IFR Operation

010 06 07 00 Simultaneous Operation on parallel or near-parallel instrument Runways

010 06 08 00 Secondary surveillance radar (transponder) operating procedures

062 02 05 04 ILS – Errors and accuracy"

These items are not in connection with HPA operations. Many IFR airports have parallel runways and accept still in low-density hours SEP / MEP operations and flight training. Therefore it should be included in all IFR training.

SSR procedure may be the only applicable form of approach if there is a malfunction with navigation radios in aircraft. Typically the simplest aircraft have least alternative nav sources, so SSR may have more value in light aircraft and therefore should be returned to all IFR courses. Due to same reason also ILS errors and accuracy should be returned back to all IFR courses.

response

Partially accepted

Thank you for providing your comment.

When reviewing the existing Learning Objectives (LOs), the rulemaking group tried to perform a thorough review by following 2 principles. LOs already

covered during the normal PPL or CPL theory instruction and LOs which are not relevant for IFR flights but are more type-specific have been deleted or transferred to the HPA course syllabus.

The Agency received a lot of comments indicating that the changes as proposed are acceptable but a few comments indicated that additional LOs should be deleted. Only very few comments were received indicating that LOs have been deleted which should stay. The Agency reviewed these proposals together with the experts and will introduce certain changes.

You proposed to put back some of the LOs which were moved to the HPA syllabus. The Agency discussed your proposals with the Review Group experts and came to the following conclusions:

- 010 06 07 00: the first 2 more general objectives will be reintroduced to require the CB IR or the EIR pilot to acquire some general knowledge on simultaneous operation on parallel runways. The other more detailed LOs will be kept deleted as these issues in such a detail are not seen as necessarily known by PPL/CPL IR pilots.

- 010 06 08 00: All the LOs dealing with the operation of transponders have been kept in the initial proposal within the NPA. The Agency will keep this unchanged. It seems that this is in line with your proposal. It should be highlighted that the HPA IFR extension in the AMC shows also this title to cover the other LOs deleted in the IR syllabus like 'Operation of ACAS equipment' which was moved to the HPA course. Based on your comment it was decided to reintroduce the LO dealing with the main reasons for using ACAS.

- 062 02 05 04: only a few of the LOs under 'Errors and accuracy' were kept for the NPA. Specifically all the questions to the different IR Approach Categories were deleted and should be instructed instead during the HPA IFR course. The Agency will keep this unchanged as the need for the other LOs seems not to be clearly justified.

It should be mentioned that an additional task (FCL.002) was initiated to perform a general review of the LOs for the CPL/ATPL and the IR.

comment

1213

comment by: *Stuart Lees*

re: AMC1 and AMC2 FCL.830

As I commented earlier in this response, I feel strongly that 5 hours is far too long for dual training for the SCFR. I also think it's extremely important that training can be completed in TMGs. (There's no need for TMGs to have SCFR privileges in normal operation, only during dual training for SCFR.)

Without these two issues being addressed I cant see how the training could be carried out on the scale that will be required. Pilots would already be burdened with great expense for something many are already doing safely without the proposed regulation. The additional frustration at not being able to get the training completed in a timely manner - due to inability to use TMGs - might, I fear, lead some to flaunt the regulations and continue to fly in cloud without the required licence. Any pilot doing such a thing would be unable to communicate their activity over VHF, and the result would be much greater risk to all concerned.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment	1214	comment by: <i>CAA Finland</i>
	Page 192: "(1) The theoretical knowledge instruction may be given at an approved training organisation conducting theoretical knowledge instruction only, in which case the Head of Training of that organisation should supervise that part of the course." Privileges of an ATO shall be on ORA. Full stop after ATO.	
response	<i>Noted</i> Thank you for providing this comment.	

comment	1215	comment by: <i>Adrian Prime</i>
	Living and Flying in the non restricted airspace of East Anglia we enjoy a risk free environment. Unfortunately though we also have relatively low cloud bases. It is therefore necessary to fly near to cloud to a) obtain the height leg of the BGA/ FAI Silver badge. and b) have a reasonable height to fly cross country safely. It is therefore a definite requirement to some how enable us to achieve these two things otherwise the Gliding movement will die as new member are unable to advance without flying from other site in the country. If it is a requirement to obtain further training to implement this then we must go down that route but please do not restrict flying unnecessarily.	
response	<i>Noted</i> Thank you for your comments.	

comment	1219	comment by: <i>Peter Blackman</i>
	The proposed SCFR training appears excessive considering most glider pilots circle to or near cloudbase and then return to VMC. The nature of gliding - taking advantage of rising air - precludes the fixed course flying which forms the majority of the proposed training.	
response	<i>Noted</i> Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.	

comment	1230	comment by: <i>John Klunder</i>
	<p>The Sailplane Cloud Flying Rating allows the current established practise of flying sailplanes in IMC to continue and for this reason it is very strongly supported.</p> <p>The theoretical knowledge and skills test requirements are relevant and appropriate to flying sailplanes within cloud. They appear disproportionate to flying clear of cloud but with less than the required separation for VMC which represents the great majority of sailplane flying in IMC.</p>	
response	<p><i>Noted</i></p> <p>Thank you for your comments.</p>	
comment	1239	comment by: <i>James ODELL</i>
	<p>I consider that five hours of training is excessive. Glider pilots do not need skills for cruising in cloud. Most glidrer pilots will only circle to, or near, cloudbase. Although thermal climbs may occasionally enter cloud, the pilot would return to VMC as they leave the lift. For most glider pilots two hours training is adequate for acquiring the skills to continue a thermal climb into cloud and then to exit on a heading. Glider pilots do not usually fly fixed courses as we are reliant upon sources of rising air in order to make a cross-country flight.</p>	
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>	
comment	1246	comment by: <i>Mike Philpott</i>
	<p>I have read the BGA response to your document.</p> <p>My own view is that the best option is to leave matters as they currently are. If this is not possible, then the essence of good regulation is to enable an activity rather than to prohibit and inhibit the activity.</p> <p>As stated in my previous comment, it is absolutely necessary in the UK for sailplanes to be able to fly near to or inside cloud. Modern sailplanes are generally equipped with GPS, radios and Flarm anti collision equipment. It is already mandatory for pilots to cal on 130.4 MHz and to monitor this frquency whilst flying in cloud. In practically all cases, cloud flying in the UK is within uncontrolled airspace. This means that any IFR traffic, which is generally inside controlled airspace will never come into contact with gliders. On the extremely rare occasion that a glider needs to enter cloud whilst within controlled airspace, the pilot will be in contact with the controlling ATC unit anyway.</p> <p>To be able to fly sailplanes in the UK, flying in or near cloud is essential, both for reasons of safety and reasons of practicality. A sailplane needs to gain altitude in order to be able to glide to the next area of rising air. If it has to break off climbing prematurely, then there is real risk of not being able to reach the next thermal. Thiw would increase hazard rather than reducing it.</p>	

As a highly experienced and active sailplane pilot, I would not be able to pursue my activities if I were no longer able to fly near to or inside cloud. I have considerable personal investment in my sailplane and spend a lot of time and effort in mentoring people into our sport. It must be remembered that gliding is one of the major contributors of people to the aviation industry.

In light of EU legislation, a more formal cloud flying qualification may become necessary. If this is to happen, it must be applied in a way that enables current practice and formalises it.

The existing training is competency based and custom and practice built up over 50 years of safe operation has demonstrated that there is no need for complex and burdensome syllabuses such as have been proposed. The proposal for 5 hours training is unnecessarily burdensome. The BGA says that 3 hours with a competency requirement is sufficient, if there has to be any at all. If there has to be a minimum, then this should be it.

Whatever the outcome is for glider pilot licensing, it is essential that cloud flying is enshrined within these qualifications in a way that remains accessible to the ordinary sailplane pilot.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment *1258*

comment by: *kilkelly*

the suggested training time for this type of cloud flying is excessive. 2-2.5 hours is really all that is necessary. The instrument scan in a glider is not difficult. The basics can be taught in 1-1.5 hours. Another hour can then be spent on recovery from unusual attitudes and improving the scan

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment *1269*

comment by: *Michael Pointon*

Five hours training for glider pilots to fly in cloud is excessive. We do not normally need skills for straight line flight in cloud although sometimes when circling in thermals we may enter cloud. Most pilots will only circle on occasion to or near cloudbase and then return to VMC on descending after leaving the lift.

For most pilots two hours training is more than sufficient to be able to exit on a heading after a thermal climb into cloud. Insisting on other aspects of training as listed is disproportionate and irrelevant.

response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1271 comment by: <i>Mike Collins</i></p> <p>I think that a dead reckoning navigation test in a sailplane, especially in IMC, is almost impossible. Sailplanes circle to gain height in thermals, slow up in rising air and speed up in sinking air. To maintain height and stay airborne a sailplane pilot will need to circle whenever there is strong lift and would not be flying a straight course and therefore could not complete a DR exercise. Dead reckoning requires the pilot to have a previous fix and to calculate a new position based upon known or estimated speeds over elapsed time, and course. This part of the training and skill test should be removed as DR flying is not relevant to sailplane pilots.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that DR navigation is essential to cross-check GPS information. Therefore, the proposed test item will be kept.</p>
comment	<p>1273 comment by: <i>Joshua HOOLE</i></p> <p>Being a glider pilot, I can fully understand the want, and need for training before undertaking cloud flying. Due to the nature of the Gliding community, there is always ample support for pilots wanting to try new ways of flying, and cloud flying is one of these. I am one of the many pilots who will circle to near cloudbase, maintaining a safe lookout and positioning, before leaving in search of more lift. Therefore the privileges of flying near cloud should be maintained for the gliding community. However, I would support the regulations, but the "signing off" of training should be competency based, rather than set on minimum of 5 hours. Gliding clubs have a diverse range of pilots, so this proficiency must be flexible, to accommodate everybody's previous flying experience.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1311 comment by: <i>AOPA France</i></p> <p>GM1 FCL.825 En-Route Instrument Rating</p> <p>AOPA France agrees that the EIR shall require all departures, arrival and approaches to be flown in accordance with VFR. The EIR holder must also be made well aware that a need to fly an 'Emergency IFR approach' must only be</p>

response	<p>declared in exceptional conditions and that the use of the EIR may of consequence be restricted, other than in the en-route segment, to fair weather conditions only.</p>
	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency agrees that certain emergency situations can be more challenging for an EIR pilot. To mitigate the risk, it was decided to amend the AMC to include 2 IFR approaches, in the context of an emergency situation, to be demonstrated to the student during training. It will be emphasised that the student does not hold the privilege to conduct an IFR approach and will not be required to complete it during the skills test.</p>
comment	<p>1313 comment by: AOPA France</p> <p>AMC2 FCL.825(c) En-Route Instrument Rating FLIGHT INSTRUCTION (a)(6)</p> <p>AOPA France does not consider that this sub-paragraph is relevant for a rating whose privileges do not include flight in the instrument pattern. Hence we recommend that sub-paragraph (a)(6) is deleted.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency would like to highlight that the 'instrument flight pattern' exercise is part of basic instrument flight training. Therefore, the Agency believes that this is an essential element of the EIR practical training syllabus.</p>
comment	<p>1314 comment by: AOPA France</p> <p>AMC2 FCL.825(c) En-Route Instrument Rating FLIGHT INSTRUCTION (a)(14)</p> <p>AOPA France considers that this paragraph lacks objectivity. For example, 'controlled airspace with a high density of traffic' is a somewhat subjective requirement and may be difficult to achieve in practice. The general aim of this sub-paragraph will undoubtedly be recognised by training providers, but we do not consider that sub-paragraph (a)(14) is necessary and recommend that it should be deleted.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency believes that the proposed text is appropriate and it will be kept as it is an important experience element for EIR students. An instructor/ATO should endeavour to subject them to this kind of environment where possible.</p>
comment	<p>1315 comment by: AOPA France</p> <p>AMC4 FCL.825(e)(f) En-Route Instrument Rating Skill Test / Proficiency Check Section 3 Item j</p> <p>AOPA France considers that this item should be amended to read '<i>Simulated</i></p>

diversion and simulated emergency IFR approach to an alternate aerodrome'. Although the privileges of the EIR are limited to en-route flight under IFR, the safe conduct of an 'Emergency IFR approach' is a perishable skill which requires periodic re-testing.

response *Not accepted*

Thank you for providing this comment. Please refer to comment 558 for the response to the issue you raised.

comment

1333

comment by: *David Sandells*

Part '9) Subpart 1 - Additional Ratings (Sailplane cloud flying) - Ammendment to FCL.830 section 2.2

Touring Motor Gliders (TMGs) are essential training equipment for sailplane instuction. Their advantages include:-

- * Often seated side-by-side allowing more effective close instruction (sailplanes are typcially tandem - one behind another)
- * Longer flight durations can be achieved by using the engine to move to better locations for gliding
- * Extremely similar characterisitcs to sailplane when flown with the engine off
- * Flights can be extended using the engine to climb to allow longer and more consistent training
- * Longer flights = reduced numbers of take-offs and landings = better cost-effectiveness for the student
- * Flexibility and simplicity of launch allow for more efficient training and therefore better ability for training organisations to meet student demand.

These benefits lead to better student training and therefore improved safety
Also these benefits lead to more efficient instruction and therefore reduced economic impact of the proposed changes.

therefore (TMGs) should not be excluded from sailplane instruction. They should be positively encouraged and included due to the benefits listed above.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (use of TMG) was also identified by BGA.

comment

1334

comment by: *Darren Baldwin*

I feel that it is not necessary for glider pilot to undergo five hours of training when you consider that glider pilots do not need the skills for cruising in cloud. We may carry climbs that occasionally netre cloud, and the correct level of training and skills required for such activity should be set out and catetred for and certified. most glider pilots will circle to cloudbase and then retrun to VMC as they move out of the lift.

It is my opnion that most glider pilots could be trained adequately in two hours.

in this time they can obtain the skills required to thermal climb into a cloud and exit on a heading.

Glider flights cannot rely on sources of rising air to make cross country flights and therefore we do not fly a course heading and set speeds and predetermined altitudes. To insist on certain aspects of the training as is listed, is not proportionate or relevant.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment

1335

comment by: *David Sandells*

Section 10) Subpart I - Additional Ratings (AMC2 FCL.830 **Sailplane flying rating skill and proficiency check**)

Part 2 lists all of the instruction examples as required for a proficiency test.

This will dramatically increase the cost and duration of the test due the nature of sailplanes and their inability to re-climb (they have no engine!)

This will have a strong negative economic impact.

Flight instructors should be able to select some of these exercises depending on the capability of the applicant pilot. In particular it should not be necessary to perform both versions of the escape manoeuvre as this would use up much of the gliders energy and therefore necessitate either a very high, expensive launch or multiple expensive launches.

Sailplane clubs with only winch launch facilities would effectively be prevented from conducting this training as they would be unable to provide long enough flights.

Restricting the availability of training would have negative economic benefits

Restricting the availability of training would lead to less qualified pilots and therefore not meet the safety improvement objectives of the proposal.

Remove the absolute need to conduct all of the flying tests for a revalidation test - make this optional for certain applicant pilots.

response *Partially accepted*

Thank you for providing this comment. The Agency agrees that the content of the theoretical knowledge, training and skill test should be based on the experience level of the student. In any case the examiner must conduct all prescribed exercises; however, the examiner may focus more on areas where the applicant has less experience. In addition, the Agency would like to highlight that the rating has no revalidation, but only a recency requirement. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes

(excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

1336

comment by: *David Sandells*

10) Subpart I – Additional Ratings –
AMC2 FCL.830 Sailplane Cloud Flying Rating
SKILL TEST AND PROFICIENCY CHECK

The checks make no allowance for pilots who have missed the 24 month renewal date. For competent pilots in this category a full repeat of the training (including hours) could be unnecessary for them to safely regain the rating.

This situation would have a negative economic impact with no certain benefit to safety.

Pilots outside of renewal dates should have to repeat all of the flying tests but not repeat the training hours requirement.

The above should be written into the proposed amendments.

response

Accepted

The Agency acknowledges your comments.

The recency requirements for SCFR have been amended. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

1359

comment by: *Glider Pilot - 3400hrs FAI Diamond Badge Full Rated BGA Instructor*

The following applies to paragraph 2 on page 191

I am entirely in favour of effecting the required training and testing in a pure glider and agree with the sailplane element of requirement. However if a minimum number of hours continues to be mandated and TMG are to be excluded for at least 1 hour then it is not a practical proposition to acquire this time in a pure glider as the majority of the training flight durations are measured in single figures of minutes, therefore TMG is an essential training tool to acquire the required duration.

It would be more appropriate to require a minimum number of dual training flights rather than the duration.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 1364 comment by: *Steve Wilson*

While I understand the possible need for this, I could only support the SCFR. Gliders have flown for years within 1000 feet of cloud with a negligible safety risk.

response *Noted*

Thank you for your comments.

comment 1370 comment by: *Jon Stiles*

Dear Sir,

Having been drawn into the base of a cloud I welcome training that would equip me to escape more safely. However I feel the suggested syllabus for sustained cloud flight is beyond the requirements of the club flyer but could be offered as an additional endorsement.

Regards,
Jon Stiles
07761068703 / 01424774089

response *Noted*

Thank you for your comments.

comment 1372 comment by: *Christopher RAMLER*

I support the theoretical knowledge and flight instruction, and the skill test and proficiency check for the Sailplane Cloud Flying Rating, however the requirement for 5 hrs dual flight instruction is excessive and should be removed. An oral examination and practical skill test with a suitably qualified and experienced instructor should be sufficient. It should be remembered that most glider pilots will only spend a matter of a few minutes each year flying in cloud, if at all.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 1377 comment by: *George Metcalfe*

Comment to para 2.2 on page 191.

Sailplane pilots with previous experience of cloud flying under country

	<p>regulatory or delegated arrangements (e.g. British Gliding Association) should also benefit from any reduction in "sailplane or powered sailplane (including TMG)" requirement.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Prior cloud flying experience may be credited to the the Part-FCL cloud flying rating. This process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>1386 comment by: <i>Jane Moore</i></p> <p>I am a UK glider pilot, I have 1500 hours and I am an assistant instructor. I have flown at numerous sites and in widely varying conditions including high wave flights, cross country thermalling flights and mountains.</p> <p>I do not fly in cloud, but on behalf of fellow UK pilots who do, I support the cloud flying rating. However, I think the practical part of the training is excessive, 5 hours uner the hood would be prohibitively expensive, unnecessarily demanding and unsuited to the way gliders, as opposed to power planes, operate, for the following reasons: Glider pilots do not fly long distances in stratus cloud, they use occasional cloud climbs in cumulus to extend the range of the flight, exiting the cloud as soon as enough height has been gained and continuing on track. For the purpose of gliding, 'track' is not a straight line to the next VOR, it is a meandering course through the sky from one energy source (thermal) to the next in the general direction of the next turnpoint. The flight is very rarely a straight line as small adjustments are made continually to make the most of the rising air encountered, and it is not possible to maintain a constant altitude. The theoretical part of the syllabus is not a problem. I would prefer a practical training requirement of no more than 2 hours, depending on the ability of the pilot.</p> <p>As to flight in IMC, that is, above 3000ft but clear of cloud, there needs to be provision to allow this, otherwise gliding will be so restricted that it will be seriously threatened. I consider that there is no need for special training, the skills required are those for normal flight in VMC, that is, keep a very good look out. Pilots will normally climb to within a few hundred feet of cloudbase before setting off for the next cloud (thermal). When wave flying, the pilot will be alongside or above the lenticular. In both cases, normal flying training with the emphasis on look out is all that is required. There is no need for dual training under a hood. Theoretical training on human factors, weather and icing would be advantageous.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying) were also identified by BGA.</p>
comment	<p>1422 comment by: <i>Steven Lambourne</i></p> <p>Many commercial pilots come from gliding. This will kill off gliding.</p>
response	<p><i>Noted.</i></p>

The Agency acknowledges your comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment

1423

comment by: FAA

The knowledge training requirements for an applicant for an EIR [FCL.825(d)] and a competency-based modular IR (A) (AMC2 Appendix 6) may be better addressed by stipulating a lower minimum number of hours required and use a competency based training and checking technique for testing.

Reason: Annex 1 2.7.1.1 of ICAO for an instrument rating requires subject areas to be covered rather than stipulating an hour constraint to cover material. EASA's proposed knowledge hour requirement is set at 100 hours for each of the ratings.

Recommendation: EASA should only stipulate the subject matter to be covered prior to an applicant taking the theoretical knowledge test.

Safety Impact: Hours of study do not necessarily equate to knowledge gained; whereas a knowledge test gives an indication of knowledge retained. Therefore one should consider subject matter content and use a competency based training and checking technique for testing based on the content and not focus on time. This would have more of a safety impact on the training outcome.

response

Not accepted

Thank you for providing this comment. The Agency strongly believes that, in the interest of harmonisation and standardisation, a minimum amount of hours must be stipulated.

comment

1424

comment by: Hans SCHURICHT

INSTRUCTION AND DUAL FLYING TIME SHOULD BE BASED ON THE WHAT IS NEEDED TO BRING THE CANDIDATE UP TO THE REQUIRED STANDARD TO PASS THE TEST. FIVE HOURS SEEMS EXCESSIVE AND SHOULD NOT BE SET AS THE AS A MINIMUM REQUIREMENT. TOURING MOTOR GLIDERS SHOULD BE PERMITTED FOR TRAINING AND CARRYING OUT THE TEST.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

1427

comment by: FAA

The knowledge training requirements for an applicant for an EIR [FCL.825(d)] and a competency-based modular IR (A) (AMC2 Appendix 6) may be better addressed by stipulating a lower minimum number of hours required and use a competency based training and checking technique for testing.

	<p>Reason: Annex 1 2.7.1.1 of ICAO for an instrument rating requires subject areas to be covered rather than stipulating an hour constraint to cover material. EASA's proposed knowledge hour requirement is set at 100 hours for each of the ratings.</p> <p>Recommendation: EASA should only stipulate the subject matter to be covered prior to an applicant taking the theoretical knowledge test.</p> <p>Safety Impact: Hours of study do not necessarily equate to knowledge gained; whereas a knowledge test gives an indication of knowledge retained. Therefore one should consider subject matter content and use a competency based training and checking technique for testing based on the content and not focus on time. This would have more of a safety impact on the training outcome.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment. The Agency strongly believes that, in the interest of harmonisation and standardisation, a minimum amount of hours must be stipulated.</p>
comment	<p>1434 comment by: Philip TAYLOR</p> <p>The proposal for 5 hours formalised training is excessive for the SCFR. As the rating will only be granted on satisfactory completion of a skill test, the only requirement should be that the candidate is suitably prepared. This decision does not require an arbitrary number of training hours but should be based on the individuals own competence.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1476 comment by: René Meier, Europe Air Sports</p> <p>Page No. 191 to 192 Paragraph: 9) Subpart I - Additional Ratings - AMC2 FCL.830 Sailplane Cloud Flying Rating - Skill Test and Proficiency Check</p> <p>Comment: EAS supports the proposed syllabus for the SCFR oral examination and the practical skill test.</p> <p>Justification: N/A</p> <p>Proposed text: No change</p>
response	<p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>1477 comment by: René Meier, Europe Air Sports</p>

	<p>Page No. 190 to 191 Paragraph: 10) Subpart I - Additional Ratings - AMC1 FCL.830 Sailplane Cloud Flying Rating - Theoretical knowledge instruction and flight instruction</p> <p>Comment: EAS supports broadly the proposed syllabus for the SCFR theoretical knowledge instruction and flight instruction.</p> <p>Justification: N/A</p> <p>Proposed text: No change</p>
response	<p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>1485 comment by: <i>Julian Fack</i></p> <p>As a 2000+ hours cross country and competition glider pilot I support the introduction of the Sailplane Cloud Flying Rating, as without the ability to fly close to cloud, no serious cross country soaring would be possible in UK, with our low cloudbases. I would also appeal for a lesser rating to allow flight under IFR, but clear of cloud as this is the mode of flight most used in cross country soaring flight in the UK.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1488 comment by: <i>Peter Pengilly</i></p> <p>I would like to support the introduction of a Sailplane Cloud Flying Rating, I believe it is essential to maintain the excellent safety record of gliding in the UK.</p>
response	<p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>1489 comment by: <i>Peter Pengilly</i></p> <p>I support the En-Route Instrument Rating</p> <p>I suggest the proposed minimum flight test duration of 90 minutes is too long, it should be possible to assess a candidate's ability with 60 minutes, maximum. Other states carry out a full instrument rating test, including approaches, in less than 90 minutes. A test duration of > 90 minutes will be too costly for candidates and will be seen as too much of a barrier to obtain the rating, and so will negate some of the safety benefit to be gained by introducing the rating.</p>
response	<p><i>Accepted</i></p> <p>Thank you for providing this comment. The Agency agrees with your comment</p>

and has decided to reduce the minimum skill test duration to 1 hour.

**C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the
aeroplane instrument ratings**

p. 197

comment

904

comment by: *Colm Farrell*

Both the EIR and competency based IR require the candidate to undertake a course of study including compulsory class room time. The CBIR requires a course at an ATO.

All of this is surplus to requirements. The test should be designed to demonstrate whether the candidate has acquired the required level of knowledge or not. How they acquired that level of knowledge should not be relevant.

response

Noted

Thank you for providing this comment. The Agency and the Rulemaking Group experts agreed that some classroom time is necessary to ensure solid knowledge and standardisation across ATOs. However, the Agency decided to further reduce the minimum amount of hours to 80.

comment

947

comment by: *Peter Carter*

The use of a SCFR-full (option 1) appears to be the best option for glider pilots as I see it. As a glider pilot, this option appears reasonable, safe, and more importantly, useable. Obviously, safety is of the utmost importance, and the 24 month renewal that would be needed seems to be very sensible, as well as the formalised training. My only wish is that the training doesn't become so formal and beauratic that it no longer functions. I approve of the SCFR-full option.

response

Noted

Thank you for your comments.

comment

1133

comment by: *terryw*

Although most glider pilots may elect not to fly in cloud, there will inevitably be occasions when this situation has to be dealt with. For example, flying in wave very often means a long descent through cloud which has closed up beneath.

response

Noted

Thank you for your comments.

comment

1478

comment by: *René Meier, Europe Air Sports*

Page No. 197 to 227
Paragraph: All - outlining the RIA approach

Comment: EAS compliments EASA generally on producing as thorough an RIA

	as was feasible given the relative lack of available and specific data to measure risk.
response	<i>Noted</i> Thank you for providing this comment.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 1 Process and consultation

p. 198

comment	19 I have an IMC rating in the UK as a PPL pilot but I have not got a Night rating due to lack of sufficient colour vision. Hence I cannot train for a PPL IR under the present rules. Does this document need to address this point in relation to the proposed new qualifications as I would like to add to my qualifications as a PPL with SEP rating	comment by: <i>Philip Simpson</i>
response	<i>Noted</i> Thank you for providing this comment. The Agency, after reviewing the issue, has decided to amend paragraph FCL.610. Now an applicant for the IR(A) shall hold a night rating only if the IR privileges will be used at night. The Agency also decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.	

comment	78 We would make an additional comment on the process and context leading to the NPA. After the FCL008 task began, various stakeholders made representation to EASA and the European Commission, during the Comitology process for the main Part FCL, regarding the accessibility of instrument qualifications in light of the cessation of national qualifications and the requirement for EU residents operating 3 rd country aircraft to qualify under Part FCL. We believe that the Agency and the Commission gave various assurances that these concerns would be remedied, in part, through FCL008. We believe that these assurances add additional weight to the Agency's position as presented in the NPA and that this should be considered in the Agency's evaluation and response to feedback from the CRT process.	comment by: <i>PPL/IR Europe</i>
response	<i>Noted</i> Thank you for providing this comment.	

comment	628 As Aove, the failure to accept the proven, economical UK IMC rating because of time constraints is criminal	comment by: <i>PPL holder</i>
response	<i>Noted</i> Thank you for providing this comment.	

The Agency would like to highlight that an existing licence and rating (i.e. UK IMC Rating) may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency. The Agency will support the CAA UK in finding a solution to this issue.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 2 Issue analysis and risk assessment p. 198-204

comment 79

comment by: PPL/IR Europe

Regarding the first sentence of para 2.1, "*Stakeholders have warned on various occasions that the current JAR-FCL scheme for PPL holders to obtain instrument ratings is not proportionate to the risks of non-commercial operations with non-complex aircraft.*"

We would word our position as a stakeholder differently. We do not believe any flight safety purpose is served by the differences at present between the JAR FCL IR and the proposed changes in the NPA. For example, we do not believe that the present "unnecessary" LO content in the IR TK (as identified by FCL008) has any flight safety value. Furthermore, we believe that a competence-based training method for the IR, which preserves the existing Test content and standards, would have zero detrimental safety effect. Therefore, we do not think the NPA is proposing changes which represent a trade-off between "more accessibility" and "accepting higher risk in non-commercial non-complex operations". We believe the NPA proposals present no additional risk in respect of the CBM-IR.

In respect of the EIR, clearly a risk assessment is needed for a fundamentally new kind of qualification. We agree with the Agency's risk assessment.

We have no further comments on the RIA other than to praise the Agency for what we consider a very open-minded and fair methodology

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that it could not identify any negative safety impact of Option 2. See page 216 'Comparing the options'.

comment 99

comment by: Peter KEUTGENS

Well over 10000 of European based FAA instrument rated pilot entries in the FAA's "Airman Directory Releasable File" may need to be taken with a pinch of salt, but fact remains that large numbers of European pilots have in the past opted for the FAA instrument rating for the very reasons set out in this Regulatory Impact Assessment (RIA). I applaud the Agency's effort to close the gap in European rulemaking in this regard and I believe that both the EIR and new competency-based IR should remove much of the reason for European private pilots to go abroad.

Whilst the RIA in my mind successfully argues the case for the proposed EIR

and competency-based IR for the benefit of future European based instrument rated pilots, it appears that the economic impact of the thousands of currently FAA rated pilots needing to convert to EASA ratings remains unclear. For instance, the requirement of 100 hours PIC instrument flight time appears largely plucked out of thin air and so I would have liked to have seen some evidence of what that requirement equates to in number of European based FAA instrument rated pilots left out. I argued above that that requirement may be overly restrictive.

With a new set of rules available for future European PPL and CPL instrument rated pilots, I do not see why all pilots historically holding FAA ratings (for reasons set out in this RIA) but wishing to convert should not be given a clear path towards the European equivalent rating. That is short of a full mutual recognition of FAA and EASA licences and ratings, because at the end of the day the skill required to safely fly an aeroplane down an instrument approach in IMC are the same in the US and Europe. With FAA and EASA licences I believe pretty much at a par in terms of learning objectives surely nothing should stand in the way of a bilateral agreement on FCL?

response *Noted*

Thank you for providing this comment.

Pilots without a European rating were included in the analysis. With regard to crediting prior instrument flight time for third-country IR holders, please see responses to your other comments.

comment 327

comment by: *Horst Metzig*

"Sharkholders expressed concern that accidents are frequently caused by PPL holders without an instrument rating" This finding ist not a question of be a holder of any IFR rating, this is a question of discipline, this is a question defined in topics of psychology - aircraft psychology -

All diese Flugunfälle sind für mich nicht eine Frage, ob jemand die Fähigkeit besitzt, ein Luftfahrzeug unter Instrumentenflugbedingungen sicher zu führen, sondern eine Frage der Disziplin, es ist ein Phänomen, welches mit der Fliegerpsychologie erklärbar ist. Darin enthalten sind Hand - Auge Koordination, Reaktionszeiten, Konzentrationsleistung, Mehrfachbelastungsfähigkeit, Intelligenz und die Persönlichkeit.

Ich bitte, und ich empfehle, und ich schlage der EASA vor, das es ein einheitliches europäisches Flugunfalluntersuchungsgesetz gibt, darin enthalten muss sein, das in allen Mitgliedstaaten bei Flugunfällen ein psychologisches Gutachten aller Flugunfallbeteiligten mit zur Gesamtauswertung der Flugunfallanalyse kommt. In Deutschland gibt es sowas nicht, das ein Fliegerpsychologe gesetzlich verpflichtet ist, bei der Flugunfallursachenforschung/Untersuchung mitzuwirken gemäss den neusten Kenntnissen der Fliegerpsychologie.

Fliegerunfälle werden im Kopf vorbereitet und durchgeführt - unbewusst und ungewollt - und diese hier geschilderten Unterscheidungen, ob jemand zur PPL auch noch eine Instrumentenflugberechtigung hat, ändert nichts daran, das diese Flugunfälle bei ungünstiger fliegerpsychologischer Eignung dann eben mit einer IFR Pilotenlizenz auf einer höheren Beanspruchungsebene weiter verursacht werden.

	<p>Ich schlage vor, Ihre geschilderte Statistik nicht nach der Unterscheidung PPL - CPL - ATPL, sondern nach dem Gesichtspunkt und Merkmalen der Fliegerpsychologie. Dann kommen wir der Ursache sehr nahe.</p> <p>Horst Metzsig, Gliderpilot</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your comment.</p> <p>The Agency is not sure what is meant by the term 'Sharkholder' used by you. It is understood that you refer to stakeholders and to the Explanatory Note.</p> <p>The Agency agrees that the accidents mentioned in the RIA and the Explanatory Note, which happened in situations where VFR-rated pilots did not manage to escape from marginal weather conditions (or IMC) because they were not trained, mainly happened due to a lack of situational awareness or even due to a too high level of self-confidence.</p> <p>However, your proposals to introduce a specific accident investigation law which should include some kind of psychological check and may also be an assessment is not part of this licensing training and checking requirements.</p> <p>The Agency believes that the proposed EIR and the competency-based IR will help to provide the necessary training to PPL pilots to better cope with this kind of situations. This will lead to a positive trend regarding 'VFR flight ending up in IMC' situations and incidents.</p>

comment	<p>579 comment by: <i>John Richardson</i></p> <p><u>C. Regulatory Impact Assessment</u> <u>I. Regulatory Impact Assessment for the aeroplane instrument ratings</u></p> <p>The assessment of benefits in the RIA is exaggerated in terms of the number of pilots obtaining the rating given the economic conditions present in Europe and hence the safety benefits are also exaggerated. It is unlikely that many pilots will be willing to pay for the limited benefits of the EIR given the TK requirements. The CBM IR is more attractive as a route to an IR but there will be a limited number of pilots willing to consider this in the current economic climate given the costs involved and the substantial time commitment required to achieve the TK. Your assessment in the RIA that option 3 will produce between 12000 and 20000 new IR is wildly optimistic and should be significantly reduced.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that the estimates in the RIA are based on transparent assumptions and methodology. Please consider that even if the benefits are optimistic, the relative advantage of the preferred Option over Option 0 and Option 1 still remains valid. Also consider that 12 000-20 000 IR holders mean 9.8-16.3% of PPL(A) holders. It is still lower than the US share (26.8%).</p>

comment	<p>629 comment by: <i>PPL holder</i></p> <p>I would bet heavily that this is related to price...</p>
response	<p><i>Noted</i></p> <p>Thank you for this comment.</p>
comment	<p>630 comment by: <i>PPL holder</i></p> <p>Again, price!! and you have even identified the costs as relating directly (in general) to the onerous requirements of the JAR IR!! This is not rocket science!!! Do you really think US IR pilots are less safe? 2.1 and you cleverly ignore in table 16 UK IMC rating holders</p> <p>Re Table 10.11 and 12</p> <p>The opportunity Cost IS (not might be) high for PPL holders not wishing to fly commercially This is why not many do it!!</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency is aware of the UK IMC rating; however, as this is not a full IR, it was not included in the comparison study.</p>
comment	<p>831 comment by: <i>Timothy Nathan</i></p> <p>It is a pity that figures for IMCR holders could not have been extracted separately, as it is widely held and believed that UK weather related accidents (both break up and CFIT) would have been much worse in the absence of the IMCR.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1201 comment by: <i>General Aviation Manufacturers Association / Hennig</i></p> <p>GAMA has reviewed EASA's regulatory impact analysis and welcomes the details included by the agency including a review of other regulatory systems as well as general surveys of different flight schools.</p> <p>In section 2.2, however, we note that the focus of the comparison is US Federal Aviation Regulations 14 CFR 61.65 stating that the applicant shall have 40 hours instrument time and have <u>no minimum amount of class room</u> instruction for the theoretical knowledge course. While this is true, the FAA system establishes a set of Learning Objectives (FAA terminology for "LO" is "Learning Statement Codes" at http://www.faa.gov/training_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf) that define the needs. The FAA, however, provides an</p>

alternative, expedited path for a pilot to obtain an instrument rating which includes minimum requirements for both flight time and ground school per 14 CFR Part 141 Appendix C that identifies under 3. Aeronautical Knowledge Training at "30 hours of training if the course is for an initial instrument rating" in combination with 4. Flight training of "35 hours of instrument training if the course for an initial instrument rating."

Again, while not directly impacting this NPA, GAMA notes the availability of both Part 61 (independent flight training) and Part 141 (U.S. equivalent to ATO) with separate requirements for obtaining an instrument rating. The Part 141 path provides an expedited (likely less costly) and more structured course for the applicant.

response *Noted*

Thank you for providing this comment.

The Agency acknowledges that FAR 14 CFR Part 141 Appendix C (3) stipulates minimum requirements for classroom instruction.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 3 Objectives

p. 205

comment 588

comment by: *philip DRAKE*

Gliding in the UK has a good safety record proven over the last 50 or so years when regularly flying in close proximity to cloud. I am in favour of the SCFR as it would establish a structured training and skills test procedure that would take account of this fact.

By restricting the amount of airspace available by the 1000feet rule extra pressure is placed on the glider pilot to plan for a possible outlanding very much earlier than is currently normal. In fact with the UK having a predominately SW airflow and a lower cloudbase than most European countries this would make gliding totally impractical on most days of the year.

Gliding clubs provide a profitable and environmentally friendly use of land resources. This may well be lost through over regulation in an increasingly bleak financial climate and in my view the SCFR allows the sport to continue.

Most of us fly close to, but not actually in cloud regularly and in my view the 5hrs training is somewhat excessive. Also training in a sailplane is impractical due to variable conditions during the flying day.

I propose 3hrs would be nearer the requirement, and training carried out with motorgliders as this gives a similar situation to sailplanes.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating/ use of TMG) were also identified by BGA.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 4 Identification of options

p. 205-207

comment 54 comment by: *John Richardson*

The statement that the IMCr confers full IR privileges is technically incorrect. The IMCr is limited to take off and landing with in flight visibility greater than 1800m and the holder cannot enter Class A airspace. I suggest that you remove the phrase.

response *Accepted*

Thank you for providing this comment.

The Agency agrees with your comments and will amend 'full' IR to 'limited' or 'restricted' IR.

comment 67 comment by: *James Chan*

I am in full support for Option 3

Please make consideration for those who are colour blind - and therefore should issue an IR with restriction for daytime flying.

response *Noted*

Thank you for providing this comment.

The Agency, after reviewing the issue, has decided to amend paragraph FCL.610. Now an applicant for the IR(A) shall hold a night rating only if the IR privileges will be used at night. The Agency also decided to extend the EIR privileges to IFR by night provided that a night rating is held in accordance with FCL.810.

comment 1253 comment by: *LGCmember9432*

As an enthusiastic cross country pilot and instructor of approximately 30 years experience, my needs is to be able to climb to cloudbase but not into cloud, particularly in 4000' base conditions. Without this, landout risks substantially increase, particularly on what would have previously have been perceived as 'good days'.

My needs notwithstanding, I also support those (relatively few of us) who wish to fly (climb) in cloud, but recognise that some training would be required for those new to this activity. I cannot though see why any additional training is needed to do what we all currently do, ie climb to cloudbase when it exceeds 3000'.

Clearly none of the proposed options fits these needs, possibly 1 is closest, but the demands on pilots who wish to fly as now and out of cloud (ie the vast majority) will be quite onerous. So, I request that two levels of qualification be created, one for flying out of cloud for which an appropriate amount of ground based, awareness training be required. For cloud flying, training should be to a level that ensures safety.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. To continue your practice of climbing up to cloud base above 3 000 ft AMSL, you will be required to obtain a SCFR. Please note, however, that previous national licence and rating may be converted into a Part-FCL licence and rating (i.e. SCFR) during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 6 Analysis of impacts

p. 210-215

comment

45

comment by: *Carmine BEVILACQUA*

I highly agree with the proposed reduction in safety risks by creating a wider skill base.

response

Noted

Thank you for providing this comment.

comment

46

comment by: *Carmine BEVILACQUA*

Especially the length and the lack of flexibility of the training kept me from approaching it. This will change, once the new rules will be in effect.

response

Noted

Thank you for providing this comment.

comment

631

comment by: *PPL holder*

Option 1 DOES NOT reduce training coss by more than half, because it does not compare like with like
it IS NOT an IR rating

The 20% reduction in cost of the modular IR relies on heavy investment by FTO in simulators, which will ahve to be passed on to customers.
I very much doubt that ANY will accrue

As before, I think your assesment of reduction is cost is optimistic, and your projected increase in uptake is unrealistic

I think your proprtionality assesmentt fo Option 1 is wrong. The rating is flawed an dangerous. I do not think it is in any way a useful addition

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that currently hundreds of General Aviation (GA) airports in Europe are not IFR capable. Indeed in many regions and cities, there is no practical access to an IFR airport for light GA. Therefore, a significant proportion of GA IFR movements at present use transition from IFR to VFR in order to arrive at VFR airports, in a very similar way to the proposed EIR. The Agency strongly believes that with the reduced training requirements the EIR will be more accessible for PPL and CPL holders. The rating will provide an incentive to obtain the full IR(A) at a later stage thereby increasing overall aviation safety.

In addition, the Agency would like to clarify that the price of simulator training hours comes from public information on FTO's websites. There is no reason to assume that their prices do not include investment costs. These costs are already included in the prices. Please see also comment 579.

comment 1151 comment by: Alan Docherty

I feel Option 3 would be the best option.

response Noted

The Agency acknowledges your supportive comment regarding Option 3.

C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - 7 Conclusion and preferred option

p. 216

comment 1380 comment by: Michael Fase

As a newly qualified glider pilot hoping to extend my range of activities I believe the following:-

1. In the UK flying up to 3000ft only requires that you remain 'clear of cloud' and with 5km visibility.
2. There is no evidence to suggest that this leads to unsafe flying or contributes to air accidents.
3. That glider pilots should continue to be allowed to fly as in (1) above.
4. That a prescribed minimum 5 hour training requirement for a Sailplane Cloud Flying Rating is overly bureaucratic and would be excessively expensive for pilots who do not need this amount of time. The amount of time required should be determined by the progress of the pilot being trained and locally controlled.

Michael Fase

response Partially accepted

Thank you for providing this comment.

The Agency agrees that sailplanes can fly 'clear of cloud' and with 5 km visibility up to 3 000 ft AMSL. However, the Agency would like to highlight that above this altitude, or within certain airspace categories, the visual flight rules

require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating

p. 228

comment

60

comment by: *Tony Lintott*

As a private glider pilot who has no intention of flying in cloud Option 2 is my preferred option.

I see no reason why Options 1 and 2 should not be able to operate in parallel, thus, those who wish to cloud fly should be required to operate under Option 1 terms and conditions.

As the issue is only likely to be policed following an incident, use of two options in parallel is perfectly workable.

In the event that Option 1 is mandated I may feel unable to continue gliding due to my having to operate under unnecessary and unreasonable conditions where no safety benefit accrues.

Tony Lintott

response

Not accepted

Thank you for this comment.

Option 2 refers to the restricted cloud flying rating. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

139

comment by: *Peter GILL*

As the evidence suggests, there is virtually no safety case for restricting gliders to VMC.

Option 1 is the safest as it provides the operational margins for gliders to operate IMC where necessary and where local regulations permit it.

response

Noted

Thank you for providing this comment.

comment

153

comment by: *Stephen Parsonage*

The proposed regulations in any of the options listed will have a huge effect on the UK gliding movement as a whole. I can foresee many smaller gliding clubs disappearing because they cannot provide the training needed for the issue of the option 1 licence. The other options (0 and 2) will only partly address the needs of UK glider pilots. Quite often glider pilots can find themselves above

cloud as it is possible to climb above the cloudbase. If for some reason the glider pilot finds that they are well above (2000m+) the cloud layer (for example wave flying) and the cloud layer below them closes in so that there is complete cloud cover below them. Then options 0 and 2 will not allow them to descend through the cloud layer. Also if circuit training with cloudbase about 450m should the new regulations are introduced it will prevent this training taking place.

I propose that the situation the the UK currently has for Glider pilots should be allowed to continue unchanged or only changed to the extent that the British Gliding Association has proposed. It has worked SAFELY for many years and it would be a death sentence to the British Gliding movement if it were to change.

response *Noted*

Thank you for providing this comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States. Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements (less or more restrictive). Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 175

comment by: *Andrew*

I fully support the clear training outlined for sailplane flying in clouds. This will ensure that us pilots can fly in cloud and will do so safely.

response *Noted*

Thank you for providing this positive feedback.

comment 212

comment by: *M H Gagg*

As a sailplane pilot I am only competent to comment on this section of the NPA. Overall I support the reasoning & conclusions of the working group. I would have preferred to see both options 1 & 2 pursued but if this is not practicable (my understanding of the text being that the working group considers that it is not) then I would be wholly in favour of the cloud flying rating proposed in option 1.

response *Noted*

The Agency acknowledges your comment.

comment 214

comment by: *Iain Mciver*

I would like to comment on the sailplane cloudflying rating as a whole rather than the individual components. I feel that the proposed 2 part cloud rating is a very good compromise this would allow sailplane pilots to choose either the full rating for more experienced pilots and those that have less experience of this type of flying could be limited to IMC without being allowed to go fully into cloud .I would personally be happy to take some sort of formal test and briefing

	<p>to obtain the rating.</p> <p>Iain Mciver Dumfries and district GC</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>274 comment by: <i>Ian Easson</i></p> <p>I have read the proposals outlined in this document and as an active Glider Pilot, Gliding Instructor and an NPPL holder, I fully support the Cloud Flying proposals for Sailplanes</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>604 comment by: <i>Bill LONGSTAFF</i></p> <p>OK</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>651 comment by: <i>Richard Bennett</i></p> <p>I believe that it would be beneficial to allow a Restricted Sailplane Cloud Flying Rating as part of a glider pilots flying licence. In countries where cloudbases are often too low to permit flights away from the sailplane's circuit it is a necessary part of learning skills and keeping them current to be able to approach cloud base without entering cloud. Keeping a Cloud Flying Rating current would seem to be unnecessary in this case so I support the British Gliding Association's ability to modify, if required, current training standards to cater for this eventuality.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. As your comment is either based on the comment No 121 provided by the British Gliding Association or referring to the comments of that organisation, please see the response provided to this comment.</p>
comment	<p>666 comment by: <i>George SANDERSON</i></p> <p>It is essential for successful cross-country flying that sailplanes are allowed to fly near cloudbase (i.e. in some cases just under) and also be allowed to fly in clouds where airspace permits. Any reduction in these criteria would have a big negative impact on X-C flying.</p>

response	<p><i>Noted</i></p> <p>Thank you for providing this comment. Please see the response provided to comment No. 121 provided by the BGA.</p>
comment	<p>728 comment by: <i>BGA</i></p> <p>The UK, as regulated by the BGA, has a good record of cloud flying safety and it is debatable whether a SCFR will have any impact upon that record. All that will be achieved is a commonality between all member states. Given that criterion, it should be ensured that the SCFR once obtained by an individual, be valid in all EASA countries.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. The Agency would like to clarify that this rating, when obtained, will be valid in all Member States.</p>
comment	<p>762 comment by: <i>Michael D Miskimmin</i></p> <p>I accept the assessment.</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment.</p>
comment	<p>782 comment by: <i>Liz SPARROW</i></p> <p>pp228 - 239</p> <p>2.1 - Your RIA overstates the range of the typical less experienced glider pilot who is likely to have a glider with performance less than 40:1. The average club class glider, of the type that I fly in international competition typically has a glide ratio of between 34:1 and 38:1. The least experienced pilots are more likely to be flying either club sailplanes or have a share in one of these cheaper, lower performance, gliders and so the least experienced (and therefore presumed most at risk) will be disproportionately affected by the imposition of a rule reducing their operating height band. This would certainly prevent pilots from safely flying cross-country in thermal conditions on a typical British cloudbase day of say 3500' agl. In more mountainous territory, pilots are often climbing horizontally near cloud using ridge and wave lift, and again to prevent this would significantly reduce range through the climb heights achievable, where in mountain conditions much much lower glide ratios must be assumed to give an adequate safety margin - typically when flying in mountain regions and conditions, the normal glide angle is halved when calculating safe field ranges.</p> <p>6.1 Safety Impacts: As a BGA full category instructor and former chief flying instructor, I believe you significantly understate the negative impact of the reduced operating height - certainly this is the case for UK conditions and in my experience of flying international competitions across Europe there has been an equally low cloudbase on frequent occasions. Option 0 should definitely be rated -3 not -1. This would significantly increase the negative impact of this option overall from -10 to -16.</p> <p>6.4 Regulatory harmonisation: the negative effect of option 2 would be</p>

removed by incorporating it into the basic licence as valid where local laws permit. This would render this option neutral in your analysis which suggests it should be incorporated.

In summary:

Option 0 would seriously risk the continued viability of gliding in the UK and is not acceptable nor is there any safety case to support its introduction.

Option 1 is a well-constructed option to enable the continuation of the existing safe operation of sailplanes in cloud and should be adopted along with Option 2 as below.

Option 2 SCFR-R is eminently sensible and should be included as an option or incorporated as part of the basic sailplane licence. As you record, there is little or no evidence that flying close to cloud confers any safety disadvantage on sailplanes or other airspace groups - in general incidents near cloud are likely to be due to proximity of other gliders rather than of cloud. IMC flight clear of cloud requires no additional competence over VMC flight and there should be no additional skills training requirement applied universally in order to do this, particularly since pilots even with an SCFR rating will spend the majority of their time flying in SCFR-R conditions. It is disproportionate and inappropriate to require cloud skills for flight clear of cloud. In the UK, thousands of pilots have safely been flying near cloud throughout the history of gliding and this will allow pilots to continue safely to do so.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 849

comment by: *Diana King*

Allowing sailplane pilots to fly close to cloud is an essential safety factor, especially in countries like the UK, where the cloud bases are typically lower than in much of Europe and the relatively damp atmosphere results in more cloud.

When thermal soaring, being unable to climb close to cloud base (even if not into the cloud) makes it possible and safe to continue a soaring flight and sometimes, critically, to reach a safe landing place.

When wave soaring, it is frequently the case that the wave lift is just upwind of and close to cloud, and the only way to use the lift is to fly in technical IMC. In many such cases, there is, nevertheless, clear air upwind and below the pilot. The wave flying pilot may climb well above cloud and be flying in VMC until the time comes to descend. If the cloud gaps have closed partially or completely, it can be necessary to fly close to or through cloud in order to return to land. It is vital that pilots are allowed to do this legally and a suitable amount of training is a valuable safety tool in improving competence.

response *Not accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

995

comment by: *Doug Hilton*

[C. Regulatory Impact Assessment - I. Regulatory Impact Assessment for the aeroplane instrument ratings - Annex 3: References](#)

My comments relate to the Sailplane cloud flying proposals -
I support the BGA's recommendations and proposals in response to NPA 2011-16

1. Strongly supports the SCFR & considers it essential that the rating be available to both LAPL(S) & SPL holders
2. Recommends that the requirement for 5 hrs dual flight instruction be removed – if a minimum training time requirement can be justified, then in our view that time should not exceed 3hrs.
3. Recommends that training in TMGs is essential for the SCFR, but would be content to see pilots prohibited from exercising the privileges of an SCFR in TMGs.
4. Recommends that the RSCFR option is re-considered by EASA.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (SPL and LAPL(A)/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.

comment

1004

comment by: *John Paskins*

I support the cloud flying rating as only in this way can sensible and safe use be made of the open airspace.

response

Noted

The Agency acknowledges your comment.

comment

1034

comment by: *G Higgins*

I would support the training of sailplane/gliders pilots to fly in and near to clouds. We depend on thermals which rise and turn into cumulus clouds. Our

cloudbase is often 3000' to 5000' and I have no idea how we could carry on gliding if we could not fly IMC. We already have this privilege and very very few incidents. We are constantly training in lookout and vigilance.

response

Not accepted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1047

comment by: *Michael Thorne*

Your three considered options appear to me to be biased towards achieving increasing regulation and solving a problem which does not need solving. Regulators invariably tend towards greater regulation, and this seems evident in your analysis of the three options.

The analysis criteria may be suitable for commercial aviation, but we are dealing purely with recreational aviation here. Most of this takes place outside of controlled airspace, and I suggest that more relaxed rules can and should be in place for VFR outside of controlled airspace. The following comments all relate to uncontrolled airspace.

The economic impact of killing off gliding through over-regulation would be relatively small in global financial terms. A few glider manufacturers would go out of business in Germany and Poland, many gliding clubs would have to shut down and lose their members' assets, and the thousands of gliders owned by individuals across Europe would become virtually worthless. It would not shut down the EC in financial terms of course but it *would* negatively affect the rights and enjoyment of the thousands of amateur pilots who enjoy the freedom of the air in their chosen sport. You have no measurement criteria in your analysis for this human side of the equation, and I suggest that you should.

You propose three options. You do not propose a "do nothing" option. Why do all countries have to do exactly the same thing. I fail to see an advantage in fixing a non existent problem by damaging the liberty and enjoyment of thousands of glider pilots across Europe.

Option 0 would significantly reduce the height band which most gliders are currently able to use and would cripple gliding across Europe. Many people have made large investments in gliders, and many clubs exist to facilitate the needs of glider pilots. I contend that the financial, social and political impact of imposing a blanket restriction, and of limiting glider pilots to the strict definition of VFR flight, would kill off the gliding in European countries. If this is what EASA wishes to achieve it would be the most direct way of doing so. It would,

at best, be an unintended consequence of adopting Option 0.

Option 1 proposes a "Full sailplane cloud flying rating". Implicit in this option is the restriction on flying near cloud in VFR above 3000ft, which I suggest is something practised by glider pilots in every country where gliding takes place, irrespective of whether the country has a "no cloud flying" regulation.

I suggest that your analysis of the increase in operational range and safety in the 23 member states is fallacious as pilots already fly up to cloud, but rarely in cloud. Gliding in cloud is sometimes done by a very small percentage of glider pilots for strategic reasons, but most fly regularly up to and near cloud.

Imposing this option 1 would add significantly to the cost and complexity of gliding, and would drive people away from the sport in large numbers. The proposed conditions for obtaining and maintaining such a licence would add significantly to the burden on clubs already over-stressed by increasing regulation, rising energy costs and increase the load on the hard working volunteer instructors and club officials.

If a licence is to be required for cloud flying it should be only for flying IN cloud, not up to and near it. Those relatively few pilots who wish to exercise the in cloud flying option can then take the licence test and have the requisite rating

Option 2 proposes a "restricted sailplane cloud flying rating". This is effectively what we have in the UK now. Despite the existence of laws in some EU countries which permit no cloud flying, I contend that most gliders fly up to and close to cloud in all of these countries, but only a few ever enter cloud and remain in it. This occurs irrespective of any national restriction on cloud flying. Glider pilots have, and need, no specific cloud flying training to do this, but they do remain clear of cloud and in sight of the surface. Has this caused significant problems I ask? I contend not. I suggest that no licensing should be needed for this type of flying.

Where glider pilots wish to fly actually within clouds then a rating of some type may be appropriate.

Your analysis of Major Impacts suggests that it would have medium negative impacts on the eight member states where a full cloud flying rating already exists. It is hard to see what those negative impacts might be. Why not just remove the restriction on flight in or near cloud in all countries?

response

Not accepted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment	1135	comment by: <i>terryw</i>
	I forgot to add that I believe it is vital that the proposal is supported	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	1185	comment by: <i>Martin Gregorie</i>
	<p>I agree with and entirely support the reasoning in this section. Following a cloud climb, in which I will have only entered the cloud for the height gain it makes possible I fly between clouds without entering them until I am again below cloud base. The only exception to this would be if there was a continuous cloud bank lying across my course that was sufficiently long to make flying round an end impractical.</p> <p>If the cloud bank was parallel to my course and was generating lift I would normally be operating below it: in these circumstances the extra workload of cloud flying is not justified.</p>	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	1222	comment by: <i>Hugh Kindell</i>
	<p>Cross country flying in sailplanes relies upon two requirements. Firstly a suitable air mass be it thermic, ridge induced or wave induced. Secondly it requires the sailplane to have sufficient height to progress cross country. (Typical flights in the UK can be up to 500Kms or more and typical glide ratios of modern sailplanes are in the region of 40:1). Therefore the ability of having a SCFR is essential to maintain safe cross country flying. Without SCFR will without doubt be the final straw to sailplane activity in the UK with the consequent loss of jobs in the operations that support gliding and ultimately to those workers involved in the manufacture of sailplanes.</p>	
response	<i>Noted</i>	
	Thank you for providing this comment.	
comment	1249	comment by: <i>C.Garton</i>
	<p>Flight within cloud has always been an essential part of cross-country gliding in the UK. In general terms, the need for cloud flying in gliders is higher in the UK than in much of continental Europe, in large part due to the more maritime nature of the UK airmass and correspondingly greater amounts of cloud.</p> <p>Much of UK cross-country gliding and competition activity has been based on the availability of cloud flying. If this facility were to be removed there could be a significant impact on activity and hence in the longer term on the viability of the sport itself.</p> <p>Cloud flying in gliders in the UK has a long history of safe operation, overseen</p>	

by the BGA.

In consequence as a British glider pilot I welcome the NPA and the Sailplane Cloud Flying Rating. It is essential however that qualification for the SCFR remains pragmatic and takes full account of the experience levels of pilots requiring the qualification.

response *Noted*

Thank you for providing this comment. As your comment is either based on the comment No 121 provided by the British Gliding Association or referring to the comments of that organisation, please see the response provided to this comment.

comment *1251*

comment by: *Paul Gentil*

Response to NPA 2011-16.

I wish to add my support for the Sailplane Cloud Flying Rating (SCFR) as I think it is the least bad option put forward by EASA. I am very concerned that the British privilege of cloud flying by sailplane pilots, established over more than eighty (80) years must not be undermined or taken away. There is no evidence whatsoever for a safety case for removing this privilege and as such, in my opinion, EASA has no right to even consider limiting this privilege. EASA is trying to fix a problem which doesn't exist simply because all the licensing bureaucracy has already been enshrined in law before we have the chance to put forward arguments against implementation of rules which we don't need, and have never needed in the past 80 years.

The idea of 5 hours of training in cloud flying is preposterous. Most people take less than 5 hours to learn to fly a glider from scratch! The amount of cloud-flying training required, which is something which has been done with great success by gliding instructors for decades in the UK, should be determined by the instructors depending on the trainee pilot's ability, not by some arbitrary time figure determined in Cologne. However, as we are trying to close the gate after the horse has bolted, I think a minimal mandatory training period could be acceptable. One hour flying in cloud would easily tell an instructor whether the trainee pilot is likely to be capable of successfully flying in cloud or not, and any further training could be carried out until the trainee is considered competent.

Training must be allowed in TMGs as a practical and economical way of developing cloud flying skills, even if TMGs do not fly in cloud. Otherwise, to try to fly for even one hour in cloud in a glider could take vastly longer and cost a lot of money.

In summary, I support the British Gliding Association and its recommendation regarding the SCFR, and in its aims to minimise as far as possible the effects of the creeping regulatory cloud that is coming from EASA, despite there being no safety case for introducing a SCFR, or any other licenses for that matter. The 5-hour minimum training proposal is monstrous and should be drastically reduced, with the final decision made by the instructor on merit. TMGs must be permitted to carry out cloud flying training.

Reluctantly, I have to accept that EASA exists and that we glider pilots, Europe-wide, will have to fight the relentless tide of rules and regulations coming from the EU. British gliding has managed itself very successfully since

the 1920s without interference from governments and bureaucracies like EASA. We don't need more rules – we need fewer rules – regulation costs lives! The skies are for everyone and the way British gliding has been managed should be seen as a model for the EU and the rest of the world. Let us get on with it as safely today and in the future as it has been in years gone by.

Paul Gentil,
Cotswold Gliding Club,
Aston Down, Glos., UK.
22-12-2011

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

1282

comment by: *G Dale*

I'm looking at this as a professional gliding instructor (25 years, 7000+ hours in sailplanes, 500+ in light aircraft and TMG's) and a competition pilot (current British Team)

I want to add my support to the proposal for a sailplane cloud flying rating - the SFCR, if I correctly understand your terminology.

1/It is important for the future of our sport that are allowed at least to continue to operate right up to cloudbase in the UK. On many days the cloudbase is difficult to determine, varies enormously and can be very low - we will fly cross country any day that the cloudbase is above 2500'.

If we cannot operate to that cloudbase legally - we have to stop 1000' below cloudbase - then the days on which we can operate safely will be greatly reduced - increased our chances of landing out in unprepared fields due to a reduced chance of finding the next lift with a low operating band. This is a real problem in the UK with our poor weather and low cloud bases and of course it is already a big problem with operating under controlled airspace.

2/I have spent a fair amount of time flying sailplanes in cloud. It is quite easy to learn and to do, and almost all sailplanes have a combination of airbrake and stability characteristics that makes them very safe instrument platforms. Much safer in fact than most light aircraft - airbrakes will restrict the speed and increase the stability in a spiral dive, and it is extremely unusual for a loss of control in cloud to damage a glider - I recall only two such instances during the time I have been flying in the UK.

Please note that currently flight in IFR is permitted in BGA rated gliding competitions in the UK, and that there have been no accidents associated with loss of control in cloud or collision in cloud in such competitions in many years.

With this experience and my instructing qualifications and experience as well I would judge that five hours minimum time for an instrument rating in gliders is really too high a requirement - I would expect to do it in two or three for most candidates.

I hope these comments are useful to you.

response	<p>G Dale</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1285 comment by: <i>Peter Robinson</i></p> <p>It is fair to say that one of the key factors in the safe flight of gliders is to avoid outlandings as much as possible.</p> <p>On an average cross country day it is often necessary to fly close to cloud base while the bases are still climbing to allow for the necessary time to achieve a long flight without the risk of an early or late outlanding.</p> <p>In some cases, not being able to fly close to cloud would mean limiting the already limited cross country flying opportunities and would jeopardise the future of our sport even further.</p> <p>There is no evidence to suggest the practice of flying close to cloud or in cloud is any more or less dangerous than flying in other weather conditions and in the UK we have enjoyed this practice safely for more than 75 years.</p> <p>In addition, not being able to fly in or close to cloud would almost prohibit wave flying, and limit social flying during winter months for already restricted clubs in the UK.</p> <p>I see the implementation of an SCFR as an important inclusion for the gliding community and I wish to support this important proposal.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. As your comment is either based on the comment No 121 provided by the British Gliding Association or referring to the comments of that organisation, please see the response provided to this comment.</p>
comment	<p>1403 comment by: <i>Player</i></p> <p>I am and active glider pilot and I strongly support the option one -- this introduction of a Sail plane Cloud Flying Rating.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>1417 comment by: <i>RUPASINHA Marc</i></p> <p>Dear Sir or Madam</p> <p>I would like to support the idea of a SCFR for glider pilots and that TMGs can be used to deliver the necessary training. I believe that the qualification can be and should be granted on the basis of having reached the required standard and that specifying a minimum number of hours training is unnecessary as pilots experience and aptitude varies so much.</p>

Finally I ask that the decision not to have a RSCFR is revisited. UK pilots have for years managed to operate safely under cloud and so long as there was theoretical training to explain the risks and need for caution the UK practice could continue perfectly safely.

My experience:

I have been flying since 1975 about 600 gliding and 600 power (mainly TMG) Flying and Gliding instructor ratings.

Thank you

Marc Rupasinha

As a separate point - it proved impossible to use the CRT with the Explorer browser - I tried several times over three days, this has been submitted using Google Chrome

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/ restricted cloud flying rating) were also identified by BGA.

comment 1490

comment by: *Ann Laylee*

I have been a glider pilot of about 25 years I have approx 1600 hours and I am an assistant rated instructor.

I am in favour of a rating for cloud flying rating for sailplanes. Primarily for the following reasons

A) Because if we have to stay 1000 feet below cloud this will prevent us flying safely on many many days given the weather in the UK.

B) We have been cloud flying for years and there is no evidence of risk from this - I would say it is easier and less risk than in a light aircraft from my experience (I have about 1600 hours light aircraft flying) There has been little risk from collision in clouds and easier and less risk from problems while flying in cloud as most gliders have good airbrakes which makes them a stable platform.

Let me know if you would like me to expand on this

Annie Laylee

response *Noted*

Thank you for providing this comment.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 1 Process and consultation

p. 229

comment 347

comment by: *Horst Metzig*

Ich begrüße es, das die Agentur sich entschlossen hat, in der FCL.008 Wolkenflug für Segelflieger zu bearbeiten. In vielen Segelflugvereinen herrscht grosse Unwissenheit, oft wird behauptet, Wolkenflug im Segelflugzeug ist in Deutschland verboten.

Ich als Segelflieger mit Instrumentenflugausbildung im Segelflugzeug möchte in

den Mitgliedstaaten auch in die Wolke hinein fliegen dürfen. Nun steht zur Diskussion, ist es nur eine Wolke bei 1/8 bis 2/8 Bewölkungsgrad, oder 5/8, ja sogar eine geschlossene Wolkendecke wie es bei Wellensegelflugwetter teilweise vorkommt, oder den Segelflieger überraschen kann, das es unter ihm zumacht. Hier möchte ich klar stellen, wenn ein Segelflieger gelernt hat, mit dem Wendezeiger plus den übrigen Segelfluginstrumenten ohne Sicht nach draussen die Fluglage und Kompasskurs sicher zu beherrschen, dann spielt es keine Rolle mehr, ob 1/8 oder 8/8 Bewölkung. Was hingegen eine Rolle spielt, ist die Koppelnavigation mit Karte und Kompass. Bei steigendem Bewölkungsgrad hat der Instrumentensegelflieger gelernt, stressfrei sicher Fluglage und Kompasskurs zu bestimmen, die Frage der behördlich zugelassenen Navigation bleibt unberührt, und sollte bei der EASA durchdacht werden. Ich schlage vor, das die inzwischen zuverlässigen GPS Navigationsgeräte, welche in der Verkehrsluftfahrt längst zugelassen sind, auch im Segelflugzeug bei dem Instrumentenflug zum Einsatz kommen dürfen. In diesen Fall kann der Segelflieger bodensichtunabhängig GPS Navigation machen.

Auch die Flugsicherung wird dann neue Arbeit bekommen, weil die Segelflugzeuge im Instrumentenflug müssen mit dem Transponder Mode S gestaffelt werden.

Ich möchte die EASA fragen, bis zu welchen Bewölkungsgrad soll die Segelfluginstrumentenberechtigung Wirksamkeit haben?

Zusammenfassend möchte ich feststellen, meiner Ansicht hat eine Instrumentenflugberechtigung im Segelflugzeug nur dann Sinn und Bestand für die Zukunft, wenn der Fall eintritt, bei Wellensegelflugwetter oft angesprochen und gewarnt, das unter dem Segelflugzeug die Wolken sich schliessen, und keine Erdsicht mehr möglich ist, in dieser Situation soll das erlernte Wissen bei einer Instrumentenflugausbildung nicht nur eine sichere Landung ermöglichen und dienlich sein, sondern den Wellensegelflug unter IMC stressfrei zu erleben und fortzusetzen. Dazu gehört auch eine bodenunabhängige Navigation. Die heutige Technik erlaubt das.

Horst Metzig

response

Noted

Thank you for providing your comment.

However, the Agency will not specify the amount of clouds (1 or 3 or 8 oktas) as required in your comment as this is not regarded as necessary to define training and checking criteria for cloud flying.

'Entering a cloud' is a clearly defined process. 'Entering IMC' is also a process clearly defined by ICAO.

It is not up to the regulator to decide in which situations (thermal conditions - wave flying conditions) this rating will be used but up to the responsible and acting pilot. Therefore, the Agency does not see a need to further define weather conditions in which a sailplane cloud flying rating is needed.

Questions of equipment can be checked and reviewed in the future OPS requirements (Part-NCO for sailplane operation). Some equipment requirements for cloud flying are included.

comment

482

comment by: *Leslie Kaye*

response	<p>I stronkly support the British Gliding Association response to this consultation</p> <p><i>Noted</i></p> <p>Thank you for providing this comment. As your comment is either based on the comment No 121 provided by the British Gliding Association or referring to the comments of that organisation, please see the response provided to this comment.</p>
comment	<p>693 comment by: <i>Iain Mciver</i></p> <p>I agree completely with the B.G.A. response to this document.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment. As your comment is either based on the comment No 121 provided by the British Gliding Association or referring to the comments of that organisation, please see the response provided to this comment.</p>
comment	<p>763 comment by: <i>Michael D Miskimmin</i></p> <p>Accept.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this positive feedback.</p>
comment	<p>934 comment by: <i>Colin Stevens</i></p> <p>Not all sailplanes have an LD of 40:1, a large number have considerably less range and would therefore be further restricted without these ratings.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>944 comment by: <i>Dennis - Eden Soaring</i></p> <p>Most sailplane pilots do NOT wish to fly in cloud (and that includes me) but we must be able to fly to cloud base which is where the lift is. If any sailplane pilot wishes to fly in cloud then I agree they must have the correct training and qualifications to do so. To ensure this is achieved to a correct standard then we must add to the already vast burdon of regulations.</p> <p>With the above in mind then I have no action other than to support the motion.</p> <p>Dennis Watson</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>949 comment by: <i>Roger Fielding</i></p>

Section 2.1 is a good statement of the reasons for sailplanes to fly in or near cloud.

response *Noted*

Thank you for providing this comment.

comment *1012* comment by: *Martin Roberts*

Page 229 - 230
1. Process and consultation
2 Issue Analysis and risk assessment
2.1 What is the issue and who is affected?

The operational range of sailplanes

The combination of;

Para 4; "Therefore, when operating under VMC, sailplane pilots in Europe **typically** (my bold) are limited to operate between 900m (3000ft) and 450m (1500ft) unless cloudbase is 4000ft or more....."

AND Para 5; "In contrast, if flights in IMC and in cloud were possible....."

This is a misleading characterisation of the position. It is a false picture of true sailplane operation under typical soaring flight in Europe. In my experience conditions of the nature described as "typical" would not be sufficient to safely sustain cross-country soaring flight, although some pilots attempt it. And cross-country soaring flight is the *only* reason why so many sailplanes have been produced and are in service across Europe. By writing up Paragraphs 4 and 5 as contrasting positions the NPA sets up a false distinction which suggests that only by flying in cloud can the glider be used to its true potential, and that allowing cloud flying is seen as a "necessary concession". This is not true. "Good" or "typical" soaring conditions are significantly better than those characterised in Paragraph 4, and in 95% of occasions do not require cloud flying of any kind.

It is crucial for the EASA to grasp that what has been characterised as *typical* is **NOT** typical. It is a false picture.

Case Study - typical United Kingdom soaring conditions

Here is the true picture, at least for sailplane pilots operating in typical United Kingdom Spring, Summer and Autumn conditions;

Morning - convection begins and by 11.00 BST (10.00 GMT) reaches the levels EASA describe as "typical", ie, cloudbase 3000ft (900m) to 4000ft (1200m). During this time pilots may launch but will stay close to their home airfields.

11.00 - 5.00 BST during this period cloudbase can rise to 4500ft (1400m) - 6500ft (2000m). Pilots sets off from their home airfields as their radius of operations is now conducive. In these conditions climbs into cloud are not normally required. **THESE ARE TYPICAL CONDITIONS.** In southern European countries such as Spain, Italy, Greece, cloudbase can and often does reach 10-12,000ft (c10,000m)

5.00 - Evening. Pilots fly home from conditions that are now deteriorating. Occasionally pilots may climb into cloud to ensure that they get home, but this is rare.

Given the nature of the misconceptions shown in Paragraphs 4 and 5, one would wonder where the EASA got its information from. Discussions with sailplane pilots from across Europe would soon reveal the true position. Evidently discussions with overseeing bodies such as the British Gliding Association did not take place, or, if discussions did take place - their experience and suggestions (based on an exemplar track record) were ignored.

response *Noted*

Thank you for providing this comment.

This NPA was developed by the Agency in close consultation with a working group consisting of sailplane experts representing the European sailplane community. This group included experts from BGA. The NPA was published in agreement with this working group.

comment *1035*

comment by: *G Higgins*

I would support the training of sailplane/glider pilots to fly in and near to clouds. We depend on thermals which rise and turn into cumulus clouds. Our cloudbase is often 3000' to 5000' and I have no idea how we could carry on gliding if we could not fly IMC. We already have this privilege and very very few incidents. We are constantly training in lookout and vigilance.

response *Noted*

Thank you for providing this comment.

comment *1062*

comment by: *RogerBURGHALL*

Restricting the height available to sailplanes in the United Kingdom would replace a very small danger due to cloud flying (demonstrated by the good past record in the UK) with a very real danger of unnecessary land-outs. This adverse effect, in Northern climates, recognised in the EASA document, should be emphasised. If only you could standardise the climate!

response *Noted*

Thank you for providing this comment.

comment *1131*

comment by: *Peter Goldstraw*

Any change to the law to compel glider pilots to remain below 3000 feet or 1000 feet below cloud base where cloud base is over 4000 feet AMSL will stop most cross country flying which is the main attraction for most of us. Days or parts of days when cloud base is much more than 4000 feet are rare in this country.

3000 feet AMSL is effectively 2500 feet above ground level for much of the country and attempting to reach the next thermal from that height will lead to an extremely high increase in the number of field landings. This is always a more hazardous option with the risk of damage and injury and annoyance to the

farming community. This would contribute a questionable improvement in overall safety. It would make the sport far less attractive and would shut off this low cost entry to flying. Many commercial pilots start off by gliding.

response *Noted*

Thank you for providing this comment.

The proposed SCFR will enable you to continue your current practices. The Agency is also aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to emphasise that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 2 Issue Analysis and risk assessment	p. 229-231
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comment 47

comment by: *Chris Curtis*

Accident statistics provided by the British Gliding Association indicate that a large proportion of accidents in gliders occur during field landings away from base.

Suggested ammendments (in bold):

In paragraph 7, the phrase,

"..could significantly widen the operational range of sailplanes.",

should be replaced by the phrase,

".. **will** significantly widen the operational range of sailplanes **and will significantly improve safety by reducing the number of low points that incur a risk of landing in a field.**"

response *Noted*

Thank you for providing this comment.

comment 130

comment by: *Mark Sanders*

In the UK with our maritime climate and thus low average cloudbase height compared to the rest of Europe, ALL our pilots routinely and safely make climbs when above 3000ft to cloudbase (and thus in IMC). At cloudbase, probably about 90% of them break off the climb, preferring the "comfort" of staying in sight of the ground, whilst the remaining 10% of more experienced pilots may carry on the climb into the cloud. Thus about 10% of our pilots would prefer

your Option 1, 90% prefer your Option 2 (and none of them would want Option 0)

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 282 comment by: *Horst Metzig*

Die gegenwärtige Situation in den Mitgliedstaaten sind sehr unterschiedlich. Ich bitte darum, das in allen Mitgliedstaaten der Segelflug auch in Wolken zulässig ist. Voraussetzung ist, das ist mein Empfinden, ein funktionierender Transponder Mode S Class1 zugelassen für VFR und IFR bis 50000ft (Wellenflughöhen berücksichtigen), ein funktionierendes Funkgerät mit der Rasterung 8,33 khz, und dann natürlich die erlernte Fähigkeit, wirklich den Wolkenflug in der Wolke mit all seinen Turbulenzen sicher zu beherrschen.

Horst Metzig

response *Noted*

Thank you for providing this comment.

The SCFR will be introduced in all EASA Member States. However, EASA currently has no control over specially designated airspace areas, deviating from standard VFR requirements, within Member States' airspace categories.

With regard to your comment on required equipment, this is outside the scope of the NPA, but will be covered by Part-NCO.

comment 283 comment by: *Simon Kahn*

The question states "What are the risks (probability and severity)." From the narrative response there is no evidence of a collision in clouds. There have been 37 mid air collisions involving sailplanes of which 2 may have been near a cloud. From this evidence it would appear to be less probable for a collision to occur near cloud than away from cloud. If there is no evidence of an increased severity or probability of mid air collision in cloud why is there a need for regulation or sailplane flying in or near cloud????

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 297 comment by: *Andrew Sampson*

p 229: Re: Operational Range of Sailplanes

Wave:

Please note that it is frequently only possible to access upper air wave systems by flying close to or in cloud, at least momentarily. A descent from an upper air wave system may involve flight through cloud, especially if cloud has formed underneath.

Cloudbase:

The document correctly states that cloudbase 'varies from hour to hour, day to day, and across Europe'. In fact, a local cloud base can change very rapidly, and across very small distances. Strong thermal effects, convergences (such as mountain winds, sea breeze fronts etc), the formation of wave, orographic effects, and changes in parameters such as pressure, temperature, wind strength or direction can cause significant and rapid differences in cloudbase. There can be multiple different 'cloudbases' in a relatively small area.

The glider pilot uses clouds to indicate areas of possible lift, and when lift is found must climb as high as possible to maximise range and time to the next area of lift, or to a safe landing area.

I believe there should be a form of restricted Glider license under which holders would be permitted to fly up to cloudbase, but not into cloud. All pilots not holding a Cloud Flying Rating should be able to hold such a restricted license. This would preserve the safety of glider flight by enabling pilots to maximise range.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

322

comment by: *Michael Roff-Jarrett*

I wish to comment in support of the sailplane cloud flying rating proposed in NPA 2011-16. I consider that it is essential for the sport of gliding in the UK that sailplanes be allowed to operate in IMC, especially in the UK where the cumulus cloud base in good gliding weather is often between 3000 and 5000 feet. This applies particularly to flight within 1000 feet of the base of cloud, while in sight of the surface. I cannot see any safety case for not allowing glider flight under such circumstances, and the extra height makes a great deal of difference to the chances of completing a cross country flight. My comment is based on over 1500 hours flight experience in sailplanes.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft

from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

364

comment by: *Justin FIELDING*

Based on this information - in 9-years there have been "no instances of collision in clouds" and only two "in the proximity to clouds" with no evidence put forward to suggest that the proximity of cloud played any part in the incidents. Therefore I would suggest that the proposed changes of legislation are not necessary.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

380

comment by: *A Darby*

The assumptions of the bottom level of a sailplanes is normally more restrictive than indicated. Most pilots will be considering where they will have to land by 1500' (450m) AGL. Having considered where they will land they will in many cases either change course or remain in a certain area based on the landing area. For many pilots the 1000' (300m) normally means in a position to make an approach to a chosen landing area.

Consider a glider flying over a town, If they get to a quarter way and 1500' they will probably change direction to leave the town towards a landable area before breaking the 1000' over a congested area rule. Given an average ground elevation as stated of 500' reduces the operating range before changing course to a landable area to 1000' (3000' - 2000' (1500' above 500' ground) rather than the 1500' indicated.

response

Noted

Thank you for providing this comment.

comment

406

comment by: *Ian Carrick*

The ability to be able to fly within 1500m horizontally and 1000' vertically from cloud should be retained, perhaps with a restricted cloud flying rating, allowing the continued safe practices of soaring.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

483

comment by: *Leslie Kaye*

In the UK gliders infrequently enter cloud and having done so often exit within a period of seconds or in a very few minutes.

Glider flight in PROXIMITY of cloud occurs on the majority of glider flights owing to the amount and the low heights of cloud usually found in UK airspace. Such flights - the majority - would contravene strict VMC requirements.

Cloud proximity commonly occurs:

1. At the top of a thermal climb
2. In mountain wave when running just upwind of the wave cloud
3. Descent through cloud when out of range of a suitable "hole" or in wave up-wind jumps
4. Training circuits when cloud is low and/or visibility poor

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

512

comment by: *IAOPA(Europe)*

II. Regulatory Impact Assessment for the sailplane cloud flying rating
2.1 WHAT IS THE ISSUE AND WHO IS AFFECTED?

IAOPA(EU) considers that the content of this paragraph explains the issues with clarity. However, the ICAO criteria to which this section makes reference are not restricted to sailplanes. The SCR makes adequate provision for the sailplane pilot; however, no similar provision is currently available for aircraft involved in towing sailplanes. Hence in Class E airspace with a cloudbase of 3100ft, a sailplane towing aeroplane operating from an aerodrome with an elevation of 1900 ft could not legally fly above 200 ft under VFR; for a sailplane towing pilot to be required to hold an EIR in order to conduct sailplane towing up to the cloudbase under such circumstances would, we consider, be disproportionate. This problem is more likely to exist in Member States with significant terrain elevation and large areas of Class E airspace than in others, demonstrating a clear need for flexibility in rulemaking to take account of national needs. We consider that a national rating permitting a pilot involved in sailplane towing operations to fly closer than 1000ft to the cloudbase, provided that the towing aeroplane does not enter cloud, would be an obvious solution. Hence we recommend the following amendment to **FCL.600 IR – General** in order for Member States with such national needs to develop suitable national ratings:

FCL.600 IR – General

(a) **Except as provided in FCL.600(b) and FCL.825**, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

response *Not accepted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. Therefore, an aeroplane involved in sailplane towing shall comply with these requirements and have either an EIR or IR(A). In addition, after discussion with the expert working group, it was established that when conducting sailplane cloud flying training flights it is normally not necessary to fly close to clouds with the towing aeroplane .

comment 677

comment by: *Andy Delaney*

I currently fly gliders in the UK. I understand that powered pilots have for some time had restrictions on where they can fly in relation to clouds which are not practical from a glider pilots perspective.

I am also aware that this will affect glider pilots differently in different countries. For example if you fly gliders in Spain where the atmosphere is often dry and the cloudbase often very high or non-existent restrictions for cloudbase will be relatively easy to live with.

In the UK and other northern countries this is very different. Cloudbase on a good day will often top out at 4-4500 ft and being restricted to flying within 1000 ft on such a day will mean the glider has a ceiling of 3-3500 ft. Any lower and it may make cross country flight impossible for anyone other than the very brave (or foolhardy!).

This restriction affects safety in the following ways:

(a) Forces gliders to congregate in the heightband most used by other GA traffic, especially on a lower cloudbase day when everyone will be flying at a very similar height.

(b) Increases the pilots workload considerably. Glider pilot workload is generally much greater than that of powered flight due to the need to constantly look for lift and effectively use that lift to stay airborne. The difference between 3 and 4,000 ft in a glider is a big one as the additional 1000 ft or effectively doubles your thermal search time in a medium performance glider such as mine allowing time for map reading and better lookout.

(c) Keeping gliders low means field selection may be compromised. Gliders sometimes need to land in fields as they can't get a thermal to stay airborne and get home. It has been shown by BGA studies that well planned field landings although they can damage gliders rarely damage people - it is much more likely accidents happen when field landing decisions are

rushed. Conventional wisdom is for less experienced pilots should have good fields already selected when they are below 2000 ft. These proposals mean pilots will generally be forced to be at or around these levels artificially and this will increase stress and impede good decision making - particularly in less experienced pilots.

The restriction also affects other aspects of gliding that are not safety related:

(a) Number of cross country soarable days will be severely cut in the UK due to cloudbase.

(b) The range and "flyable day" will be curtailed stopping pilots being able to progress.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 681

comment by: *Tony Cronshaw*

For sailplanes to operate with acceptable safety margins, it is important to use sources of lift to gain height before setting off on a glide towards a new source of lift or a landing area. The proposed SCFR could make a big difference in range achievable on many days in the UK where cloud base is above 3,000ft. Without SCFR, the sailplane pilot must find lift or a landing area within a much smaller radius: This is a scenario where many more sailplane out-landings would occur, which are statistically associated with an elevated level of accidents, injuries and fatalities compared with landings at an airfield.

response *Noted*

Thank you for your comments.

comment 700

comment by: *Melissa Jenkins*

This is assuming you are flying to land, not to go cross country. The range is much less from 2500ft AMSL if you wish to find a thermal before being forced to land. If the range is too short you may actually be unable to find the next climb and therefore run the risk of field landing (which, lets face it, is called a crash by power pilots simply because they are tangibly dangerous)

response *Noted*

Thank you for your comments.

comment 702

comment by: *Melissa Jenkins*

Of the mid-air collisions involving gliders the contributing factor is not clouds it is thermalling in large gaggles. If the working band is reduced then this is MORE likely to happen, potentially increasing mid air collisions. As most UK gliding days have cloud bases below 4k feet, we would effectively lose up to

	<p>1000 feet of working band - or about 50% (assuming ground is 500 feet AMSL, and you need 1500 feet for a safe landing, that means you have a 1K working band to 3000ft)</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p>
<p>comment</p>	<p>725 comment by: <i>BGA</i></p> <p>I support option 1 but would ask that;</p> <p>i) consideration should be given to a restricted SCFR to enable sailplane pilots to fly to cloudbase but not to enter cloud. Many more pilots would take advantage of this rating than a full SCFR as, at present, few pilots actually cloud fly but many soar to cloudbase. This would have the advantage of legalising a common practice.</p> <p>ii) TMGs are able to be used more extensively for training. This would help with the logistics of the training programme and would allow trainees to become competent in winter months when there are few up drafts to enable 'real' cloud flying to be practised.</p>
<p>response</p>	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/use of TMG) were also identified by BGA.</p>
<p>comment</p>	<p>764 comment by: <i>Michael D Miskimmin</i></p> <p>Accept.</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
<p>comment</p>	<p>785 comment by: <i>David Weekes</i></p> <p>Agree that enforcement of cloud separation minima in airspace classes F and G when operating above 900 m would severely compromise sailplane operation and safety as a result of the additional risk of field landings.</p> <p>The number of deaths and injuries resulting from field landings is far higher than the recorded casualties resulting from mid-air collisions involving gliders operating in IMC</p>
<p>response</p>	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

871

comment by: *Jeff WARREN*

It is clear that there is no proportionate basis for preventing cloud flying on safety grounds. The record in the UK, which permits cloud flying, is good. Mid-air collisions involving sailplanes are thankfully rare, but are concentrated close to airfields and the vast majority are clear of cloud.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

879

comment by: *BAKER*

Page 229, section 2.1: For sailplane flying it is important to distinguish between cloud flying and IMC flying up to cloud base.

The vast majority of sailplane pilots, where airspace and national regulations permit, will typically fly in IMC conditions to just below cloud base. This is by far the safest method for achieving cross country flight in sailplanes - having a larger operational height band to permit long glides. A minority of pilots may also choose to enter cloud. For this alone, more formal training is necessary.

The skills for cloud flying need NOT be mandatory to acquire to fly in IMC clear of cloud. As correctly identified on page 231 option 2, the skills for flying in IMC clear of cloud are minimal.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

884

comment by: *David TAYLOR*

I support the proposal for a Sailplane cloud flying rating, as to lose the ability to fly in or near cloud would probably cause me to give up gliding. Certainly in this country, where the cloudbase is rarely above 4,000', it would limit the number of viable cross-country days - when I also have time to fly, and the club is open - to be only three or four a year. That's just not enough to make it viable.

A viable cross country day, is a day where there is a good chance of achieving the task set, and not landing out. Aside from the safety considerations of landing outside of an airfield, the requirement to have a crew, and the hassle of doing a retrieve is often a deterrent from attempting a cross-country flight.

I would also like to see option 2 made available. Since most of my flying is outside of cloud, it would give me some time to get the appropriate qualification separately.

I think that without option 2, many young pilots will not have the opportunity to go cross-country until they can afford the extra training they require for cloud flying. Even local soaring will be severely limited, such that the average flight time will be shorter.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1013

comment by: *Martin Roberts*

Page 229 - 231

2 Issue Analysis and risk assessment

2.1 What is the issue and who is affected?

The operational range of sailplanes

Page 230

The combination of;

Para 4; "Therefore, when operating under VMC, sailplane pilots in Europe **typically** (my bold) are limited to operate between 900m (3000ft) and 450m (1500ft) unless cloudbase is 4000ft or more....."

AND Para 5; "In contrast, if flights in IMC and in cloud were possible....."

This is a misleading characterisation of the position. It is a false picture of true sailplane operation under *typical* soaring flight in Europe. In my experience conditions of the nature described as "typical" would not be sufficient to safely sustain cross-country soaring flight, although some pilots attempt it. And cross-country soaring flight is the *only* reason why so many sailplanes have been produced and are in service across Europe. By writing up Paragraphs 4 and 5 as contrasting positions the NPA sets up a false distinction which suggests that only by flying in cloud can the glider be used to its true potential, and that allowing cloud flying is seen as a "necessary concession". This is not true. "Good" or "typical" soaring conditions are significantly better than those characterised in Paragraph 4, and in 95% of occasions do not require cloud flying of any kind.

It is crucial for the EASA to grasp that what has been characterised as *typical* is **NOT** typical. It is a false picture.

Here is the true picture, at least for sailplane pilots operating in typical United Kingdom Spring, Summer and Autumn conditions;

Morning - convection begins and by 11.00 BST (10.00 GMT) reaches the levels EASA describe as "typical", ie, cloudbase 3000ft (900m) to 4000ft (1200m). During this time pilots may launch but will stay close to their home airfields.

11.00 - 5.00 BST during this period cloudbase can rise to 4500ft (1400m) - 6500ft (2000m). Pilots sets off from their home airfields as their radius of operations is now conducive. In these conditions climbs into cloud are not normally required. **THESE ARE TYPICAL CONDITIONS**. In southern European countries such as Spain, Italy, Greece, cloudbase can and often does reach 10-12,000ft (c10,000m)

5.00 - Evening. Pilots fly home from conditions that are now deteriorating. Occasionally pilots may climb into cloud to ensure that they get home, but this is rare.

Given the nature of the misconceptions shown in Paragraphs 4 and 5, one would wonder where the EASA got it's information from. Discussions with sailplane pilots from across Europe would soon reveal the true position. Evidently discussions with overseeing bodies such as the British Gliding Association did not take place, or, if discussions did take place - their experience and suggestions (based on an exemplar track record) were ignored.

Para 8; "For the above reasons, an option to allow cloud flying could significantly widen the operational range of sailplanes". This is another misleading paragraph, since characterises the proposals as a benefit for all - when, in reality there is no advantage for the United Kingdom, as we already enjoy the wider range. For the United Kingdom the proposals only bring disadvantage through additional costs.

Page 231

2.2 What are the risks (probability and severity)?

In 2.1 It is stated that; "The European Commission estimates that... (sailplane) pilots flew more than 1.5 million hours in 2009. Extrapolating this means that in 10 years 15 million hours were flown in gliders. In 2.2 It is stated that in the period 2001 to 2010 there were "no instances of collision in clouds" but that "at least two cases have been in proximity to clouds" resulting in 2 fatalities. 15 million hours of Commercial/PPL/Helicopter flight activity would result in far many more serious incidents and fatalities than any comparable sailplane statistic. The "evidence" presented here by EASA indicates that the cloud flying safety record of sailplane pilots whilst not perfect, is excellent. In the United Kingdom in 90 years of sailplane activity there has never been one single instance of a mid-air collision in or near cloud, and this in the context of relatively frequent cloud flying activity compared to our European neighbours. With its perfect, exemplar and historic track record of cloud flying activity - why is any action required for the UK? There is no case to answer.

Paragraph 2.2 is entitled "What are the risks (probability and severity)?" Yet NO mention is made of the actual risks, their probability or severity, that real sailplane pilots encounter. No attempt has been made to describe the reality, which is that; this is a pilot chosen risk, no pilot would knowingly endanger themselves or other air users through any activity that was beyond their skill or knowledge, be it cloud flying or any or other form of flight. The truth is that IMC cloud flying or flight in proximity to cloud is no more or less risky than any

other form of VMC flight - for those who are properly trained, can assess the risk and can safely handle their sailplane. If cloud flying carried higher risk than VMC flight, then we would expect to see a higher incidence of collisions in cloud in statistical returns, but as Para 2.2 points out - we do not. Thus it is remarkable that the conclusion has been drawn from the figures given, that regulation is required, at least for the United Kingdom - which, as I have said already has a perfect flight safety record in IMC/cloud flying. I would wonder if glider pilots or their representative groups were actually consulted on the "risks" of cloud flying, because if they were then they would certainly not describe the "risks" in the way that Para 2.2 tries to. As a background to Europe-wide legislation Para 2.2 is revealing; it demonstrates a remarkably poor grasp of the issues, and as a result should be condemned.

response *Noted*

Thank you for providing these comments.

The Agency would like to emphasise that this NPA has been developed in close consultation with a working group of sailplane experts. These group of experts included members of the BGA.

With regard to your comment on flying close to clouds, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

In addition, the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States. As the UK is a Member State, it will also be subject to these regulations. Once EU regulation is applicable, a Member State will be unable to add additional criteria (more or less restrictive) to ensure a level playing field across Europe.

comment *1064*

comment by: *RogerBURGHALL*

It needs to be emphasised that, when flying in lee wave, it is often the case that cloud forms below a high flying glider (at say 3000 m with cloud at perhaps less than 1000 m) too fast for the pilot to be able to descend before doing so in VMC becomes impossible. It is therefore important to encourage pilots to obtain cloud flying skills and qualifications.

response *Noted*

Thank you for providing this comment.

comment *1089*

comment by: *John Castle*

All very true. The average summer day in the UK often has cloud base less than 4000 ft until mid afternoon. Whilst the use of the height band 1500 ft to 3500/4000 ft allows good progress on a cross country flight, 1500 ft to 3000 ft does not. Indeed the negative impact on the sport is that gliders and G.A aircraft will be concentrated into similar height bands with the increased risk of conflict and collision.

Further the assumption that 1:40 is a typical glide ratio is wrong. Many gliders

flown by the average club pilot has a best L/D less than this. At the speeds that must be flown to make good progress the L/D worsens to 1:30. The radius of action is therefore 30km on a typical glider on the average day in the UK. The weather enjoyed in Europe is significantly better so therefore the effect of the proposed restriction are less.
The use of Wave conditions absolutely requires the ability to fly in close proximity to cloud. Occasionally it is necessary to enter cloud in the initial part of the climb before making contact with the main wave lift area. Very occasionally a decent through cloud must be made particularly if conditions change during the flight.

response *Noted*

Thank you for providing this comment.

comment

1200

comment by: *John Wright*

Page 230

Without the existence of a cloud flying rating, it would seem that gliders cannot get anywhere near cloud base when cloudbase is high, and those this would very severely restrict glider flying across all of Europe. I feel I must strongly support the Sailplane cloud flying Rating as otherwise glider pilots everywhere will face severe restrictions on what they can do in a glider. I only fly in clouds occasionally, but without the SCFR, much of the normal flying I do outside of clouds would be considered bad airmanship if I did not have a SCFR.

When I last flew in lee wave, I was 15,000' about the nearest clouds, but there was almost 8/8 cloud cover. I had to descend through a very small gap and frequently was inside parts of the cloud. If the SCFR is not enacted, then technically my last wave flight was illegal.

Much as I dislike needing to collect extra paperwork to show I can do something I've done many times, I really must fully support this SCFR, or gliding will become massively restricted compared to what it is like just now.

response *Noted*

Thank you for your comments.

The Agency would like to highlight that an existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. This process will be the responsibility of the Member State in consultation with the Agency.

comment

1210

comment by: *Burn Gliding Club*

Dear EASA,

I have been a member of Burn Gliding club for 4 years, but I have always wanted to try gliding as far back as I can remember. I know we are in a transitional period and have been for the last few years. But the way I see it the CAA have handled affairs pretty nicely thank you very much.

We share the air with many types of Powered aircraft including Microlights, para gliders, balloons, helicopters autogyros, and even some times airships. No

other atmospheric craft requires the use of cloud flying as a sailplane (hereinafter called a glider)

I fail to see why EASA should try to curtail our activities by not continuing to allow cloud flying.

The sport of Gliding, [and it is very much a sport!] requires the use of as many different types of lift as possible, if it's out there the cunning pilot will use it, whether it may be thermic, ridge, or atmospheric wave. Even large fires and power station efflux are all usable.

In searching for lift the Cross country pilot will use the dark patches under likely looking Cumulus clouds as a guide, as very often these will yield thermic lift. In contrast to the powered fraternity, we are able to rub the canopy against the base of the cloud, before breaking off a climb.

Only relatively seldom will a determined XC pilot enter cloud to make height, or decent track across the ground. The pilot, must do so from below, giving the required call on 130.1, telling the ground that they will be changing to the cloud flying channel 130.4, while giving his turn & slip or Artificial Horizon time to power up. Calling again on the new frequency. Once in cloud all visuals with the ground are soon lost, the plane must be flown with respect to the T& S/AH while circling to gain altitude.

1. I would like to think that EASA will grant us 'Grandfather rights' on this as an historical practice, as long as we use our good judgement, and gain trust & permission from our CFI, and use them wisely.
2. If it is that we have 'to make do' as I see it, with having to attain a Sailplane Cloud Flying Rating. Then that is as I see it a second choice. Then I would like to register my support for this new rating, as opposed to losing it altogether. I understand that this would involve training in a TMG (Touring Motor Glider) EASA have stated a minimum of 5 hours. I support the BGA recommendation of 3 hours Max.
3. If it were to have the same VMC rules as powered pilots, then I would have no option but to jack it all in, in disgust at yet another attempt by the EU to interfere with our ways. A total ban on even getting near clouds would just literally kill nearly all types of soaring sports in the UK.

I therefore urge you to look again at a revised Sailplane Cloud Flying Rating, where we can keep our existing cloud flying with extra training allowed as extensions through our CFIs.

I trust I do not have to point out that Sailplaning is environmentally friendly and does not pollute the atmosphere, an all important plus in these carbon aware times.

Yours faithfully

Tommy Lynch
Glider pilot with Bronze C + Cross Country endorsements,
50 Hours solo. & 2 Silver legs

response *Partially accepted*

Thank you for providing these comments. Please take note of the responses to your individual comments below.

1. An existing national licence and rating (i.e. UK IMC rating) may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.
2. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.
3. In certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1232

comment by: *John Klunder*

Whilst the analysis of the advantage to sailplane pilots of flying within cloud is correct it gives only part of the picture. Significant advantage can be gained in both thermal and lee wave conditions by operating clear of cloud but closer than the minimum clearance required for VMC. The majority of sailplane flights in IMC are of this type. For example, lift in lee wave conditions is often highly localised and close to cloud.

response

Not accepted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1247

comment by: *Michael Williams*

Para 2-1

The research has given much thought to VMC / IMC rules, with respect to vertical clearance from cloud. For UK based gliders using thermals as the method of gaining altitude, I understand that in order to fly closer to cloudbase (ie subject to IMC) then the SCFR would be required.

Point 1, ATC services are not available for separation purposes for gliders. - please explain how flying in IMC but outside (below) cloud base, how the SCFR will improve flight safety in terms of collision risk? Gliders circling in thermals within 1000ft of cloudbase in the UK (ie in IMC) is not uncommon.

With gliders excluded from most regulated airspace, collision avoidance between gliders and gliders and other powered aircraft is primarily by visual means.

In the UK, glider pilots are specifically taught visual scanning for collision avoidance from their first instructional flight, as gliders tend to fly in close proximity. In IMC, but outside of cloud, (such as within 1000ft of cloudbase) visual separation still remains key to safe flight.

Point 2. The calculations for radius of operations used a typical glide ration of 1:40. Many gliders, including 2 seater gliders do not achieve this performance,

including my Annex 2 glider. Hence, unless I achieve the SCFR, my potential for cross country flying, and wave flights will be severely compromised. A restricted rating to fly IMC, but not intentionally in cloud, would be beneficial to me.

response *Noted*

Thank you for providing this comment.

1. The Agency would like to highlight that depending on the Member State specific ATC procedures have already been developed. These procedures may consist of filing a flight plan, contacting ATC for clearances or traffic advisory purposes. Feedback from Member States suggests that having such procedures in place do not present any safety issues.
2. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment *1248* comment by: *Mike Collins*

Annex 2 of the Chicago Convention originally defined limits so that the "transition altitude" of 3,000' AMSL was the point at which aircraft re-set their altimeters to the standard altimeter setting of 1013.25 mb. They then flew headings according to the quadrantal height rule to ensure vertical separation. As the transition altitude in the UK is now generally going to be 6,000', the quadrantal height rule will not be applicable below that height. Therefore, would it not be possible for european glider pilots to be able to fly (outside controlled airspace) up to their respective transition altitudes i.e "clear of cloud", without the need for a SCFR.

response *Noted*

Thank you for providing this comment.

The Agency is of the opinion that cloud flying has nothing to do with IFR flying; therefore, there is no link to the quadrantal height rules or to the transition altitude.

The Agency would like to reiterate that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment *1363* comment by: *Glider Pilot - 3400hrs FAI Diamond Badge Full Rated BGA Instructor*

This comment refers to Section 3 -Objectives

'The specific objective for this task is to facilitate sailplane operations'

My understanding of 'facilitate' is to make easier/assist/help. By rejecting Option 2 (restricted SCFR) in favour of Option 1 actually imposes an additional rating that has requirements that are far in excess of what is required to enable gliding to continue in the UK as it has done for many years with it's excellent

safety record.
I consider that for the majority of sailplane pilots to obtain the full SCFR is not facilitating general sailplane operations particularly for the majority of pilot who do not wish to fly in cloud but wish to continue flying in IMC but clear of cloud. Therefore I strongly believe that the restricted cloud flying rating proposed in Option 2 is required to be incorporated in Option 1 to achieve the stated Objective of facilitating sailplane operations.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1393

comment by: *John Taylor*

Dear Sirs, this section is absolutely correct - especially in relation to allowing sailplanes to fly right up to cloudbase in order to maintain contact with thermals under cumulous clouds and achieve cross country flight with minimum risk of an out-landing. As you say, flight into clouds can also extend range although the vast majority of cross country flying is done without a cloud climb. The ability to do one when necessary though is very important. If my understanding is correct, the SCFR would allow gliders to continue to fly up to cloudbase above 3000', so I fully support this proposal.

response *Noted*

Thank you for your positive feedback.

comment

1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1432

comment by: Gary Newbrook

The requirement to fly in clouds for a short period of time occurs where Wave is present and NOT during normal thermic flying. The ability to fly to cloud base during normal thermic flying is a necessary part of gliding in the UK and restricting the scope of a pilot under normal circumstances, especially in the formative flying time of newly qualified pilots will reduce the flight times of pilots and, much more importantly reduce the experience that may be gained by newly qualified pilots. Reducing the experience of such newly qualified pilots will increase the time it takes for these pilots to gain experience and thus become safer...

Flying in wave conditions is a different form of flying and should not be confused with normal thermic flying used by many new pilots to gain experience in flying solo and thus in increasing the overall safety of the sport.

Finally on this point, reducing the time that pilots are in the air will reduce the number of pilots who continue beyond first solo and start to discover the other aspects of flying: duration flights, height, cross country etc. By reducing the scope available to these newly qualified pilots, the number of pilots progressing through the sport WILL decrease. This will negatively impact the sport financially. Financial impact to the sport is an important part of the conditions as defined by the European process of evaluation.

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1433

comment by: Gary Newbrook

"In the information available, there are no instances of collisions in clouds".
"..at least two cases have been in the proximity to clouds with one fatality each.."

How does this relate to the requirement certification for cloud flying. There have been many more fatalities due to rigging errors and general pilot errors.

The risk caused by flying NEAR (NOT IN) cloud is not proven by this evidence. There is more evidence to prove that pilots should not rig a glider than there is that a pilot should not fly NEAR cloud

response

Noted

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft

from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 1500 comment by: *Richard Cooper*

I depend on getting to cloudbase in order to travel cross-country. I have been doing so for forty years, and have never yet had an airmisss at cloudbase. I depend on this type of flying to avoid landing out. Landing out has unusual dangers. Last year a farmer threatened to shoot me if I attempted to remove my glider from his field without paying £200 in cash to do so. He maintained the threat until the police were called. I am strongly against taking regulatory safety precautions which might increase the chances of my getting shot.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 1505 comment by: *Richard Cooper*

Within the UK we are obliged to operate within 1,000' of cloud for most of the time, because the cloudbases are generally lower than those in Europe. We also have far more restrictive airspace. These features are not mentioned in your document.

IOt would be very difficult to continue in gliding in the UK if we were not allowed to fly within 1,000' of cloud, because my already marginal currency would be reduced to a dangerous level while my frequency of field landing would be hugely increased.

Within the eastern parts of the UK there is usually an airfield or farm strip withing reach, but if my radius of action were so severely reduced my risks of a filed landing - at a very real chance of death or injury - would be greatly increased, while my chances of having a mid-air collision would not be significantly reduced.

This document demonstartes blinkered thinking by persons who are not glider pilots and who do not know their "tosts" from their "ottfurs".

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

Furthermore, please note that this NPA has been developed in close consultation with experts, including sailplane experts from BGA.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 3 Objectives

p. 231

comment	284	comment by: <i>Simon Kahn</i>
	The objective should include allowing sailplanes to operate close to clouds safely as well as in clouds or IMC. The height band excluded by 300m below cloud above 100m is significant. Reducing the height that sailplane are permitted to climb will increase the range and therefore the risk of having to make a precautionary landing which carries a greater risk than flying in cloud (based on the evidence provided in this document).	
response	<i>Not accepted</i> Thank you for providing this comment. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.	
comment	463	comment by: <i>Laurence SMITH</i>
	I am very pleased to see the proposed objectives. They are particularly important for the on-going stability and future of gliding in the UK, bearing in mind the average larger amounts of cloud and lower cloudbases in the UK relative to many of the member states.	
response	<i>Noted</i> Thank you for providing positive feedback.	
comment	488	comment by: <i>Leslie Kaye</i>
	The objectives should also acknowledge the importance of encouraging and facilitating gliding for amateur sport and recreation.	
response	<i>Noted</i> Thank you for providing this comment.	
comment	690	comment by: <i>Henry Smith</i>
	I agree with Option 1, but feel 5 hours of dual flying instruction is excessive: 3 hours is all that is needed for a Sailplane (Glider) pilot who, after all is used to turning steeply and keeping a good lookout.	
response	<i>Partially accepted</i> Thank you for providing this comment. Please check the response provided to the British Gliding Association (BGA)	

comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment	765	comment by: <i>Michael D Miskimmin</i>
	Accept	
response	<i>Noted</i>	
	Thank you for this comment.	

comment	1066	comment by: <i>RogerBURGHALL</i>
	I support the introduction of a cloud-flying rating for sailplane pilots. Making this readily accessible will encourage pilots to obtain the appropriate skills.	
response	<i>Noted</i>	
	Thank you for providing positive feedback.	

comment	1070	comment by: <i>Martin Roberts</i>
	Page 231 3 Objectives	
	This is yet another wholly misleading paragraph; "The specific objective for this task is to facilitate sailplane operations by increasing the operating range of sailplanes by allowing them to operate in clouds or in IMC....". This paragraph implies benefit; " <i>facilitating</i> " sailplane operations. But there is no benefit to the United Kingdom gliding community because we already enjoy these freedoms of action, and do so within the framework of 80 years of perfectly safe flight in sailplanes in and around cloud. For the UK there is no objective, no benefit, there is simply further cost financial, human and in materiel. For the UK sailplane pilot these proposals would actively depress sailplane operations.	
response	<i>Noted</i>	
	Thank you for providing this comment.	
	The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.	

comment	1394	comment by: <i>George Metcalfe</i>
response	<i>Noted</i>	
	No comments provided.	

comment	1418 ❖	comment by: <i>Barry Thomas</i>
	Comments on NPA 2011 – 16	

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.
Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response *Not accepted*

Thank you for providing this comment.
Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment *1486*

comment by: *Tony Hutchings*

Having read proposals and rationale relating to UK sailplane cloud flying and proposals for 5 hours instruction to gain (option 1) an SCFR rating to be able to do what we already are allowed to do in the UK where permitted, I feel is going to prove unnecessary and very expensive for many glider pilots. Even the BGA's compromise proposals are unreasonable. Obviously most glider pilots do not spend much time flying in cloud but there are occasions, especially in the UK where cloud bases for cross-country flying are much lower than in mainland Europe, where climbing in cloud can make the difference between getting home or landing out in a field, this safety aspect is important as outlanding can prove very dangerous on occasions. I would propose that, as is the case now in the UK, those that wish to cloud fly obtain training from their club, via the BGA endorsed CFI, the amount of training required should depend on the pilot's individual experience, the CFI is in a position to establish this. Option 2 is a restriction on what is now allowed in the UK, for the above reasons Option 1 but implemented differently is preferred.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, please note that previous experience can be credited to a Part-FCL licence during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 4 Identification of options

p. 231-232

comment

122

comment by: *Graham Bowser*

Proceeding with the proposals for a Sailplane Cloud Flying Rating is essential if the sport is to be able to continue after the introduction of legislation.

Without it, particularly in the UK and other Western extremities of Europe, there would be very few days when flights could be conducted given the low average cloudbase in those areas.

By introducing a formal training and qualification process the already excellent safety record will be enhanced. The duration of training needed to become competent will depend upon past experience and aptitude. 5 hours is too definitive a figure. What is important is proving "competence" (be that in 1 or in 10 hours) rather than setting a specific number

response

Partially accepted

Thank you for providing this comment.

With regard to the 5 hours training, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised have also been identified by BGA.

comment

131

comment by: *Mark Sanders*

Option 0: UK glider pilots would give up in droves if Option 0 were to go ahead - privileges they had enjoyed for years taken away and serious safety implications as described in your document.

Option 1: Is perfect for many of our pilots who regularly fly in cloud. However, for the majority who fly up to cloudbase but no further, it seems to be completely disproportionate for them to have to undertake five hours of simulated instrument flying when they have no intention of ever flying in cloud. I fear many of them, faced with the choice of either exclusively flying in VMC, or else undertaking what seems like arduous instrument training just to continue enjoy current and safely held practices may give up, threatening the future of our sport here in the UK

Option 2: I accept that this option would place too many restrictions on other Member States and also unreasonably restrict our own pilots.

An **Option 3** would logically seem to be a sound idea - being a **combination of Option 1 and Option 2**. It would give glider pilots throughout the Member States the ability to choose a level of privilege and training proportionate with their requirements. There does not appear to be an downside to this course of action either.

response

Partially accepted

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/Option 2 - restricted cloud flying rating) were also identified by BGA.

comment

156

comment by: *Robin Birch*

	<p>My earlier comment to the IMC outside of cloud applies here as well.</p> <p>How are the ATOs going to be established? Most gliding clubs do not have aircraft equipped for this type of training and possibly could not afford to do this given the current expensive and labarynthine regulations around adding instruments.</p> <p>Given that gliding instructors are not currently required to record flight in and out of cloud how are they to gain the necessary experience to achieve the rating?</p> <p>Given the current non-existence of the instructing rating, who will train the trainers?</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please note that the requirements for an ATO are covered in Part-ORA. The Agency understands the issue of lack of suitably equipped sailplanes at gliding clubs; however, the required instruments (see Part-NCO) are definitely needed to operate sailplanes in clouds. Therefore, an artificial horizon or turn and slip instrument will be kept as a minimum requirement for these flights.</p> <p>In addition, the Agency agrees with your comment on logging of flight time and proposes to enter this into the 'remarks' section. Thus far no standardised log book requirement has been in Part-FCL, but the Agency will review this at a later stage.</p> <p>Finally, previous experience as an instructor for cloud flying will be credited during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p>198 comment by: <i>Atorriani</i></p> <p>Option 1 is my favourite one. Glider pilot can be followed in his growth, and will be able to solve flight situation that could be dangerous.</p> <p>Regards Alberto Torriani italian glider pilot.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your feedback.</p>
comment	<p>229 ❖ comment by: <i>Martin SMITH</i></p> <p>I am commenting as an experienced and regular cross country sailplane pilot based in the UK. I have safely enjoyed the cloud flying and proximity to cloud privileges that UK gliding currently permits and wish to continue to do so.</p> <p>I am in favour of Option 1 of the Sailplane Cloud Flying Rating for all sailplane pilots. In addition to the document text that describes the operational range</p>

limits and related landout frequency imposed by not having this option, I would make the following observations based on my own gliding experience:-

1. On any given day the cloudbase is often extremely variable and constantly changing.
2. Remaining outside of cloud is easy to judge by simple observation.
3. Remaining 1000ft vertically clear of cloud on a typical gliding flight which climbs and descends repeatedly is impossible to judge without first visiting the current cloudbase and then descending 1000ft, which both defeats the object and is an extremely inefficient way to fly a sailplane.
4. Policing the 1000ft vertical clearance from cloud is impossible.
5. Sailplanes often fly in close groups, having everybody with their heads down looking at their altimeters and worrying about whether they are 900 or 1100 feet below a difficult to judge cloudbase will adversely affect lookout.

Given all of the above a rating such as Option 1 of the SCFR which permits close proximity to clouds is the only practical answer.

With regards to the training required for this rating, as a Full Rated BGA Instructor I understand that some students would learn the required skills very quickly and some students would simply never get it. As such I am in favour of the skills and competency tests but feel that the minimum training duration requirement such as the 5 hours proposed is excessive given that sailplane pilots will already have most of the skills required. It is also important that TMGs which are normally restricted to VFR are permitted to operate closer to cloud when conducting training flights for students preparing for their SCFR.

Martin Smith
December 2nd 2011

response *Partially accepted*

Thank you for your comments in support of Option 1.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment 239

comment by: *Brian Shadbolt*

Any regulation of a the current satisfactory system is not required. What will it achieve?

Why change a system with a long history of safe operation to a heavily regulated regime which will not improve safety?

The only sensible option is to retain the status quo. No rating is needed.

The requirements set out in this document will kill gliding.

response *Not accepted.*

The Agency acknowledges your comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment 247 comment by: *East Sussex Gliding Club Ltd*

As a glider pilot and gliding instructor, I support the proposals as set out within this section of NPA 2011-16 and in particular the provision for and SCGR-R to maintain and regularise the current practice within the UK gliding community.

The withdraw or delete these proposals by further amendment would effectively end sailplane flying in the UK.

We train our students very carefully to maintain a strict and careful lookout at all times and I believe that the proposals within this document will formalise this training.

response *Noted*

Thank you for providing this positive feedback.

comment 266 comment by: *Michael Wells*

Reference-Impact Assessment for the Sailplane Cloud Flying Rating. Option 2.

Although I can appreciate the logic behind requiring some training for flying in cloud I believe that the requirement for 5 hours sailplane flying on instruments while under instruction is excessive. I would suggest that 1 hour would be adequate for an experienced sailplane pilot, and that 3 hours dual instruction on instrument flying would be more than enough.

The case of flying sailplanes in cloud is quite different from flying powered aircraft in cloud. Sailplane pilots usually use circle up using cumulus or cumulo nimbus clouds to gain height in order to increase their gliding range, these cloud climbs are generally of short duration. On the other hand powered aircraft will usually be flying in cloud, maybe for long periods, while maintaining a heading and altitude. their reason for flying in cloud is totally different.

There is a considerable difference in the training required for flying a sailplane in cloud and a powered aircraft in cloud.

Reference SCFR-R Option 3. If Option 2 is not adopted (in current or amended form) then Option 3 gets my vote and is already in operation in a lot of countries

Ref FCL 830 (c) The requirement for 24 months revalidation. I believe that this should be removed, it is an expensive and inconvenient expense with little or no benefit.

In the U/K we have been allowed to fly sailplanes in cloud without the requirement for a cloud flying rating, and maintained a good safety record.

Having to do a 5 hour course to obtain a cloud flying rating will not improve the safety case.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training) was also identified by BGA.

In addition, the Agency would like to clarify that the SCFR has a 24-month recency requirement, but no revalidation.

comment 267

comment by: *Tony Murphy*

I am a UK glider pilot with BGA Silver C, and 780hrs total. I wish to register my support for **OPTION 2 for a cloud-flying permit for glider pilots**. I must emphasise that the EASA proposal to limit flights to below 1000ft under local cloudbase would make glider operations in the UK difficult or impossible . I must also point out that the re-training and certification for pilots would need equipment, certified instructors, motor-glidern, and funding, all of which do not at present exist in the UK .

response *Noted*

Thank you for providing this comment.

The Agency believes that with the introduction of the new system there will be sufficient equipment, sailplane instructors & examiners and TMG's to support the implementation of the SCFR.

comment 281

comment by: *Horst Metz*

Ich möchte mich für die Option 1 einsetzen. Das Rating für Wolkenflug sollte in allen EU Mitgliedstaaten anerkannt werden, sofern dieses in einen Mitgliedstaat ausgestellt wurde.

Als Inhaber eines Wolkenflugratings muss es erlaubt sein, in jeden Mitgliedstaat die Kenntnisse dieses Rating Wolkenflug zu üben, um die Kenntnisse nicht zu verlieren, oder zu verlernen. Dazu brauche ich meiner Ansicht keinen Fluglehrer für Wolkenfluglehrberechtigung, sondern einen erfahrenen Segelflugpiloten, der sitzt vorne im Segelflugzeug, Der Übende für Wolkenflug sitzt hinten, wobei die Sicht nach draussen im hinteren Teil abgedeckt ist. Der hintere Pilot hat somit keine Sicht nach draussen, somit fliegt der Pilot hinten nur mit Wendezeiger, während der vordere Pilot den Luftraum überwacht. Der vordere sagt die Kursrichtung zur erhofften Thermikwolke, dieser Kurs muss vom Hinteren eingehalten werden. Bei Thermik kurvt der Pilot hinten ohne Sicht nach draussen, also IMC, selbständig ein, um den Aufwind zu erfliegen. Dazu muss dieser ständig zentrieren. Diese Übung schärft die Hand - Auge Koordination. Für diese Übung braucht man nicht in die Wolke einfliegen, man behält auch die Wolkenabstände. Ich würde es verneinen, wenn für diese "Inübunghaltung" ein Fluglehrer mit Wolkenflugberechtigung vorgeschrieben wäre.

Auf diese Art und Weise kann man im Segelflugverein auch ohne Fluglehrer die lizenzierten Fertigkeiten in Übung beibehalten, die Flugsicherheit wird dadurch nicht beeinträchtigt. Daher muss es gesetzlich erlaubt sein, das im Segelflugzeug hinten gesteuert wird, während der vorne sitzende Pilot als verantwortlicher Pilot den Luftraum überwacht, nur überwacht. Die Steuerung des Segelflugzeug übernimmt der hinten sitzende Pilot, ohne Sicht nach draussen. Diese Variante habe ich mit den Luftamt Freiburg besprochen, ohne Fluglehrer vorne sieht das die deutsche Rechtsprechung so nicht vor. Genau diese Rechtsproblematik müsse in alle EU Staaten gelöst werden.

Horst Metz

response *Not accepted*

Thank you for providing your comment and for the positive feedback on the proposed cloud flying rating.

The Agency can confirm that a Part-FCL cloud flying rating issued by one Member State will be automatically 'valid' and accepted in all other Member states. This is the main principle of harmonisation encompassed in the future European licensing system.

However, the Agency does not agree with your opinion that the training could be provided by every licence holder holding such a cloud flying rating. The principle - and this is shared with the experts and gliding instructors - is that training will only be provided by qualified instructors. This is a principle which is given by the Basic Regulation.

For the recency requirements of the cloud flying rating additional options have been introduced (actual experience/dual flights with an instructor/ proficiency check). Please review the resulting text for FCL.830.

comment 286 comment by: *Simon Kahn*

Does option 0 allow existing privileges to be exercised without a cloud flying rating for sailplanes? If not why not when there is no evidence presented of a significant probability of a significant risk? Option 0 should continue to allow national aviation authority to allow sailplanes to fly close to or in cloud where current aviation practice demonstrates low probability of severe risk.

response *Noted*

Thank you for providing this comment.

The Agency would like to clarify that Option 0 implies that the SCFR will not be implemented. As a result, all sailplane pilots within all EASA Member States would be unable to fly up to the cloudbase or within clouds. Current privileges, such as the UK restricted cloud flying, would be lost.

comment 287 comment by: *Simon Kahn*

Option 2 should be extended to allow flight in VMC close to cloud above 1000m.
Consider Option 3 : Option 1+2
Consider Option 4: Include the requirements of Option 2 in the pilot license and an optional additional rating for Option 1.

response *Not accepted*

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

comment 299 comment by: *Albert Jackson*

The requirement for a minimum of 5 hours of dual instruction is excessive. In my experience, a competent sailplane pilot can master cloud flying with 1 hour of dual instruction or less. Consequently SCFR rating should require no more than a minimum of 2 hours of dual instruction. This would allow a 100% margin for the minority of pilots that may struggle to achieve the necessary

proficiency.

response *Accepted*

Thank you for providing this comment.

With regard to the 5 hours training, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised have also been identified by BGA.

The Agency followed the proposals and will require at least 2 hours of flight instruction.

comment 303 comment by: *Albert Jackson*

Option 2. The name Restricted Sailplane Cloud Flying Rating (SCFR-R) is misleading if not disingenuous. It relates to flying sailplanes in clear air in Instrument Meteorological Conditions. It would be more accurate to name the rating as Sailplane Clear Air Instrument Meteorological Conditions Rating. Options 1 and 2 are not mutually exclusive. The proposal should also consider Option 3 which is a combination of Options 1 & 2.

Experience in the UK for over 50 years shows that sailplanes can be flown safely in clear air in Instrument Flight Rules airspace without cloud flying experience. Requiring a pilot to have a Sailplane Cloud Flying Rating in order to fly in clear air in IFR airspace is totally inappropriate. The ability to fly a sailplane only by reference to instruments does nothing to improve safety in clear air. It does not improve the pilot's visual acuity or make the sailplane any more conspicuous. Indeed any pilot flying solely by reference to instruments in clear air would create a significant hazard.

Requiring sailplane pilots to obtain a SCFR in order to fly in clear air would:-

1. be an unnecessary financial burden
2. be unnecessarily restrictive on pilots with less than 30 hours solo experience
3. severely restrict flying from airfields located on high ground adjacent to ridges or in wave flying areas.

Failure to introduce Sailplane Clear Air Instrument Meteorological Conditions Rating would significantly disadvantage pilots in countries that currently permit such flying without any improvement in safety. Introducing the rating would not increase the risks in countries that currently prohibit such flying and these countries could continue to prohibit such flying if necessary by redesignating the airspace.

The introduction of both Sailplane Cloud Flying and Sailplane Clear Air IMC Ratings is surely a "no-brain" decision.

response *Not accepted*

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

comment 356 comment by: *Stuart NORTH*

Although a Restricted Sailplane Cloud Flying Rating has been considered, it has only been considered as an alternative to a full Sailplane Cloud Flying Rating. A further option (Option 3) should have considered making both ratings

available. This is because, while the ability to fly in clouds is crucial in a number of cross country glider flights, nearly all cross country flights in the UK involve flying in IMC at intervals during the flight. Furthermore, in certain airspace categories a SCFR may not confer any advantages over a RSCFR. For these reasons an RSCFR would be an important alternative rating for a significant number of glider pilots. Please re-consider the options that have been identified by adding an Option 3 - both SCFR and RSCFR.

response *Not accepted*

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 381

comment by: *A Darby*

What about option 3 with both full and restricted cloud ratings with greater training being required for the full cloud rating

response *Not accepted*

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 385

comment by: *Allan Reynolds*

1 No cloud flight collisions have occurred in the last few years. Glider pilots therefore should be allowed to fly in cloud unrestricted without the need for further training.

2 Cloud flying is part of a glider pilot's training before going cross country. In view of the above, no change is necessary.

3 If specific training is considered necessary, 2 hours training is sufficient, not 5 hours. This amount of training makes it less economical.

4 'ATO'. Training should take place at any British Gliding Club approved club site and be given by any qualified instructor nominated by its CFI.

5 The reference to collisions involving gliders near cloud means those gliders are flying in VMC, not IMC, ie keeping a good lookout for other gliders.

6 CONCLUSION - If one of the three Options has to be adopted, then my preferred Option is Option 1, with consideration given to my comments 1 to 5 above.

Allan Reynolds glider pilot. Member of Midland Gliding Club

response *Partially accepted*

Thank you for supporting Option 1.

The Agency would like to highlight that an ATO will be required to ensure that a minimum training quality standard is achieved in every EASA Member State; this does not necessarily exclude current BGA-approved clubs. Training for the

SCFR must be conducted by a FI(S), who would be part of the ATO.
In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training/restricted cloud flying rating) was also identified by BGA.

comment 391

comment by: *Mike Frawley*

In response to the proposal NPA 2011-16 (Proposals for cloud flying in gliders): I concur broadly with the response of the British Gliding Association, but would also comment re. the following:

With reference to FCL.830,(b),(2),(ii) The requirement for a minimum of 5 hours instrument flying instruction to obtain the Sailplane Cloud Flying Rating; This number of hours is excessive since many pilots will already have developed the skills required through experience, and the need to fly under instruction for 5 hours will place an unnecessary burden on gliding club operations in terms of instructor and two-seater availability, as well as cost to the pilots. Less experienced pilots who need to learn cloud flying as a new skill, and therefore need more hours of instruction to achieve the required standard may be disadvantaged due to lack of instructor and equipment availability. EASA should consider removing the requirement for 5 hours instruction for the SCFR.

Also with reference to the SCFR, it should be noted that sailplanes when flying cross-country, generally, do not transit through cloud (on a heading) but use the cloud and associated thermals to climb to a height necessary to reach the next thermal, or their destination. We also deviate from track by considerable amounts (typically 20-30 degrees either side of track) in order to follow lines of energy. This is essential when cross-country soaring, and for this reason the training requirement for using dead reckoning to find position and heading while in cloud is irrelevant to the sailplane pilot. This would also increase pilot workload and could be detrimental to safety. EASA should therefore consider removing the training requirement for using dead reckoning etc. to fly an accurate heading while in cloud (Theoretical Knowledge 1.4 and Flight Instruction 2.1).

The BGA proposed a Restricted Sailplane Cloud Flying Rating to allow IFR flight, but remaining clear of cloud, and this proposal has been rejected by EASA.

The reason for this BGA proposal was that during cross-country flight glider pilots will endeavor to climb to the base of clouds in order to achieve the required height for transit to the next thermal, without actually entering the cloud. This technique is fundamental to gliding and has been the norm in UK gliding for many decades without compromising safety.

I am strongly in agreement with the BGA in that EASA should reconsider the option of a Restricted Sailplane Cloud Flying Rating within U.K. airspace.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 397

comment by: *John Weddell*

Option 0. Unacceptable. If this were adopted it would lead to the end of gliding.

Option 1. I strongly support this option. It should be available for both LAPL(S)

and SPL holders and will ensure that safe gliding will be maintained and become safer as more pilots become SCFR endorsed.

Option 2. I support this option. A restricted SCFR would allow experienced glider pilots to fly safely in more airspace categories if IMC flight clear of cloud where airspace rules require an additional rating were permitted.

response *Noted*

Thank you for your comments.

comment 400

comment by: *albert newbery*

Whilst supporting the proposed Sailplane Cloud Flying regulations I am strongly opposed to the requirement for an arbitrary 5 hours flight instruction prior to testing. In the gliding movement there is a wide diversity of skills and experience and it is unacceptable for those with extensive experience, including cloud flying, to be subject to the expense of un-necessary training. Submission for test should be at the discretion of the training instructor.

It is essential that motor gliders are permitted in the training and testing regime.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 407

comment by: *Ian Carrick*

The SCFR in option 1 is the best option, but a restricted rating allowing flight within 1500m of cloud for the purposes of wave soaring and 1000' of cloud to extend thermal soaring should be considered as noted in 3.1 General.

response *Noted*

Thank you for providing your comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA. The Agency will not introduce a restricted cloud flying rating which would allow not complying with the ICAO VMC definitions.

comment 420

comment by: *Gerald Higgs*

Option One.

To implement option one would rapidly lead to the end of gliding as a sport in U.K. and, I suspect in most of Europe. None but the most dedicated and wealthy glider pilots will want to be bothered with all the training, testing and renewal testing that is proposed. It just will not happen and gliding as a sport will die out.

If option one were implemented how would transgressions be monitored? How would you record the position, size, cloudbase and top, and duration of cumulus clouds and compare them with the positions of errant glider pilots?

The proportion of glider pilots that do fly in cloud now is very small; most of us don't want to, and the arrangements for cloud flying now have been adequate for many years. You will have access to accident statistics which will show, I am sure, that the number of cloud flying accidents is very small.

Option Two.

This is a much better idea as it regularises what happens already. To stay 1500' horizontally and 1000' vertically away from cumulus clouds in order to comply with current VMC criteria is a nonsense. The expression "clear of cloud" as it applies to VMC conditions below 3000' QNH is more or less totally disregarded by most glider pilots in a U.K. summer; otherwise our activities would be severely curtailed. Anybody with the most rudimentary understanding of gliding will be aware of, and understand that.

The adoption of option 2 appears to recognise this reality and would be acceptable as a way forward.

response *Not accepted*

Thank you for providing this comment.

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating (Option 1) are too burdensome as stated in your comment. As a sailplane pilot you might be agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations. With regard to your comment on Option 2, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 421

comment by: *j nicholson*

**In Support of
Sailplane cloud flying rating (Option 1)
FCL.830.**

As a UK ATPL holder and UK glider pilot I wish to make comments in support of Option 1 for a "Sailplane cloud flying rating" in NPA 2011-16.

Most forms of rising air or "lift" that are required to keep a glider aloft are usually associated with some sort of cloud formation because of the physical processes involved in air rising and water vapour eventually condensing out to form cloud.

The sport of gliding in order to exist at all needs free access to all forms of lift or else it cannot survive. Just like sailing yachts need the wind.

Those bodies who regulate the sport frequently do not contain individuals with significant experience of cross country gliding and consequently do not always understand the unique and close relationship that is required between forms of lift and gliders, in order for the sport to be able to exist.

The proposal of this rating and option 1 is vitally important because it will allow glider pilots in the UK to continue to use lift all the way to cloudbase where airspace allows.

The UK being an island experiences lower cloudbases than continental Europe because of its moist maritime climate.

If the cloud flying rating did not exist and glider pilots were forced to remain 1000' clear of cloud then significant problems for the sport would be presented that would have a serious impact on the survival of the sport in the UK.

In the UK cloudbase levels above ground are frequently in the range of 1000' - 4000' when the weather is suitable for gliding to take place at clubs. If we were no longer able to fly within 1000' of cloud then this would make flying impossible on some days, as one needs to be launched to at least 800' approx to be able to commence even just a circuit.

And cross country gliding in soarable conditions frequently takes place with cloud bases down to 2000' agl and below, particularly at the start of a soarable day - not being able to fly within 1000' of the cloudbase would force more potentially hazardous field landings, or stop cross-country gliding at those times.

Even with a good and infrequent 5000' cloudbase in the UK not being able to use the last 1000' up to cloudbase means that the effective safe operating band has been reduced from 3000' to 2000'. Below 2000' maintaining field landing options becomes more of a concern. Reducing the operating band between around 2000' agl and cloudbase by 1000' has a serious detriment on the ability of a glider pilot to achieve cross country flight.

Furthermore, as cloudbases constantly change on a good gliding day, varying significantly in time and geography - how would it be proposed to accurately establish where the 1000' below cloud point is ? And large cumulus clouds do not always have regular flat bases.

In short, gliding needs to be able to use every foot of height it can up to cloudbase, and this is particularly so in the UK due to its weather.

Beyond that there are times when a climb in to cloud can be a useful tool to enable a long glide to be made across difficult potential landing areas, to better field landing opportunities, or to enable a long glide across dead unsoarable air to areas where it is still soarable.

Many cross country flights depend on this ability and would otherwise end up in a field landing.

I hope that you will take these comments in to consideration in order that the sport may continue to survive.

Commercial operators will not understand the need for this in gliding.

But you have to be there to understand why it is so necessary.

It would be like taking a lot of the wind away from the sails of a sailor.

Gliding breeds very good & skilled aviators - it is the original form of flight and at the grass roots of modern day aviation.

It deserves to be taken seriously.

response

Noted

Thank you for providing feedback.

comment

448

comment by: *Lasham gliding society*

Regulatory Impact Assessment for the sailplane cloud flying rating

In my role as Chief Flying Instructor at Lasham Gliding Society I broadly support the introduction of the SCFR for sailplane pilots providing the training requires is not too onerous. My preferred option would be the restricted SCFR

as this would allow us to operate more or less as we have done for the last 50 years. Clear evidence shows that this has not caused any problems in terms of safety.

Because of the lower cloud bases in the UK than the rest of Europe The impact on sailplane pilots and Lasham Gliding Society if we were not able to fly legally above 3000ft in IFR would be devastating to sailplane flying in the UK.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 466

comment by: *P A Startup*

Gliding has been regulated in the UK by the British Gliding Association with the oversight and guidance of the UK Civil Aviation Authority for more than 50 years.

During this time we have had the priveleges of being able to fly in cloud with appropriate training, and also in IMC conditions but outside of cloud. This has enabled gliders to achieve some outstanding flights which would not have otherwise been possible. Operating in this way has had the benefit of establishing and maintaining a good safety record which has been maintained by ongoing training and because gliding takes place in a greater operating height band and therefore lower density of aircraft. This enviable safety record alone should be an indication that further punitive regulation is not necessary.

The loss of these priveleges would mean that the achievemnts and enjoyment of gliding would be catastrophically reduced, but more importantly that the safety margins would be significantly eroded. I cannot stress too highly impact of the loss of these priveleges would have on our sport.

It is essential for the continuation of the sport of gliding that the establishment of a Sailplane Cloud Flying Rating be given your most urgent attention. I also urge you to reconsider the establishment of a Restricted SFCR for flight in IMC conditions but clear of cloud. For the SCFR the training requirement also needs to be reviewed because as the currently suggested requirement for 5 hours dual training is excessive and difficult to achieve in a gliding environment.

response *Partially accepted.*

Thank you for providing this comment.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

485

comment by: *Leslie Kaye*

Option 2 (SCFR-R) would fully meet my personal requirements.

The existence of Option 1 (SCFR) might be useful in circumstances of highly controlled airspace however the 5 hours training requirement seems excessive particularly for winch launching sites where the available flight time can be significantly under 5 minutes per flight.

Option 0 would end my gliding activities and reduce the sport in the UK to insignificance.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training /restricted cloud flying rating) were also identified by BGA.

comment

611

comment by: *Andrerw Thorburn*

The nature of soaring flight in sailplanes often requires pilots to fly close to cloud, and sometimes into cloud, at all operational altitudes. This is a routine and fundamentally necessary procedure for practicable sailplane flying as a sport. This activity has been carried out for many years (in the UK and elsewhere) with a high level of safety, under existing protocols. It is essential, for the continuation of the sport, that any future regulation recognises the continued need for routine sailplane flight close to and into cloud, at all operational altitudes.

response

Noted

Thank you for providing this comment. The new regulation is introducing a Sailplane Cloud Flying Rating which allows the sailplane pilots to fly close to and also in the cloud.

comment

682

comment by: *Andy Delaney*

I think a cloud flying rating for sailplanes is a good idea. Ideally I'd like to see a combination of option 1 and 2 but if this is not possible I think option 1 is the only practical solution. Personally I don't fly in cloud and don't intend to but it is absolutely essential for me to be able to fly within 1000 ft of cloud. I don't think it is an exaggeration to say many people would likely give up gliding with this restriction.

I have small children and making time for gliding difficult to find. If I was further restricted to very rare flying days in the UK in order to be able to go and fly (probably not as current as I would like to be) with lots of other GA aircraft at the same height constantly scraping for lift with an increased likelihood of landing out I'm not sure how feasible this sport would be.

As I mentioned option 1 seems the only workable solution as I know many glider pilots need to let down through cloud following wave flights but I would make the following comments:

(a) 5 hours training seems excessive just to fly within 1000 ft of cloud - especially as many of have been doing this perfectly safely for years.
(b) It is essential that this training be allowed to be done in a motor glider as doing this in the winter in an unpowered glider would take a large number of flights.
(c) We do not want to navigate in cloud or fly straight in cloud. Flying in cloud is usually only done to climb higher in a thermal and then exit out of the side (cumulus) or to get through a cloud layer in wave (either on the way up or down). We don't want to fly for long distances navigating in cloud etc.
(d) The vast majority of glider pilots very rarely fly in cloud but need to fly within 1000 ft of cloud on almost all flights.
(e) Any tests should be specifically for gliders and designed by someone who understands gliding - cloud and IMC flying in gliders is totally different to powered flying.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as some of the issues you raised were also identified by BGA.

comment 701

comment by: *Melissa Jenkins*

Option 2 is a continuation of what currently exists in the UK. This would be my preferred option

response *Not accepted*

Thank you for providing feedback.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 732

comment by: *Roger Fielding*

Option 0 would be a disaster for UK gliding, effectively preventing cross-country flying except on a very few days with an unusually high cloud base.

I support option 1 although I think further consideration should be given to option 2. Flight wholly within cloud is rare; flight close to cloud base is a common scenario. However, a full cloud flying rating would bring some welcome flexibility.

response *Noted*

Thank you for providing this comment.

comment 755

comment by: *Chris Sterritt*

Option 1

I believe that a requirement for 5 hours flight training is excessive, but I do accept that some training would enhance safety.

	<p>Option 2 This is a very valuable addition which would allow the current practice in the UK to be maintained and extended to those countries which have the airspace structure and national regulations to support it. This has been exercised by many UK pilots for 50 years with a proven good safety record.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>With regard to the 5 hours training and the Option 2 (restricted cloud flying rating), please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised have also been identified by BGA.</p>
comment	<p>766 comment by: <i>Michael D Miskimmin</i></p> <p>Accept</p>
response	<p><i>Noted</i></p> <p>Thank you for providing feedback.</p>
comment	<p>777 comment by: <i>Ulster Gliding Club</i></p> <p>The need to enhance flight safety in IMC conditions is acknowledged. However, operating a sailplane in Northern Ireland, the most northwesterly point in Europe, means that pilots in this regions of Europe frequently fly in and near cloud in order to exploit the maximum amount of lift possible. Withdrawing our privilege of cloud flying, which we have enjoyed for many years, and are very good at, would reduce the potential performance of our sailplanes to a narrow operating range of our airfield and could increase risk to flight safety as a result of unplanned out landings. Northern Ireland does not enjoy the same weather conditions as mainland Europe and we frequently fly in cloud lower than 900 metres. The freedom to fly in and near cloud must be preserved. While the introduction of SCFR-R is not in itself a bad idea, we already enjoy this privilege in the UK. The requirement of 5 hours dual instruction in instrument flying is excessive for sailplane pilots who have being in regular cloud flying practice. This measure would also take quite a long time in Northern Ireland due to constant interruptions of inclement weather and where our typical flights last 30 minutes or so. A 2 hour requirement would be more realistic and attainable. Finally, the requirement to undertake this training at an ATO places sailplane pilots in Northern Ireland at a significant disadvantage and additional cost as we live on an island which is remote from Europe and the ATOs proposed to offer this training. It would be preferable to have our own certified instructors authorised to carry out this training in our own club enviornment. JH</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>

Furthermore, the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

The Agency would like to highlight that an ATO will be required to ensure that a minimum training quality standard is achieved in every EASA Member State; this does not necessarily exclude current BGA-approved clubs.

comment

787

comment by: *David Weekes*

I am strongly opposed to the proposal (Option 0) that IMC glider flying should be discontinued

I am not in the habit of attempting to gain height by flying a glider in cloud. I do however frequently fly near, but clear of cloud under what would be classified as IMC conditions.

I have on occasion had to descend through cloud following wave flying.

As such I support Option 1 as proposed

response

Noted

Thank you for providing feedback.

comment

844

comment by: *Christopher Burrows*

As a glider pilot in the UK, I agree with the proposals set out by the British Gliding Association (BGA).

I think that the currently in the UK, there are no issues with cloud flying as everybody adheres to the good practice guidelines set out when learning to glide.

Option 1 seems to be favourable to us, out of the 3 options. Although, the 5 hours of cloud flying training are completely unnecessary. The average pilot probably will not even reach 5 hours of cloud flying in a year let alone trying to do 5 hours of cloud flying in ones training.

I feel that it is absolutely essential for the sport that cloud flying privileges are retained so that Glider Pilots in the UK can continue to fly as they have been over the years safely and with common sense.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

Furthermore, the reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment

881

comment by: *BAKER*

Page 231, section 4:

Option 1: It is important that the introduction of a SCFR should not be used to permit IMC flying - the training and skills required for cloud flying is not required for IMC flying up to cloud base.

Option 2: The introduction of an SCFR-R, while not strictly necessary for practical purposes, should not be thought of as an alternative to SCFR - the two can co-exist and provide different options for pilots. Some national agencies may require that a formal statement of theoretical knowledge be attained to permit IMC flying to cloud base. The SCFR-R will provide this requirement if introduced alongside the SCFR.

Page 232, Table 24:

I suggest that the table be modified such that SCFR-Full is relevant to flying in cloud ONLY. Please do not legislate to mandate that pilots who only wish to fly in IMC clear of cloud have to achieve SCFR-Full, where SCFR-R will provide the adequate competence for IMC (as will no formal rating at all)

response

Not accepted

Thank you for providing this comment.

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating '...should not be used to permit IMC flying' as stated in your comment. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

893

comment by: *Nicola Claiden*

I support option 1 for the sailplane cloud flying rating. I support this option because I think it is important for any pilot who is going to enter cloud to be trained sufficiently in the art of cloud flying for the safety of themselves and any other aircraft in the area.

As a gliderpilot and PPL holder with experience of instrument flying, I also think that having a minimum of 3 hours training with an instructor is enough to determine if a pilot has the aptitude for instrument flying. After 3 hours of training, it should be at the discretion of the instructor/CFI or examiner as to whether the pilot requires any further instruction before being signed off.

Nicola Claiden 20/12/2011

response

Partially accepted

Thank you for your support of Option 1.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

941

comment by: *Dr Stephen Gibson*

I support that there should be both a Restricted SCFR to allow flight close to but not inside cloud, and also a full SCFR, I suggest the Restricted rating should also be available to TMGs.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/use of TMG) were also identified by BGA.

comment

984

comment by: *Mike Borrowdale*

Option 0:

Since this would remove the possibility of cloud flying for sailplanes in the UK, possibly triggering the negative consequences noted elsewhere in this document, I would not be in favour of this option.

Option 1:

I am generally be in favour of this option. However, since a skill test must be passed I can see no particular need to specify a duration of dual instruction prior to the test. If a pilot could pass the test with minimal dual training then the remainder of the training hours specified here would be wasted. At very least it should be noted that having an instrument rating gained in another branch of aviation should count towards the training hours required.

Option 2:

Since this would remove the possibility of cloud flying for sailplanes in the UK I am not in favour of this option UNLESS option 1 is also available. I.e. SCFR-R is available as a separate rating to SCFR as proposed in option 1.

response

Partially accepted

Thank you for providing this comment and your support for Option 1.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However, in any case, 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO.

comment

985

comment by: *Mike Borrowdale*

response	<p><i>Noted</i></p> <p>No comment provided.</p>
comment	<p>987 comment by: <i>stephen ancseil</i></p> <p>I fully support and concur with Option 1 being the best practical way forward, subject to the comment that 5 hours in most cases would be excessive for experienced pilots. Perhaps the low experience, 30 hour sailplane pilot would benefit from the 5 hours cloud flying instruction, which could be part of a wider scope cross country training and instructional regime.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.</p>
comment	<p>1015 comment by: <i>Bob Grieve</i></p> <p>I support Option 1. to allow sailplane pilots to fly in cloud if required.</p> <p>However I would also incorporate option 2 in airspace F & G for those pilots not wishing to fly in cloud, but fly near cloud.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for your comment and support of option 1.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1023 comment by: <i>Francis RUSSELL</i></p> <p>Option 1 for an SCFR would be the best alternative to the current superior regime for sailplanes in the UK (a regime thnat has proved satisfactory and safe in the 40 plus years that I have been gliding). If additionally Option 2 for a restricted rating could also be enacted this would be of the utmost value to the less-experienced sailplane pilots at an early stage of their development both for local flying and for cross country flights.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for your comment and support of Option 1.</p>

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

comment

1071

comment by: *Martin Roberts*

Page 231

4 Identification of options

These "options" are a remarkable piece of engineering and **are deeply flawed**. In presenting only 3 options it is determined that there are *only 3 options*. This cannot be a true reflection of reality - as a true zero option would be to leave things as they are now allowing Member States to do as they see fit for their gliding communities. So already there is a de facto 4th option - the reality of the quite safe situation we have now.

It is also perfectly clear that gliding organisations were not consulted over these options, or if they were that their voices were discounted; Option 0 is not an option any UK glider pilot would suggest as it would mean the end of meaningful sailplane activity in this country. Option 2 is a meaningless device evidently not geared to the needs of sailplane pilots; The Requirement "No specific experience on sailplanes after licence issue is required" demonstrates again this.

Option 1 has been framed as the only possible acceptable option, a fait accompli. This is a poor piece of work that does not reflect well on the consultative process that it is suggested was employed.

So we are left with a great puzzle. If glider pilots did not establish "Option 0" and "Option 2" (and clearly they did not) - then who did?

Given that Option 0 and Option 2 are wholly unacceptable, why were the options limited to just 3? Who says there are only 3 options? Based on what evidence?

Here are my suggestions for further options. These are the options I would have suggested if I had been asked;

Option 4

Do nothing. Leave the situation as it is now in place - allowing Member States the freedom to represent the wishes of their flying communities as they see fit. 2 mid-air collisions in 10 years/15 million sailplane hours is an acceptable position in comparison to the statistics of other air users.

Option 5

EASA acknowledge that the United Kingdom gliding community has unique and historic experience of IMC flight in and proximity to clouds. EASA identifies the British Gliding Association (BGA) as an expert in the field of training and preparation for cloud flying and recognises the perfect track record of British pilots in IMC/cloud flight over 80 years. EASA invites the BGA to work with the EASA to spread the exemplar model practice seen in the United Kingdom to all Member States who wish to embrace an evidenced perfectly safe model for IMC and cloud flying practice.

This is what is indicated - It is the BGA model which is the perfect model - the model with the perfect track record. If any action is required to improve flight safety in and around cloud across Europe, then surely the BGA model is the one to be embraced. It has enjoyed a perfect operational record throughout United Kingdom gliding history. It is the BGA model that should be investigated and promulgated by EASA - not some other model, real or imagined.

response *Not accepted*

Thank you for providing this comment.

This NPA was developed by the Agency in close consultation with a drafting group consisting of sailplane experts, including experts from the UK.

The Agency does not agree with your proposed Option 4 as to 'do nothing' would not establish and maintain a high uniform level of civil aviation safety throughout all the Member States as agreed with the Member States.

With regard to your suggested Option 5, the Agency acknowledges that BGA is a well-established and capable entity, and that several BGA experts have been involved in the consultation process. The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment *1095*

comment by: *John Castle*

In this whole thing I generally support the BGA comments. I believe Option 1 is the only acceptable choice. However, the training and theoretical requirement of 5 hours is too high. For practical reasons this must be carried out in a Motor Glider. I suggest that this is reduced to 1 hours actual flying and 2 hours theoretical training. The skill tests and revalidation are acceptable if sufficient numbers of suitably qualified examiners can be found.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment *1098*

comment by: *Dave HOLBORN*

This sounds an excessive minimum, as some pilots could well have experience

response	<p>from previous types of flying and it should be based on capability and not how much money people have available to spend completing the '5 hours' minimum.</p> <p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency will insist that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.</p>
comment	<p><i>1107</i> comment by: <i>william cook</i></p> <p>As an owner and pilot of vintage, and high performance sailplanes, the restriction to operations without the glider pilots imc/cloud flying rating would render cross country flying and indeed local flying almost impossible on most days in the United Kingdom. Therefore I fully endorse the BGAs comments on the content of NPA 2011-16.</p>
response	<p><i>Noted</i></p> <p>Thank you for your support for the SCFR.</p>
comment	<p><i>1112</i> comment by: <i>Bob Bromwich</i></p> <p>This stakeholder votes for Option 1, SCFR-full</p>
response	<p><i>Noted</i></p> <p>The Agency acknowledges your comment.</p>
comment	<p><i>1122</i> comment by: <i>James Duthie</i></p> <p>Cloud Flying Rating for Sailplanes.</p> <p>Option 1.</p> <p>1. I support the proposal to introduce a cloud flying rating for sailplanes, where airspace and national regulations allow.</p> <p>2. I feel the proposed 5 hours dual instrument training is excessive. A minimum of 2 hours training, to control the sailplane by reference to instruments only, should be adequate.</p> <p>This training to be carried out in sailplanes or TMGs.</p> <p>3. I support the introduction of a skill test with a flight examiner.</p>

4. I agree that the Cloud Flying Rating be revalidated every 2 years.

Option 2.

I support the introduction of a Restricted Sailplane Cloud Flying Rating for flights in IMC clear of cloud.

Flying in IMC clear of cloud has been normal practice for many years in many countries of the world.

No specific skill test is necessary, other than being able to fly the sailplane competently.

response *Partially accepted.*

Thank you for providing this comment. The Agency acknowledges your support for both Option 1 and 2.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.

comment *1148*

comment by: *Alan Docherty*

Option 1 required for those pilots that want to do actual cloud flying. But option 2 is also needed for those that want to fly just under the clouds.

The 5 hours requirement for dual training is a bit rigid. I personally have a UK IMC rating and therefore feel that this should be taken into account. I suggest that some sort of allowance should be given for previous experience and powered aircraft experience

response *Partially accepted*

Thank you for providing this comment.

With regard to the 5 hours requirement, the BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency insists that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

Please also check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment *1170*

comment by: *Russ Francis*

I beleive it is a mistake for the gliding community to omit the SCFR-R as an

option - i.e. option2. Flying IMC but not in cloud is a mode of operation all UK glider pilots currently use on a frequent basis and I believe that the majority of pilots would opt to take this option if it were presented since it fits the needs of many pilots.

Many pilot wish to pursue their sport to the maximum but have no intention or desire to fly in cloud. The SCFR-R would allow them to do this without the extra expense & in their view worthless additional training to get a full SCFR.

Alternatively raising of the transition altitude for IMC "clear of cloud" to "300m from cloud" to a substantially high altitude would achieve the same objective across the majority of met conditions. In the UK a 7000ftAMSL would work well rather than the current 3000ftAMSL.

Failure to address this issue I am sure will push some people out of the sport of gliding, which is definitely working against aviation in the broader sense and will of course have a financial impact on some gliding clubs, particularly those who will not benefit from additional cloud flying training revenues.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

With regard to '...raising of the transition altitude for IMC "clear of cloud"...', this is outside the scope of this NPA. However, please note that a Member State may establish a special zone within its airspace that has different visual flight rules. To increase the current 3 000 AMSL altitude in all Member States, this would have to be instigated by ICAO.

comment *1250*

comment by: *Mike Philpott*

Option 0 would either kill off gliding as a sport or lead to widespread law breaking. It is entirely unviable.

Any new regulation must preserve current safe practice.

Option 1 is unnecessarily burdensome but appears to preserve the privileges that are currently enjoyed by sailplane pilots.

Option 2 is not entirely clear. Presumably it would enable pilots to fly closer to cloud than the current VMC minima and as such should be included within any glider pilot licensing.

If EASA has to introduce a cloud flying rating, then it should be proportionate and based on experience that has been gained through fifty years of safe operation.

response *Noted*

Thank you for providing your feedback.

The Agency does not agree that the proposed requirements for a harmonised

cloud flying rating (Option 1) are too burdensome as stated in your comment. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

comment

1254

comment by: *Michael Williams*

If a SCFR is justified for safety reasons then:-

Option 2 would be a good tool to allow flying activities to continue outside of cloud but in IMC, which I suggest replicates most UK cross country and local (to base airfield) UK flying.

Option 1 is a good tool for pilots who enjoy cloud flying, and enhances their flying skills both cross country and high level wave flights. High altitude wave flights can result in a climb or descent through cloud. I have previously commented on the minimum experience requirement, and the use of motor gliders and simulators.

I would support Option 1 and 2. Option 0 would adversely affect gliding options if cloud flying / IMC flight was prohibited, and affect the financial viability of many gliding operations.

response

Not accepted

The Agency acknowledges your support for both Option 1 and 2. With regard to Option 2, the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

1261

comment by: *david tagg*

the making of a rule to issue a cloud flying license to sailplane pilots which involves the hours required for training in the classroom and in practical flight tests i can only see as being non workable . in the uk as you well know we are not blessed with the best of weather . the idea that we should stay away from cloud would probably finish our sport due to the fact that on many days during the winter months cloudbase sometimes dosnt exceed 1000ft , therefore we wouldnt fly at all . The strain put on examiners would be extreme and i feel that many sailplane pilots would not even get the opportunity to be examined and issued with a cloud flying license [do you think this would stop them flying ?]

I really cannot get my head around the idea that cloud flying should increase the risk of outfield landings and possible associated risks of injury ; in fact it is more likely to reduce the risks due to a possible height gain which will get you home .

I really do not want to be confined to gliding distance of the airfield .

this document is very large and has obviously taken a long time to produce ;

	<p>i hope you will devote as much time reading the sailplane pilots grievances and help us to continue enjoying our sport .</p> <p>Kindest regards Dave Tagg</p> <p>ps i hope i have entered this comment under the correct section</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing your comments.</p> <p>The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are 'non workable' as stated in your comment. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.</p> <p>In addition, the Agency does agree that cloud flying should not increase the risk of outfield landings, as stated on page 234 under Option 1 – sailplane cloud flying rating.</p>
comment	<p>1312 comment by: <i>David Bowden</i></p> <p>The position taken assumes that these options are mutually exclusive. There is a case for option 1 where people intend to cloud fly and option 2 for those that approach cloud base yet do not enter cloud. In fact in my experience 95-99% of flights in the UK fall into the second category.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your feedback.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>1354 comment by: <i>A Dowell</i></p> <p>I support option 1 as a glider pilot, provided that current club examiners can carry out the training as they now do under the auspices of the BGA. Instruction minima in general are a bad practice - they are illogical as such minima do not add any value from a safety point of view.</p> <p>There should be no minimum hours instruction necessary to gain the proposed rating, merely a competency requirement to met - the skill test. A proficiency check is also a good idea and to be welcomed, though this should be undertaken by club instructors - as currently for all other training assesment.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing your feedback.</p>

comment	1368 comment by: <i>Neville WILSON</i>
	<p>Not all sailplane pilots may wish to obtain a cloud flying rating nevertheless it is clearly a requirement to be able to thermal to cloud base in order to achieve maximum advantage of the available lift. If the rule of keeping 1,000ft vertical separation from cloud were applied it would be impossible on many days to achieve any soaring flight, in fact at our airfield at 1,300ft amsl where we winch launch to about 1,200ft it would often not to be possible to fly at all.</p> <p>Another situation can arise when we have wave conditions where cloud cover can rapidly close in underneath - a situation we take care to avoid by monitoring conditions below - but if it becomes necessary to descend through cloud. which is not quite so problematic as circling in cloud, would this also necessitate the pilot having a cloud flying rating?</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency confirms that you will require the SCFR in both cases you described when operating above 3 000 AMSL.</p>
comment	1379 comment by: <i>John Brownlow</i>
	<p>I have been an active glider pilot since 1954 and have flown sailplanes for many hours under IMC and in cloud in the United Kingdom. I have also flown under these conditions in France, Germany, Sweden and the Netherlands. I have never experienced a risk bearing incident while flying in cloud or under IMC and do not believe it will result in higher probability safety than currently accepted. Nevertheless, I support the introduction of an SCFR-Full but consider that 5 flight training hours is excessive to qualify for the this rating, and I propose 3 hours as the minimum required to reach a sufficiently high standard.</p> <p>I also recommend that flight training for the SCFR -Full should be conducted in TMGs as the preferred machine, or in gliders with dual controls.</p> <p>John Brownlow</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency will insist that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.</p>
comment	1407 comment by: <i>Player</i>
	<p>I am a current sailplane pilot and I strongly support the proposed SCFR rating for flying in cloud.</p>

Being unable to fly in or near clouds would limit the safe gliding distance on many gliding days when the cloud base is not particularly high. Climbing into lee waves often requires a climb in rotation that makes it necessary to climb near an often present rotation cloud. Sometimes during wave flying it is necessary to descend through cloud that forms suddenly and at low level.

I also believe that the option of a 3 hour training(dual instruction) would be sufficient to fully develop the skills required

I also believe training in TMGs could be allowed for the purpose of training a pilot for the SCFR

response *Partially accepted*

Thank you for providing this comment.

The BGA and several other commentators stated that the proposed amount of dual flight training is too excessive and the Agency further discussed this requirement with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 2 hours of flight training. However, the Agency will insist that at least 1 hour of the training has to be flown on a sailplane or powered sailplane except TMGs.

comment 1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response *Noted*

Thank you providing this comment and your support for Option 1. With regard to your comment on the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

1447

comment by: Gary Newbrook

Option 1 is a problem:

The problem is that this regulation is an **all or nothing** rule: Flying **IN** cloud rather than flying **UP TO cloud base**. Even the Option 2 does not allow for flying at cloud base although it does remove the 30 hour requirement

If flying to cloud base was allowed but **excluded IN cloud flying**, this would allow newly qualified pilots to fly higher and thus extend each of their flight times. This would enable these pilots to progress much faster gaining experience of flying generally as well as thermalling with other sailplanes. In the UK, restricting their flying to VMC only will effectively reduce their flying ceiling to around 3000' (plus or minus a thousand under certain conditions), reducing flight times and reducing the amount of experience that can be gained in a single season.

This will **REDUCE the rate of experience** that can be gained by newly qualified pilots. **This cannot be viewed as a safe thing**, let alone a good thing for the sport.

The solution here is to change the rule with respect to **IN** Cloud flying and **NEAR** Cloud flying.

Glider pilots **MUST** be able to fly **NEAR cloud**. Only under certain circumstances is there a requirement to fly IN cloud.

There **MUST** exist scope that allows for a **NEWLY QUALIFIED** pilot to **fly at or near cloud base**.

The 30 hour Pilot in Charge rule MUST be removed for flying NEAR cloud

THIS WILL IMPACT THE SPORT FINANCIALLY AS NEWLY QUALIFIED PILOTS LEAVE THE SPORT DUE TO BOREDOM AND THE COST NECESSARY TO ALOWW THEM TO FLY CROSS COUNTRY WITH THIS 30 HOUR RULING

On average, the pilots at the club that I fly with manage **10 hours** per year. It will takem them 3.5 years to be able to fly above 3500 feet..! They **WILL** get Bored. They **WILL** leave the sport.

There are clubs where the effective ceiling will be 1500 above the airfield

response

Noted

Thank you for providing this comment.

comment

1479

comment by: René Meier, Europe Air Sports

Page No. 231

Paragraph: RIA for SCFR - paragraph 2.2 'What are the risks (probability and severity)?

Comment: To be meaningful statistically, the quoted mid-air collisions outside

but in proximity to cloud in the period 2001-2010 need to be measured as a rate (exposure). Taking absolute numbers of incidents to reach a conclusion that only an SCFR is recommended does not address the lesser requirement for a rating to fly outside cloud but within ICAO defined IMC.

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment *1484* comment by: *Sally Hill*

I would like to support the proposal for Qualifications for Flying in Instrument Meteorological Conditions particularly regarding sailplanes. The British Gliding Association (BGA) have done an excellent job in regulating gliding activities and training within the UK which includes regulating IMC. The Sailplane Cloud Flying Rating will provide a valuable framework to ensure that safe flying practices continue to be maintained amongst glider pilots.

The proposals for both SCRF and restricted SCRF have definite benefits. The restricted SCRF would work well as a subcategory to SCRF to enable new pilots to gain the required 30 hours PIC hours and develop their cross country experience before undertaking the full rating. It will also give an opportunity to provide theoretical knowledge training to licensed pilots who would prefer to fly under IFR but clear of cloud.

response *Noted*

Thank you for providing this positive feedback.

With regard to your comment, please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment *1503* comment by: *Richard Cooper*

The requirement for 5 hours dual cloud flying is ludicrous. I learned by climbing into cloud and not falling out. I "lost it" only ever once, and managed to recover without any great difficulty.

After several attempts I became competent enough to make a cloud climb and, using GPS, to stop my turn on a given heading and fly on a set course to turn a waypoint in cloud within a few metres, emerging exactly on track anything up

to thirty minutes later. This was done without any dual instruction at all. I can and have located and soared wave upwards through cloud, and made blind - and successful - GPS approaches. I would rate my lifetime total spent in clouds at around 5 hours.

The cost of obtaining five-hours dual would be approximately threere times my annual budget for gliding.

Your excessive demands wouldn't ground me; I would carry on exactly as before and ignore them. Therefore they only serve to bring your law into the contempt it deserves.

Your proposals are as counter-productive as Prohibition was in the United States; they will produce anarchy where formerly there was order.

I formerly held a Private pilots licence for which I had to do four hours dual on instruments. I consider the skill to be entirely different from the skills necessary to soar a glider in cloud.

It is plain these requirements have been formulated by a power pilot who is unfamiliar with glider operations and not an expereinced sailplane pilot.

response *Partially accepted*

Thank you for your comment. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

In addition, the Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome, or will be 'counter-productive' or 'produce anarchy' as stated in your comment. As a sailplane pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. Ignoring rules as predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 5 Methodology and data requirements p. 232-233

comment 296

comment by: *Andrew Sampson*

Table 25 Assessment Criteria:

I believe that the criteria should explicitly recognise the impact on collective 'happiness', or welfare of the whole community. Gliding is a source of enjoyment for many thousands of participants, as well as onlookers.

Gliding also provides a platform for, and motivation for, scientific advancement in several fields such as aeronautical engineering, physics, meteorology, and medicine: the advancement of gliding has made enormous contributions in these areas.

The absence of cloud flying rights would severely restrict the sport. It would certainly prevent the exploration and extension of the ultimate limits of sporting prowess in gliding. It would also adversely affect our ability to seek scientific advancement in several important areas.

Although these issues may be implied indirectly in the criteria summarised in the table, I believe they should merit inclusion as a separate criteria, thus strengthening the case for Sailplane Cloud Flying Rating.

response *Noted*

Thank you for providing this comment.

comment 596

comment by: *terry salter*

As a glider pilot of some 30 years experience I would like to register my concerns with the recommendations contained in NPA 2011-16 as they apply to my sport of gliding.

The emphasise of your deliberations appear to have been on agreeing the training required to formalise and regulate the qualification necessary for flying in IMC . Whilst I can understand the need for this the facts are that the vast majority of glider pilots do not fly in clouds, have never wanted to fly in clouds and will never want to fly in clouds. However, the reality is that the vast majority of glider pilots do fly in **clear air near cloud**, have always flown in **clear air near cloud** and will continue to want to fly in **clear air near cloud**. Your rejection of the BGA's recommendation of an RSCFR rating seems to fly in the face of this reality without proposing a practical and enforceable alternative.

To expect the vast majority of glider pilots to undergo expensive training to acquire a skill they will never use together with installing expensive instruments they will never need simply to continue to fly in clear air near cloud is wishful thinking.as is the likelihood of non-SCFR qualified pilots adhering strictly to VMC constraints.

If it were possible to strictly monitor adherence to VMC/IMC regulations for glider pilots your recommendations would, I suspect, decimate gliding participation amongst those of us not interested in true cloud flying and already concerned about increasing bureaucracy and costs. As well as being viewed as another example of poorly reasoned and unnecessary law-making your proposals could be viewed as the "last straw". However, as they are virtually unenforceable the sad reality is that your proposals are likely to be ignored by most glider pilots who will continue to fly safely in clear air near clouds as they do throughout Europe today.

The BGA's recommendation of an RSCFR category recognises this reality and attempts to regularise the practice that has been in place. safely, for many years. Can I ask that it be reconsidered and that you surprise us by showing European Bureaucracy is capable of exercising common sense and recognising the truth in the expression " if it ain't broke don't fix it".

Terry Salter

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

The Agency does not agree that the proposed requirements for a harmonised cloud flying rating are too burdensome or that 'proposals are likely to be ignored by most glider pilots' as stated in your comment. As an experienced glider pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. Ignoring rules as predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment	767	comment by: <i>Michael D Miskimmin</i>
	Accept	
response	<i>Noted</i>	
	Thank you for providing this comment.	

comment	873	comment by: <i>Jeff WARREN</i>
	It is disappointing that no weight is attached to the benefits of sailplane pilots having the maximum potential to enjoy this form of flying.	
response	<i>Noted</i>	
	Thank you for providing this comment.	

comment	1072	comment by: <i>Martin Roberts</i>
	Page 232 5 Methodology and data requirements 5.1 Applied methodology: multi-criteria analysis	
	In Paragraph 1. The Agency defines the position as; "Essentially, it applies cost benefit thinking to cases where there is a need to represent impacts that are a mixture of <i>qualitative, quantitative and monetary</i> data.....". (my italics) This would be a welcome approach, unfortunately it is clear that this approach is not the one that was actually and comprehensively used; By its own defined remit therefore , this methodology is flawed if it does not involve these benchmark features; a) <i>Qualitative</i> ; Invite sailplane pilots themselves to contribute to the establishment of Options (Option 0, 1, and 2) and assessments. AND b) <i>Quantitative and monetary</i> ; Look at the micro-economy of gliding and gliding clubs - since this is where the real impact needs to be assessed.	
	It is evident that neither of these benchmarks has been met for the following reasons;	

There can be no doubt that sailplane pilots were not consulted over the establishment of "Options". Sailplane pilots would not suggest grounding themselves ("Option 0"), or **not** require specific experience on sailplanes after securing their licence ("Option 2"). These are options that no sailplane pilot would suggest. Neither would they limit themselves to looking at just 3 options (2 of which are wholly unacceptable in any event). *It is misleading to suggest that there are only 3 options* when in reality there are many more. There are no Tables of Evidence, no survey evidence, no evidence of fact finding of any kind is published in this NPA about sailplane pilot views or opinion. **There is no qualitative evidence of any kind** being reflected from the European gliding community and represented here. Even though sailplane pilots are the key group here they have not been asked about the impacts on them or invited to negotiate possibilities in view of the impacts that they themselves identify. Thus benchmark a) on *qualitative data* which the EASA says it set for itself, is not met.

Benchmark b) is mission critical to gliding. Gliding club managers could never envisage a terminology such as that seen in Table 26: Scores for Multi-criteria analysis, where figures in millions of euro are discussed. Unless Gliding Club managers were consulted and asked for real quantitative data on their operations then any attempt by the EASA to make an assessment of economic impact in terms of numbers of euro is merely guesswork. On Page 235 in Section 6.2 Economic Impact paragraph 3 mentions a survey of United Kingdom gliding club manager's response to "Option 0". Paragraph 4 then immediately discounts this data as a "high estimate". Even if the UK club managers were out in their estimations by 50% the impact on the UK economy would still be nearly 10million euro, but the effect to the specific micro-economy of gliding would be catastrophic, in all probability leading to melt-down; even 5 million euro wiped off the UK gliding economy would probably cause it to collapse. This passage reveals that EASA has **not** asked for real quantitative data from real gliding clubs across the EASA area, and that when they received input from a Member State most likely to be impacted by proposals - they discounted it. A further point to observe is that **IF** EASA had data real economic data from real gliding clubs - then they would have published it and used it as part of their evidence base. This NPA does not display any such real data about the real impact on real gliding clubs, still less the real impact in the United Kingdom. Thus benchmark b) on *quantitative and monetary data* which the EASA says it set for itself, is not met.

The Methodology employed is thus wholly flawed. It has not identified or asked the right groups the right questions and replaces this instead with suppositions and guesswork. Considering that this is the basis for far reaching Europe-wide legislation - it is a remarkably poorly researched piece of work and reflects poorly on the EASA and its approach.

response

Noted

Thank you for these comments.

Please note that this NPA was developed in close consultation with a working group consisting of sailplane experts, including experts from BGA. The Agency therefore believes that the 'methods employed' in developing this NPA are appropriate and supported by a majority of the European sailplane community.

comment

1303

comment by: David Bowden

response

Noted

No comment provided.

comment

1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1463

comment by: *Gary Newbrook*

The methodology has missed a very important economic aspect of the sport.

If a newly qualified pilot must wait until they have spent 30 hours in charge of an aircraft before they are allowed to progress to flying NEAR cloud, they will not be able to gain sufficient experience in flight due to the reduction in time that they can spend in the air during a single flight. This will increase the amount of time it will take for such a pilot to be able to complete time in the air. The less height that they are able to attain due to legislative restriction will reduce the time that can be spent in a single flight. Each pilot will launch no more than a number of times in a day (perhaps three for a winch site). The amount of contiguous flying will be much less, reducing experience, reducing safety and increasing the time it takes for a pilot to progress.

Boredom ensues.

Pilots walk away from the sport.

The economic stability for the sport is reduced.

response *Noted*

Thank you for providing this comment.

The 30 hour requirement has been reviewed by the Agency in consultation with a working group of sailplane experts. The Agency and experts have concluded that 30 hours is an appropriate amount of experience needed prior to obtaining the SCFR and believe that a newly qualified pilot will be able to attain the hours within a reasonable amount of time.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 6 Analysis of impacts

p. 234-236

comment 48

comment by: *Chris Curtis*

The best arrangement for accommodating the requirements for safe sailplane operations is to include options 1 and 2 within the rules, thus having two possible ratings, one that allows flight near cloud, and the other that allows flight within cloud. (SCFR and SCFR-R). I see no reason why there should not be both a Full Rating and a Restricted Rating made available.

Suggested Ammendment (in bold):

Thus Section 6.1, para 5, the phrase:

"However, this option would provide an alternative implementation....."

should be changed to:

"However, this option would provide an **additional** implementation....."

Option 2 is required by the majority of glider pilots for safe cross country flight. Option 1 is also required for flight in or above cloud (typically wave flying conditions but also when required to cross an area of unsoarable conditions). Also, when wave flying, it may be necessary for a glider pilot to descend briefly through cloud. The two options should not be mutually exclusive.

I suspect that Option 2 has been given an MCA score of 0 because most cross country pilots at present operate gliders as if Option 2 was already in force. Therefore, adopting Option 2 would have a neutral impact. I believe that removing this privilege would result in a very negative impact on safety (even if it was replaced by Option 1). Options 1 and 2 should exist concurrently and act synergistically.

response *Not accepted*

Thank you for providing this comment.

As Option 2 entails the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA. In addition, the Agency and the working group of experts do not believe Option 1 will have a negative impact on safety.

comment 89

comment by: George Knight

Chicago Convention Annex 2

The NPA makes a broad-brush statement that option 2 would provide an alternative implementation to the provisions in Annex 2 of the Chicago Convention. Unfortunately the NPA does not attempt to specify precisely which provisions of the convention with which it conflicts – so that is a matter for conjecture.

I have reviewed all 65 pages of the tenth edition of Annex 2 to the Chicago Convention, plus the relevant amendments and supplements, and cannot identify anything in Annex 2 that would conflicts with a Restricted Sailplane Cloud Flying Rating being issued in Europe.

In any case the International Civil Aviation Organisation (ICAO) exists to promote INTERNATIONAL civil aviation as stated in the third paragraph of the preamble to the Chicago convention (9th edition):

"THEREFORE the, undersigned governments having agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically;"

Whereas international flights by gliders are relatively rare so even if option 2 is an alternative implementation that is of little significance to ICAO and a difference can easily be filed under Article 38 (Departures from international standards and procedures)...

"Any State which finds it impracticable to comply in all respects with any such international standard or procedure, or to bring its own regulations or practices into full accord with any international standard or procedure after amendment of the latter, or which deems it necessary to adopt regulations or practices differing in any particular respect from those established by an international standard, shall give immediate notification to the International Civil Aviation Organization of the differences between its own practice and that established by the international standard. In the case of amendments to international standards, any State which does not make the appropriate amendments to its own regulations or practices shall give notice to the Council within sixty days of the adoption of the amendment to the international standard, or indicate the action which it proposes to take. In any such case, the Council shall make immediate notification to all other states of the difference which exists between one or more features of an international standard and the corresponding national practice of that State."

The argument that option 2 is inconsistent with ICAO's Chicago Convention is untenable and should be discontinued.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 128

comment by: Alastair MacGregor

The SCFR - restricted should be reconsidered along with agreeing to the full

	<p>SCFR.</p> <p>I disagree with the ratings option 2 has been given in the multi criteria analysis: There is a positive safety impact for option 2 as it will lower the risks of outlandings. The economic criteria for option 2 are positive as it allows gliding to continue. The social impact would be positive as many pilots will not want the complexity of the full SCFR and drop out of gliding. Option 2 will allow them to continue flying.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>

comment	<p>136</p> <p>comment by: <i>Robert John</i></p> <p>6 Analysis of Impacts.</p> <p>It is stated that 23 member states do not presently permit cloud flying. The fact is, however, that regardless of the rules, it is standard practice throughout Europe (indeed throughout the world) for sailplanes to operate up to cloudbase and in close proximity to cloud. To pretend otherwise and look solely at the written "rules" is not a sound basis for analysis of the present common usage or the impact of change. Strict enforcement of IMC would have sailplanes operating at least 1000 ft below cloud when cloudbase is over 3000 ft. This is a nonsense and has simply never been the case in reality. To enforce it would be disastrous for the sport in any country that did so.</p>
response	<p><i>Noted</i></p> <p>Thank you for this comment.</p> <p>The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p>

comment	<p>150</p> <p>comment by: <i>Philip Jeffery</i></p> <p>I am a sailplane pilot with over 6,000 hours of gliding experience since starting in 1955. At present I fly about 300 sailplane hours per year, all of it cross country. I retired as an airline captain in 2004 aged 65 after a forty year career of professional flying. During this time I held numerous management</p>
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and training roles. Earlier I worked as a flying instructor training private pilots.

My following comments are in response to the potential deleterious effect on the sport of gliding by NPA 2011-16:--

1. Firstly, there is no evidence, statistical or otherwise, that justifies any change to the existing UK status quo regarding flight in IMC so any new legislation will at best have minimal effect and at worst decimate gliding as a sport.
2. To avoid a serious regulatory impact, any requirement for an endorsement to fly sailplanes/gliders in IMC must be no more onerous than approval by a Chief Flying Instructor based on his assessment of pilot capability and the level of any required relevant instruction.
3. I suggest any promulgated endorsement is in two parts, one in respect of conditions permitting unrestricted flight by means of external visual reference, the other when use of blind flying instruments is required.
4. Any rule that resulted in a requirement for gliders to remain 1,000 feet below cloud-bases when above a height of 3,000 feet is completely unworkable. It is impossible to make a meaningful assessment of the base of a convective cloud under which a glider pilot is climbing until within about 200 feet of it. In addition, the base of the nearest cloud to it can vary by upwards of 1,000 feet. Countries that presently have such legislation are deluding themselves if they think it is working; I know having flown in many.
5. Whilst it is possible to fly cross-country remaining beneath a cloud-base of 3,000 feet AGL or less, as the cloud-base rises the convective columns become further apart which would significantly increase the risk of an off airfield landing if unable to climb higher than 1,000 feet below cloud-base.
6. It is therefore incumbent upon rule makers to ensure that any resulting laws are fair, justifiable and workable. To do otherwise will encourage some to ignore legislation which has a very negative safety effect as transgressors will turn off collision awareness equipment such as Flarm, Transponders and ADS-B to minimise their risk of detection.

Please don't pass any legislation that unnecessarily damages the wonderful sport of gliding enjoyed worldwide by so many, particularly if it erodes safety margins.

response

Noted

Thank you for providing this comment.

This NPA has been developed by the Agency in close consultation with a working group of European sailplane experts, including experts from the British Gliding Association (BGA). Based on inputs received during the working group discussions, it was decided to develop the SCFR. It was also decided that this rating should be endorsed on a licence and should entail training provided by an instructor and a test by an examiner. The Agency would also like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. In addition, the Agency does not agree that the proposed requirements for a harmonised cloud flying rating will 'encourage some to ignore legislation' as stated in your comment. As an experienced pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles on which the VMC minima are established by ICAO for certain airspace categories. Ignoring rules as

predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

151

comment by: *Philip Jeffery*

I am a sailplane pilot with over 6,000 hours of gliding experience since starting in 1955. At present I fly about 300 sailplane hours per year, all of it cross country. I retired as an airline captain in 2004 aged 65 after a forty year career of professional flying. During this time I held numerous management and training roles. Earlier I worked as a flying instructor training private pilots.

My following comments are in response to the potential deleterious effect on the sport of gliding by NPA 2011-16:--

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3. I suggest any promulgated endorsement is in two parts, one in respect of conditions permitting unrestricted flight by means of external visual reference, the other when use of blind flying instruments is required.
4. Any rule that resulted in a requirement for gliders to remain 1,000 feet below cloud-bases when above a height of 3,000 feet is completely unworkable. It is impossible to make a meaningful assessment of the base of a convective cloud under which a glider pilot is climbing until within about 200 feet of it. In addition, the base of the nearest cloud to it can vary by upwards of 1,000 feet. Countries that presently have such legislation are deluding themselves if they think it is working; I know having flown in many.
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6. It is therefore incumbent upon rule makers to ensure that any resulting laws are fair, justifiable and workable. To do otherwise will encourage some to ignore legislation which has a very negative safety effect as transgressors will turn off collision awareness equipment such as Flarm, Transponders and ADS-B to minimise their risk of detection.

Please don't pass any legislation that unnecessarily damages the wonderful sport of gliding enjoyed worldwide by so many, particularly if it erodes safety margins.

response

Noted

Thank you for providing this comment. Please see the response given to comment 150.

comment	228	comment by: <i>Stephen HALEY</i>
	I am not sure I agree with the overall safety and other scores for option two. I would give safety a 2 and the remaining as per option 1. I would estimate that 20-30% of my flight time is within 1000ft of cloud while only 2-3% is within cloud.	
response	<i>Noted</i> Thank you for providing this comment. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.	
comment	280	comment by: <i>Horst Metzigi</i>
	<p>Ich stimme für eine einheitliche europäische Wolkenflugberechtigung für Segelflugzeuge. Das bringt Rechtsklarheit, vor allem wenn Piloten aus Ländern mit Wolkenflugberechtigung, und mit deren nationale Lizenzierung, in Länder ohne ausgereifte Wolkenflugberechtigung reisen.</p> <p>Ich wünsche mir ein Europa, in dem alle Piloten gleich behandelt werden, das betrifft die informelle Selbstbestimmung zum Freizeitvergnügen Segelflug, ob jemand Wolkenflug machen will oder nicht.</p> <p>Ich habe eine tschechische Segelfluglizenz, und eine dazugehörige tschechische Erweiterung auf Wolkenflug. In der Tschechei wird die Wolkenflugberechtigung in das Flugbuch eingetragen, in Deutschland in die Segelflugpilotenlizenz. Diese Ungleichheiten schaffen in einen zukünftigen Europa Rechtsunsicherheiten, und unnötige Abklärungen bei den Luftämter.</p> <p>Zum gegenwärtigen Zeitpunkt, das Jahr 2011, wird meine tschechische Wolkenflugberechtigung von dem deutschen Luftamt Regierungspräsidium Freiburg nicht anerkannt. Von dieser Behörde wurde ich auf deutsche Rechtsprechung verwiesen. Solche Situationen darf es in einen einheitlichen Europa nicht mehr geben.</p> <p>Horst Metzigi</p>	
response	<i>Noted</i> Thank you for providing this comment. Please refer to the response provided by the Agency to your comment No 282.	
comment	285	comment by: <i>Horst Metzigi</i>
	<p>There are a lot topice about social impact. The main reason for cloud glider flying ist to train the hand - eye coordination. If I am realy in a big cloud, there are heavy turbolenz, my small glider is dropping from one side to the other side. This fealing is far away fron airbus airline flying. But I can train my sensoric ability - the airline pilot over hudson river with failed engine was a glider pilot -</p> <p>Bitte schauen Sie sich meine Dokumentation eines Wolkenflugtrainings im Videofilm bei you tube an: http://www.youtube.com/watch?v=JMht7r15P24</p> <p>In dieser Übung, oder Trainings lassen sich viele Elemente einbauen, von deren Beherrschung ein Linienpilot im Notfall für sich und allen Passagieren profitieren</p>	

kann. Der Airfrance Flugunfall mit dem A320 über dem Atlantik war auch ursächlich zustande gekommen, weil die Piloten das manuelle Fliegen verlernt hatten. Wenn der fliegende Computer mal ausfällt, dann- die Erklärung gibt der Pilot am Hudson River mit ausgefallenen Triebwerken.

Somit erkenne ich ein wichtiges Trainingselement Wolkensegelflug vor allem auch für die Militärpiloten und Berufspiloten. Nicht alles kann ich im teuren hydraulischen Flugsimulator und Computersimulation üben. Voraussetzung zu alledem ist, das alle EU Mitgliedstaaten sich eindeutig für den Wolkensegelflug aussprechen.

Horst Metzsig

response *Noted*

Thank you for providing this comment. Please refer to the response provided by the Agency to your comment No 282.

comment 288

comment by: *Simon Kahn*

6.1 Safety impact. There are a number of adverse impacts in Option 0 including an increase in the number of off field landings and a reduction of of capacity for look out and collision avoidance. This should be given a score of at least -3. Also note that reducing capacity for collision avoidance is like flying in or near cloud!!

Therefore flying in cloud could be a neutral safety impact.

Option 1 has assumed that all piltos will obtain and maintain this rating. In practice many pilots will find this training and revalidation too onerous and the amount of cloud flying will decline, leading to further outlandings for some so a minor adverse impact.

The discussion of the member state airspace/ATM regulations is irrelevant here. If the option is not practical it cannot be adopted so should not be considered. If it is practical then the safety should be assessed.

6.2 Less range will mean more field landings and more alunches/retrievees so restricting sailplanes from flying in cloud will inxcrease emissions. A rating of 0 applies to no impact so for negligible impact the rating should be -1 at least.

response *Noted*

Thank you for providing this comment.

comment 310

comment by: *Mike Armstrong*

Page 234 6.1 Safety Impact. The statement that option 2 "may not be in line with airspace regulations or ATM procedures in certain Member States" may be true but should not detract from the benefits of the option since any Member State can implement additional restrictions if they see fit.

response *Noted*

Thank you for providing this comment.

Please be advised that once EU regulations are applicable, Member States cannot apply additional requirements (less or more restrictive). This will establish and maintain a high uniform level of civil aviation safety throughout

all the Member States.

comment	<p>311 comment by: <i>Mike Armstrong</i></p> <p>Page 235 Economic Impact. Provided Option2 is included as an addition to Option 1 then there will be a further positive impact, albeit not large.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p>

comment	<p>317 comment by: <i>Mike Armstrong</i></p> <p>Page 236 Social Impact. Again this would be positive for Option 2 provided that it was included in addition to Option 1 which I support.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

comment	<p>369 comment by: <i>michaelGARDNER</i></p> <p>I support option 1 as this will ensure a greater height safety margin when going cross country or looking for good field landing situations.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>

comment	<p>383 comment by: <i>A Darby</i></p> <p>Option 0 misses the fact that when cloudbase is below 4000' which is quite common in the UK that all gliding and VFR power will concentrated in a 1000' band between 2000 and 3000' (assuming average ground elevation of 500'). In the current enviroment most glider pilots will try to stay between 2500 and 4000 which reduces the concentration of aircraft at a particular altitude and in many ways seperates gliders and powered aircraft. The reduced concentration at a particular altitude must have a reduction in risk as aircraft can only colide at the same altitude.</p>
response	<p><i>Not accepted</i></p>

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

425

comment by: *steve brown*

I fully support thre BGAs respones on the whole matter of a clould flying rating, I express my concern over the avalibility of instructors to carry out the checks required.

response

Noted

Thank you for providing your feedback.

comment

431

comment by: *John SAVAGE*

I agree with Option 1 being most suitable for sailplane pilots.

Additionally, I would support the implementation of a lesser rating allowing rated sailplane pilots to fly nearby cloud (e.g. clear of clouds), but without penetrating them.

response

Noted

Thank you for providing this comment.

With regard to your support for a 'lesser' rating, presumably the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

465

comment by: *terry hughes*

I am a pre solo glider pilot who expects to go solo in the not too distant future. so option 1 would be preferred

eventually i would expect to be able to fly in cloud after suitable training.

training in a dual slmg is the best option.

3 hrs should be sufficient

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG(SLMG)) were also identified by BGA.

comment

538

comment by: *Chris Fox*

	<p>In the analysis of Option 2 (SCFR-Restricted), the issue of whether this option would be in line with airspace regulations or ATM procedures is not relevant to the impact on safety.</p> <p>Recommendation: This option should receive the same safety score as option 1 - Low Positive.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

comment	<p>548 comment by: <i>Laurence SMITH</i></p> <p>I disagree with the neutral MCA rating given for Option 2, for the Social, Economic and Proportionality impacts.</p> <p>From 48 years of experience of gliding in UK weather conditions, I would suggest that in the UK, without a restricted SCFR, opportunities for post-solo flying, up to the stage where a pilot has gained sufficient skill and experience to attain a full SCFR, could often be affected, with consequent negative impact on the Social, Economic and Proportionality criteria, and, to some extent, the Safety Criteria. Quite often, especially in winter conditions, this would also apply to general local/club flying by pilots with no SCFR.</p> <p>However, Option 1, for the full SCFR rating remains the fundamentally most important option for the long term future of gliding in the UK.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>With regard to your comment on the restricted cloud flying rating, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p>

comment	<p>565 comment by: <i>Peter BROWN</i></p> <p>In further support of the EASA proposal to adopt Option1, I would add that it should also be noted under paragraph 6, relating to the safety impact, that if Option 0 were adopted, the safety impact would not merely be negative because it would inevitably result in more outlandings, with pilots distracted by the need to find a suitable outlanding field. Additionally, and what the document does not refer to, is the fact that outlandings themselves are inherently more dangerous than landings at established airfields, because of the impossibility from the air of accurately assessing the risks of any chosen location. There have been instances of damage and injury caused by hidden obstacles, ditches, wire fences and similar, which are not readily observable from the height at which the pilot needs to make a decision on a specific outlanding site, and I believe that this point should be made strongly. In my view, it moves Option 1 to a more negative safety category than proposed, as it is recognised that it will involve more outlandings.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment.

comment

709

comment by: *Angus Watson*

As a recreational sailplane pilot and instructor I agree that cloud flying should have an element of formal training.

I can see the benefits of a harmonised qualification valid in all European countries.

I would prefer to see the option of allowing flight up to cloudbase without any further qualifications. The requirement to undergo time consuming, expensive training seems disproportionate to the risk of an accident operating near cloudbase.

For flying in cloud I think training should be given and the qualification awarded on competency. A minimum of 5 hours may not be appropriate or necessary for all glider pilots. 5 hours in a glider equates to a substantial investment in time and expense. I am not sure how practical it will be to offer this kind of training in 'pure' sailplanes. e.g. using a hood may work on good soaring days assuming the glider is not required by anyone else at the club on the day. Attempting to achieve 5 hours of training over the winter period will require many launches, would the time taken to take off, fly a circuit and landing count towards the overall 5 hours?

Having a training program that puts the qualification out of reach for many pilots is likely to result in pilots ignoring the rules and just going back to the days of 'self teaching' which would be a backward step for safety. I believe if you truly want to improve safety it must be done in a manner that is 'achievable'. In the UK the British Gliding Association have achieved great results throughout the whole safety regime and this due to its members understanding the regulations and having clear visibility of the benefits. I do not see this perception of benefit when regulations such as those proposed by EASA and other European regulators are 'imposed' on national bodies.

response

Partially accepted

Thank you for providing this comment.

The Agency would like to emphasise that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. A restricted SCFR can therefore not be accepted.

With regard to your comment on the 5 hours training requirement, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

Finally, the Agency does not agree that the proposed requirements for a harmonised cloud flying rating is 'likely to result in pilots ignoring the rules' as stated in your comment. As a sailplane instructor you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. Ignoring rules as predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly

believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

712

comment by: *Peter Gray*

I'm not sure I follow the arguments behind rejecting option 2. If it has a neutral safety impact (i.e. safety is not compromised) why not allow it irrespective of any other parameter?
If certain member states find it out of line with their regulations they can forbid it. Those that would approve are permitted to under European legislation.
Why is a European wide derogation from the Chicago convention so unthinkable?

response

Noted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. A restricted cloud flying rating is therefore not accepted.
With regard to your comment on Member State regulatory discretion, be advised that once EU regulations are applicable, Member States such as the UK cannot apply additional requirements (less or more restrictive). This will ensure a 'level playing field', and establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment

756

comment by: *Diego Caielli*

In the UK, we enjoy at the moment regulations that allows us glider pilots to reach cloud base when thermalling. Without a cloud flying rating, with the harmonization of rules we will be prevented to do so and will be required to stop climbing 1000 feet from cloud base.
While 1000 feet might not sound much in powered flying, for gliding in the UK it will make a considerable and dangerous difference.
Most of the time I fly with a ASW19b, an affordable /medium level 30 yrs old glider. Glider of similar performance are extremely popular and make the bulk of gliders being flown across UK and Europe.
These gliders have about a 40:1 glide ratio. So 1000 feet lower reduces the glide range by at least 12km. Considering that most of the time in the UK cloud base is between 3000 and 4000 feet and that for safety we glider pilot give us a 1000feet commit to landing safety buffer and a further 1000ft "start looking for a place to land", a new requirement would reduce glide range easily by 50% to 100% (i.e making cross country flying impossible). Even when cross country is possible, the probability of not finding the next termal and thus be required to land increases esponentially. Halving the glide range means covering an area 75% less large, thus making a dramatic difference to the chances of findind the

	<p>next termal. I think not having cloud rating will make gliding in the UK a far more dangerous activity and will make flying possible only in booming conditions or abroad. Again that will reduce my flying currency and thus will have a knock on effect on the safety of my flying. Personally I find the safety impact calculations in this document significantly underestimated - it seems it does not take into account how glider pilots fly in practice in UK, Germany, Poland etc, (i.e the largest gliding community countries where flying to cloud base is allowed). Going for option 0 will have potentially a human cost that could not be mitigated (increased out landings accidents given reduced glide range) or mitigated at extra cost (teach thousands of glider pilots how to cope with the new rules). I therefore strongly urge EASA to endorse Option 2 or at the very least Option 1 (although it will add severe costs and complications to glider's flying).</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p>
comment	<p>768 comment by: <i>Michael D Miskimmin</i></p> <p>Accept</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>771 comment by: <i>D R Piercy</i></p> <p>I support the EASA proposal, especially the Restricted Sailpplane Cloud Flying proposal. Especially in the UK, low cloud bases mean that the operational heights of sailplanes would be severely reduced if flight near to cloudbase were not allowed. This increases the safety risk for sailplanes in their normal operation, both by possible bunching of sailplane traffic, especially in competition flights, and more importantly, by reducing the range of operation, and hence increasing the necessity of a field landing, itslef an increased safety risk.</p> <p>A second consideration is that the restriction on flying near to clouds should be proportionate: there is not much sense in introducing a law causes that law to be ignored.</p>
response	<p><i>Not accepted</i></p>

Thank you for providing this comment.

With regard to your comment on the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

In addition, the Agency does not agree that the proposed requirements for a harmonised cloud flying rating are disproportionate or will 'cause a law to be ignored' as stated in your comment. As a glider pilot you might agree that flying in clouds needs a certain amount of training and you might be aware of the 'see and avoid' principles, on which the VMC minima are based, established by ICAO for certain airspace categories. Ignoring rules as predicted in your response cannot be the behaviour of a safety-minded sailplane pilot. The Agency strongly believes that these new harmonised rules for a cloud flying rating will be one important element for maintaining a high level of safety in gliding operations.

comment

834

comment by: *Vincent EARL*

While option 1 is an acceptable compromise, I would urge EASA to re-consider option 2 (Restricted Sailplane Cloud Flying Rating) for those member states that are flexible enough to be able to accommodate the Restricted SCFR into their operational structures. Those member states with the foresight to consider general aviation in their planning and operational scenarios should not be penalised by those that can't be bothered. My reasons for inclusion of the Restricted SCFR are given below:

1. Remaining clear of cloud by 1000ft vertically and 1500m horizontally requires a knowledge of what the cloudbase actually is. Cloudbase changes from hour to hour and cannot be accurately determined in flight by a soaring pilot without climbing to within a few hundred feet of cloudbase. Without the SCFR a soaring pilot might fall foul of the new regulations in one of 2 ways:
 1. Climbing too close to cloudbase without knowledge of the actual cloudbase. This would invite penalties for operational infringement and could invalidate insurance. There is also the possibility of legal proceedings for the pilot in an environment where the prevailing conditions cannot be known by the pilot.
 2. The soaring pilot may unnecessarily restrict a climb (range) in a sailplane for fear of infringing the rules and possibly falling into the category of item 1 above.
2. Even if a sailplane pilot holds the new SCFR and decides not to operate within cloud but close to cloud, the level of safety achieved does not materially improve above a sailplane pilot operating close to cloud without the SCFR or a Restricted SCFR. Any collision risk remains the same regardless of the rating held by the pilot. Soaring utilises a number of techniques that require flight close to cloud without penetrating cloud in order to achieve higher cross-country speeds and faster/higher climbs.

I believe that the assessment is flawed in that it does not identify the true nature of the positive safety benefits of the Restricted SCFR. The experience of the UK is that safety is not compromised by pilots operating close to cloud while not holding an Instrument Rating (or equivalent). **This privilege must be retained in the absence of any evidence that shows the practice to be unsafe.**

response

Not accepted

Thank you for providing this comment.

This NPA has been developed by the Agency in close consultation with a working group consisting of sailplane experts, including experts from the UK. During working group discussions it was decided to develop the SCFR. With regard to your comment on the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

837

comment by: *Adrian Hegner*

Section 6.4

I support the introduction of Option 2 'restricted Sailplane Cloud Flying Rating' as the best of the 3 options offered.

Also I agree with the British Gliding Associations comments that 5 hours of training is to much and a lesser number of hours should be specified.

response

Partially accepted.

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment

880

comment by: *David TAYLOR*

I agree with the assessment of impacts, in that Option 0 is worst by some considerable margin. I would like to see both options 1 and 2 being made available. Most of my cross-country flights involve flights up to cloud-base, but outside of cloud. Typically, the extra height gained will be at the expense of the extra effort required to circle accurately and so forth. Also, if you can still see the clouds on track you can make better decisions about where to go next.

Say, only one flight in thirty will I attempt a cloud climb, and that is normally at the end of the day, when there are only one or two large clouds left, and I know that I will need to gain as much height as possible in order to make it back to my club site.

response

Noted.

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

955

comment by: *Derek MITCHELL*

I believe the economic impact for the UK to be understated as a reduction of this magnitude would be unsustainable for operational clubs leading to a total elimination of gliding in the UK as a going concern. Even if initially only thermal soaring organisations were affected by the regulations, clubs

	<p>predominately operating with other types of lift are largely reliant of visiting pilots to remain viable. This source of revenue would eventually decline to the point where these clubs would also become unviable. This situation must also be true in some if not all other european countries.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency and working group sailplane experts do not believe that the economic impact of the regulatory changes is understated.</p>
comment	<p>956 comment by: <i>Andrew Watson</i></p> <p>3. Mistaken assumptions in the Regulatory Impact Assessment (Chapter II, p228)</p> <p>3.1 Economic Impact (section 6.2, p235). The RIA assumes that Option 2 (restricted rating) and Option 1 (full SCFR) are mutually exclusive, so that Option 2 would "therefore reduce gliding activity in the eight EASA Member States where currently a full cloud flying rating exists". This need not be so. Options 1 and 2 could easily be introduced in parallel, thus giving Option 2 a net positive MCA score, not zero.</p> <p>3.2 Regulatory harmonisation (section 6.4, p236). The RIA assumes that Option 1 and 2 would have a negative regulatory impact because "ATC would need to introduce new procedures" in states where gliders do not currently fly in IMC. This is incorrect. Flying gliders in IMC or cloud in the UK imposes no burden whatsoever on ATC. Hence the MCA score for Options 1 & 2 should be zero, not -1.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>As you refer to Option 2 (restricted cloud flying rating), please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.</p>
comment	<p>993 comment by: <i>Bob BOYD</i></p> <p>6.1 Safety impact.</p> <p>This is confused thinking. Options 1 and 2 cannot be considered in isolation.</p> <p>If 'safety' equates to operating range, then options 0 or 1 alone would compromise those without the full SCFR.</p> <p>Option 2 alone would severely limit gliding activities.</p> <p>Options 1 and 2 together would provide the best overall operating range capability.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>

As Option 2 refers to the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

1003

comment by: *rupert PURITZ*

It is very important that gliders be allowed to climb to cloud base, otherwise, for example, if cloud base is at 3000ft, then gliders will be restricted to 2000ft and cross country flight will not be practical. Most pilots prefer to reach 3000ft before setting off, and this would need a base of 4000ft- quite often not achieved.

A cloud flying rating could well be an advantage to many pilots, but I believe that a 5 hour training requirement would, in many cases, be too long. Since a skills test would be a requirement, demonstration of competence could determine the length of training.

Many commercial pilots have a gliding background which stands them in good stead, and it is vitally important to maintain gliding as a challenging sport which may lead some people to a career in aviation.

I support Option 1, to introduce a cloud flying rating. I am a full rated gliding instructor at London Gliding Club.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

1029

comment by: *Roger WARREN*

Many glider pilots will wish to fly IFR but not to actually fly in cloud. I would support a restricted SCFR to cover these pilots. in my opinion, there does not need to be any further requirement over and above that needed for a glider pilot licence and could be included within the basic licence. Some theoretical knowledge is required, but I believe there is already sufficient within the syllabus.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1076

comment by: *Richard AYLESBURY*

I strongly support Option 1 to maintain cloud flying capability for gliders in the UK. The formalisation of training across the international community with a consistent syllabus is to be welcomed.

response

Noted

Thank you for providing positive feedback.

comment

1078

comment by: *Martin Roberts*

Page 236

6 Analysis of Impacts

Para 1; "This section discusses the impact of the three options described....."

The "3 Options" are **wholly flawed** and not based on any genuine discussion with real glider pilots or their representative organisations. As a result any "discussion" in this NPA is moot. These "Options" were deliberately engineered to make it seem as if there could *only be 3 options*. Any discussion or analysis based on these "Options" is misleading, actually, a gross manipulation.

6.1 Safety Impact

Paragraph 3; "Option 1" is misleading as it suggests that through adopting this "Option" an improvement in safety can be achieved in all cases. In the United Kingdom this is *not* the case since we already enjoy the widened operating range through IMC/cloud flying. Thus, *in the UK there is no safety improvement* and any MCA score is as a result moot. The UK has a perfect record in an around cloud. Our system works perfectly.

Page 235

6.2 Economic Impact (this entry is wrongly numbered in the NPA. A sloppy piece of work.)

Any discussion of Option 0 is moot, although the disastrous economic effects (MCA -3) are correctly identified.

Paragraph 5; "As regards option 1....." This paragraph is **WHOLLY** misleading as it suggests that improvements to operational range are the primary focus for Economic Impact. This is completely wrong and demonstrates a complete lack of grasp of the true economic impact. States which have a rating system will be largely unaffected. However, States which will need to implement a rating system will face huge costs; costs to individual pilots spending large sums on building up the unnecessary "5 hours", time costs to the instructors needed to receive the training to become FI and FE rated, costs to club members onto whom the costs of training instructors must inevitably fall, costs of aircraft and launch facilities which must inevitably be diverted into the new "industry" of providing cloud flying training.

My estimates have shown that each individual sailplane pilot would need to find *at least* £1000 (1200euro) and 15 days of flying to pay for their own cloud flying training, the majority of which is the "5 hour" requirement. I have shown too that clubs face costs of in the region of £10000 (12000euro) in order to train their instructors. In the UK this multiplies out as a cost of £300000 (360000euro) nationally. Extending this throughout the 23 Member States who would have to implement I would envisage costs approximately in the range £6 million (7 million euro) to £8 million (9.5 million euro), depending their

underlying infrastructure.

Most tellingly, although the EASA states that it has assessed the "Economic Impact" of Option 1 - at no stage in this crucial and very short paragraph are any figures or numbers of euros mentioned. Clearly **it has not been researched**. Indeed, by the definition established in Table 26 on Page 233, Option 1 MUST have a negative impact of -1; "Total costs of less than 10 Million euros". Implementation *has to* cost something. The suggestion made in paragraph 5; "The estimate is low because it is not clear to what extend (sic) the new possibility will be used in practice (MCA score +1)" is simply not credible.

The United Kingdom would be particularly economically prejudiced by the adoption of any rating system because of our unique position as already enjoying the benefits of IMC/cloud flight. On implementation we would have to pay large sums of money and time, and our membership costs would rise sharply - simply to continue to enjoy something for which we never had to pay before. And all this to **not** improve our safety position since the UK record is already exemplar.

Europe-wide any rise in costs would particularly hit and deter younger pilots. This could destroy their chance of using gliding as an entry point to a career in European aviation. This cannot possibly be an objective of The Agency. The Agency has not identified or assessed the issue of economic impact accurately.

Paragraph 6; "Option 2" is again moot. The economic effects on the UK gliding economy would be profound and disastrous. The sentence; "The Agency does not have sufficient data to estimate the overall economic impact...." is a very telling one. It suggests, once again, that the EASA has not done sufficient research on this very important and far reaching proposal.

6.3 Social Impact

Paragraph 1; The sentence; "It is difficult to measure the social benefits in this context...." again suggests that The Agency is engaging in guesswork and supposition. As with the assessment of economic impact - effects here are likely to be more marked for younger pilots.

Page 236

6.5 Proportionality (which is again wrongly numbered)

Because the assessment of Economic Impact (6.2) is wrong, the assessment of proportionality that is based on it is also wrong. The statement given, which is that the impacts will bring "an over proportionate burden on gliding clubs" is correct. But the resultant assessment is once again guesswork and no figures are presented to support any statement. The scores given for Options 1 & 2 are simply not credible.

response

Partially accepted

Thank you for providing this comment.

As several other commentators stated that the proposed amount of dual flight training is too excessive, this requirement was further discussed with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours

in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 1 hour of flight training. However, the Agency insists that this amount of the training has to be flown on a sailplane or powered sailplane except TMGs.

The Agency estimates the following costs for the sailplane training:

- €30–€50 per sailplane hour (dual)
- €45–€60 per launch to 1 000 m (which will allow 20 minutes flight time)

Therefore:

- 1 hour dual instruction: €30–€50
- 3 launches to 1 000 m: €135–€180

The total cost of 1 hour of dual instruction without the use of TMG is €165–€230.

The Agency estimates that 1 hour of dual instruction can be carried out within 1 day.

comment

1096

comment by: *John Castle*

Every out landing carries some risk. Reduced operational ability created by the proposed restriction will increase the number of outlandings.
I believe that many Sailplane pilots will be tempted to convert to NPPL and become GA pilots adding to the numbers of the aircraft and the environmental pollution from the engines in use in these aircraft.
Others will simply give up the sport which will have become impossible to enjoy in the same way that we (safely) have for many years

response

Noted

Thank you for providing this comment.

comment

1115

comment by: *Bob Bromwich*

Section 6.2
Environmental impact

Sailplanes, after they have been launched, do not consume fuel - and thus the low cost of gliding allows much longer and further flights by glider pilots compared to power pilots, averaged over a typical flying year - basically because the cost of flying the same hours in a power aircraft would be more than the pilots' annual salary !

But, without flying according to the proposed sailplane cloud flying rating, the glider would be more likely to land out in a distant farm field, thus requiring a road retrieve by trailer, and this would increase the environmental impact due to the fuel used by the retrieve vehicle two - way journey !

Thus if EASA chooses the "OPTION 1, SCFR-full" the environmental impact will be minimised, and this stakeholder strongly advises EASA to choose as advised

	here.
response	<i>Noted</i> Thank you for providing this comment.

comment	<p>1118 comment by: <i>Bob Bromwich</i></p> <p>6.2 Economic Impact</p> <p>Here in the UK, we are very worried by the "unintended outcome" of <u>not having the SCFR rating</u>.</p> <p>In particular, if gliders are not allowed to fly near/in cloud as they have been doing in the UK safely for many years, then the value of gliders would decrease, and pilots would give up flying. In my case, I would be very hard hit, as I have ~ 250,000 euros worth of gliders, and it would be a very considerable loss if they could not be sold.</p> <p>Furthermore, the negative economic impact would be more than stated in section 6.2, because not only would the very large overall value of the glider fleet decrease markedly, but also, the manufacture of new sailplanes would be hit, with job losses in the manufacturing firms in Germany.</p> <p>Also, EASA, please in awarding the SCFR, please do not make it too expensive to obtain - there is an economic impact in the licence cost. Please minimise the number of hours needed in the skills test for the SCFR.</p>
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response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>As several other commentators stated that the proposed amount of dual flight training is too excessive, this requirement was further discussed with the Review Group experts. Taking into account that if there is no TGM available for the training (although the NPA already allowed a maximum amount of 4 hours in TMGs), 5 hours on sailplanes as initially proposed would be difficult to achieve, and having in mind that this more competency-based approach will end up in a skill test, the Agency agrees with this proposal to reduce the minimum amount of training and will lower the requirement to at least 1 hour of flight training. However, the Agency insists that this amount of the training has to be flown on a sailplane or powered sailplane except TMGs. The reduction in the number of required dual training hours will make obtaining the SCFR less expensive and more accesible.</p>
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comment	<p>1164 comment by: <i>Ralph Erskine</i></p> <p>Para. 6.1 assesses the safety impact of the three options. For Option 1 (harmonised cloud flying rating across all EASA Member States), it concludes that 'For the eight Member States with a similar arrangement at present, this would have no impact on safety.'</p> <p>However, that may not assess the position accurately for the United Kingdom (UK). At present, all solo glider pilots in the UK may fly in cloud. In future, if Option 1 becomes law, only pilots with the Sailplane Cloud Flying Rating (SCFR) will be permitted to do so. Unless all existing UK solo glider pilots acquire an SCFR under the new procedures (which seems unlikely) or are given some form of 'grandfather' privileges (which is not mentioned in this NPA), Option 1 will</p>
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decrease their operating range, and increase the risk of out-landings.

Much the same applies to the other seven Member States which permit cloud flying: Option 1 will only have 'no impact on safety' if either-
(a) the number of pilots acquiring an SCFR under the new procedures equals the number who hold cloud flying privileges or licences in the State in question; or
(b) every pilot with an existing cloud flying licence has cloud flying privileges conferred as 'grandfather' privileges.

I appreciate that a lot will depend on any transitional provisions for the UK and the other seven States, that the UK is in a minority of one in this context, and that perhaps few pilots in the other seven States hold cloud flying privileges or licences (no statistics seem to be readily available).

response *Noted*

Thank you for providing this comment.

An existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. The Agency will support the CAA UK in finding a solution to this issue.

comment *1224*

comment by: *Martin Ellis*

If the ability to fly in cloud or in close proximity to cloud is removed for the UK, the Safety and economic impacts would be more serious for gliding and gliding clubs in the UK. Many UK gliding clubs, which are small enterprises and already operate in a difficult economic environment, may not be able to survive unless permission to fly in or near cloud is maintained.

From the social impact point of view, UK glider pilots have enjoyed the right to fly in cloud and near cloud for very many years and they continue to do so with safety. Many life-enhancing flights can only be achieved by some cloud flying or close proximity to cloud being permitted. It would be unreasonable, immoral and possibly illegal to do anything to remove these established rights.

response *Noted*

Thank you for providing this comment.

The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment *1255*

comment by: *Mike Collins*

I SUPPORT Option 1 (SCFR) for those sailplane pilots who wish to fly in cloud and also I SUPPORT Option 2 (SCFR-R) of the EASA proposals for those that wish to continue exercising current privileges under IFR but clear of cloud.

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1318

comment by: *John Klunder*

Option 1 will require a new rating to be obtained by UK sailplane pilots, in order to continue the existing established practise of flying within IMC but clear of cloud. The training infrastructure for that rating does not currently exist in the UK and is likely to take some time to establish. The short term impact will be a significant restriction on sailplane activity in the UK until UK pilots can obtain the required rating.

Option 2 in addition to Option 1 would reduce this restriction, and also is arguably more appropriate for the majority of pilots (since the majority of sailplane IMC flights are clear of cloud).

However if there can be only one sailplane IMC rating then it should be Option1, as only that option allows the full range of activities.

response

Noted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

Please be advised, that an existing licence and rating can be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. The Agency will support the CAA UK in finding a solution to this issue.

comment

1319

comment by: *David Bowden*

Page 234 Safety Impact

The score of +1 is based upon increasing the operating range of sailplanes. It assumes that all pilots would go to the significant cost of getting and maintaining their rating. This will not be the case.

Few if any pilots will. In the UK we have no restrictions however few pilots and with good reason, venture into cloud. Most conclude that the risks associated with cloud flying far out weigh the benefits. Few gliders have speed limiting brakes and most are fitted with basic cloud flying instruments.

The implication is that most pilots in the UK will not have the rating. They will not be able to climb up to just bellow cloud base. For them the operating range will be reduced. That does not seem to be included in the calculation. If it were the safety impact would move from +1 to -3. There is an acknowledgement that Option 2 would improve safety but then is swiftly dismissed. Why is there not consideration of allowing for differences in member states.

Apparently not considered are the risks in training pilots to cloud fly and their subsequent attempts to try-out their skills.

Page 235 Economic Impact / Social Impact

The negative impact upon UK gliding is only considered under option 0. Under option 1 there is no regard to the increased cost to the individual and the impact that will have upon the number of people participating in the sport (there will also be considerable practical difficulties in obtaining a rating). How anyone can calculate a benefit is beyond my comprehension. A figure of -3 is more realistic.

Page 236 Proportionality

How can the statement about an over proportionate burden on gliding clubs be consistent with a +1 for option 1. Why does not the proportionality test take into account the nature and extent of the problem we are trying to change. Where is the "if ain't broke - don't try to fix it" mentality.

Page 236 Harmonization

I am in favour of harmonization. Can you arrange for us to have the weather that they have on the continent. Until then, regulations should reflect our local weather conditions. We frequently have low cloud bases. Also we have most of the country covered with airways that have low bases. To enter cloud and climb is usually a "no no" given the risks associated with climbing into the airway.

response

Noted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

Please be advised, that an existing licence and rating can be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the

Agency. The Agency will support the CAA UK in finding a solution to this issue.

comment

1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.

response

Not accepted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment

1464

comment by: *Gary Newbrook*

There must be two levels of flying introduced; flying IN cloud and flying NEAR cloud. Standard IMC rules MUST NOT APPLY in sailplanes

Flying near cloud MUST be allowed for all pilots, new and experienced. The new pilots will gain the experience necessary to make them safer pilots. Experienced pilots will be able to take the sport further and give aspiration to the new pilots, keeping the sport vibrant and available for all... NOT JUST THOSE WHO CAN AFFORD IT.

The 5 hour rule is wrong. A pilot who is safe to fly after 30 minutes is also safe after five hours. Why charge them an extra four and a half hours flying time ??? I am sorry to say that this arbitrary timing shows a lack of imagination in the ability to create a syllabus that can prove competency.

	<p>Competency is based on ones ability to fly, not ones ability to spend enough money to fly for five hours.</p> <p>This ruling only increases the cost of gliding. It does nothing to increase the safety of gliding</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p> <p>Also please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>1465 comment by: Gary Newbrook</p> <p>The economic impact is demonstrably unknown.</p> <p>IT WILL REDUCE THE NUMBER OF PILOTS WHO CONTINUE TO FLY BEYOND SOLO.</p> <p>The cost to complete the SCFR is prohibitive to some and unnecessary</p> <p>Actively reducing the number of pilots who are prepared to wait three and a half years to be able to complete their Silver Height goal is a negative economic impact</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1467 comment by: Gary Newbrook</p> <p>6.5 Proportionality I completely disagree that there will be a positive economic impact Option 1 must be viewed as negative and must be given at least a -1 score for reasons given elsewhere</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1480 comment by: René Meier, Europe Air Sports</p> <p>Page No. 234 Paragraph: RIA for SCFR - paragraph 6.1 Safety Impact</p> <p>Comment: Option 2 (RSCFR) is rejected by the Agency on the basis of it being "somewhat less than Option 1 with a full cloud flying rating". But many glider pilots do not want or need to fly in cloud and therefore where local airspace</p>

rules applied in particular Member States allow flight up to cloud base over 3000ft AMSL, such pilots will need, unnecessarily, to obtain the full SCFR under this proposal.

Just as there is provision in Basic Regulation 216/2008 for situations "where national law permits" (vide: GP medicals), there is a case for the RSCFR to be available in those Member States where it can be of great benefit in extending the gliding range, thereby reducing the possibility of land-outs which always carry more risk than landing at an aerodrome. This is of particular benefit in safety terms when flying over relatively un-landable country or at times of the year when fields are mainly crops.

EAS concludes that, on this point, the RIA is flawed, and reaches the wrong conclusion. EASA and / or the EU does not determine the application of airspace rules in this regard in Member States. Therefore the maximum flexibility should be provided through the medium of this RIA and NPA, thereby enabling some Member States to allow continuation of acceptable practices in gliding, which on balance reduce risk (i.e. risk of collision far outweighed by improvement of risk of landing-out). Tens of thousands of glider pilots know this from their direct practical experience over many decades.

Justification: Real life risk-based assessment from those who fly sailplanes

Proposed text: Options 1 (SCFR) and 2 (RSCFR) to be recommended

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment

1494

comment by: *Richard Cooper*

AS a pilot of 44 years gliding experience, much of which has been spent within 1,000 feet of cloud within the UK, I feel the figure of 85% reduction in gliding to be far more realistic than the 10% quoted by the authors of the document. Those authors are obviously unfamiliar with the prevailing weather conditions in the UK where cool moist maritime airmasses usually have much lower cloudbases than those of the rest of the continent.

This presumption plainly favours central European countries over the UK and is thus in breach of the fundamental principles of EASA and the EU.

response

Noted

Thank you for providing this comment.

This NPA has been developed by the Agency in close consultation with a Review Group of sailplane experts, including experts from the UK. The Agency therefore disagrees with your comment that 'authors are obviously unfamiliar with the prevailing weather conditions in the UK...'. In this respect, the Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from

complying with these ICAO requirements.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - 7. Conclusion and preferred option

p. 237

comment

29

comment by: *Timmy SCHWARZ*

Obviously, Option 0 scores the lowest, as it is the "worst case" concerning safety and glider flying activities.
Even if considering option 2 on it's own might not give the best result, why could there be no combination of both option 1 and 2?

When it might be possible to obtain either a restricted or a "full" cloud flying rating, than overall safety will definitely be enhanced.
Still, memberstates could imply certain rules or restrictions on their airspaces, concerning the use of the restricted cloud flying rating - but wherever else possible, this option gives an economically affordable chance for glider pilots to exercise their hobby in the most secure and professional way.
Especially glider flying is a typical regional "affair", where right now (e.g. in the vicinity of larger airports) special rules (use of the airspace) apply on a very regional scale and always in sincere exchange of thoughts from both the responsible ATC unit and private flying clubs in each particular part of a country.

response

Noted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

The Agency agrees that Member States will be able to designate special (sailplane) airspace zones within airspace categories with different rules for VFR. However, Member States may not apply additional criteria (more or less restrictive) with regard to EU regulations; therefore, the application of a restricted cloud flying rating will not be possible.

comment

49

comment by: *Chris Curtis*

I disagree with the methodology used to compile the Multi Criteria Analysis table, particularly with regard to Option 2. An assumption has been made that Option 2 will have a neutral impact on safety. However, not including Option 2 will have a very negative impact on safety for reasons already agreed.

I do not believe that Options 1 and 2 should be mutually exclusive; they should exist concurrently within the rules. In other words, there should be two ratings available i.e. SCFR and SCFR-R. The statement "*SCFR-R may not be accepted by some of the Member States due to airspace regulations and procedures*" is significantly undermined by the impact on safety caused through the omission of Option 2. If there is an impact on safety because of regulation then the regulation should be changed. Surely this must be a priority. Safety is paramount.

response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>As your comment refers to the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.</p>
comment	<p>123 comment by: <i>Mike Terry</i></p> <p>After nearly 50 years of solo flying I dont recall any flight safety issues to do with glider pilots in IMC. I have given up my 2 gliders because of all the over regulated European red tape. If its not bust dont fix it. More training which has to be done just to satisfy EASA costs more money. The net effect of this and all the other "Regulation" from EASA is that I am now on the verge of giving up gliding. It will soon be a rich mans sport and EASA will have killed gliding. I will be amongst many driven out of the sport by rising costs and red tape.Glider oriented firms will have a very few customers. My only hope is that the Eurozone collapses and takes Easa with it. The effect of this and other EASA intervention is to destroy the enjoyment of gliding and probably in the long term the sport itself. DO NOTHING! If you want to make the skies safer for all, give gliding sites a 5 mile 7000' GTZ (gliding traffic zone). Let us fly in conditions that we by experience know is safe. Keep those who never look out anyway away from safe experienced pilots.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.</p> <p>However, the Agency would also like to emphasise that Member States will be able to designate special (sailplane) airspace zones within airspace categories with different rules for VFR.</p> <p>Also, existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. This means that obtaining a SCFR may be possible with fewer training requirements.</p>
comment	<p>135 comment by: <i>Robert John</i></p> <p>Options 1 and 2 are complementary, not mutually exclusive. The Agency should not be considering one OR the other but both. Any limitations that may be imposed by airspace regulations or operating procedures in some countries will com=ntinue to affect those countries but should not debar a sensible proposal from being put in place. The restrictions they have may later be changed or removed.</p>
response	<p><i>Not accepted</i></p>

Thank you for providing this comment.

As your comment refers to option 2 and the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.

comment

145

comment by: *Roy Pentecost*

Option 0 will be very detrimental to sailplane safety in the UK. The low cloudbase coupled with inability to operate near cloud will increase the risk associated with off-airfield landings, probably the largest single cause of major sailplane damage in the cross-country flight scenario.

Option 1 is the preferred option allowing cloud flying to cross large thermal gaps (common in showery or overcast conditions) and for accessing or leaving higher level wave flying above the convective layer.

response

Noted

Thank you for providing this comment.

comment

166

comment by: *Peter Harris*

My comments apply in general to the section involving sailplanes.

Specifically, the requirement to maintain 1000' clear of cloudbase above 3000' in the UK is too restrictive. Where I fly in central UK, cloudbase is sometimes clearly defined, and on other occasions less so. As long as required visibility can be maintained, then flight up to cloudbase should be permitted above 3000'. With the normal thermal strength where I fly, it usually takes a very long time to gain 1000', and the loss of that valuable bit of clear air would severely restrict options on many occasions. I consider it perfectly safe to operate up to cloudbase, as long as the visibility underneath is good. In other parts of Europe, thermal strength might make such an edict less restrictive - please do not legislate so strictly that those of us less fortunate to enjoy regular high thermal strength are unfairly limited in our options to match those who do enjoy thermals that we can only dream of!

Secondly, I refer to the instrument rating requirement of 5 hrs dual instruction. I am a retired military pilot with almost 4000 hrs single seat fast jet flying in my logbook. Of that, over 220 hrs is actual IFR flight, and over 70 hrs is simulated IFR flight - in aircraft which mostly did not have an autopilot! I would be confident that I could satisfy an instrument instructor/examiner that I am safe to fly a suitably equipped sailplane with no further instruction. The decision of competency should be delegated to a suitably qualified instructor/examiner who rightly can make that judgement based on flying ability, rather than an arbitrary number of hours under instruction. From my military experience, some ab-initio pilots would reach a required level of competence with fewer than 5 hrs - some would take longer. That judgement should be delegated and left to an appropriately qualified examiner.

response

Partially accepted

Thank you for providing this comment.

1. The Agency would like to highlight that in certain airspace categories or

above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

2. Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

246

comment by: *Robert Davey*

I am a UK glider pilot/instructor with over 2000hrs experience and also hold a UK PPL with a similar amount of flight time - a large amount of which is glider towing.

I support the proposals but with the following comments.

Many glider pilots - perhaps the majority - wish to fly up to cloudbase but not into cloud which at present is permitted in the UK. To have to obtain the full cloud flying rating to continue to do this would seem to be dis-proportionate as there is no difference flying just below cloud then 1000ft below, other than keeping an extra good lookout.

With reference to the full cloud flying rating, the minimum 5 hours training would seem excessive, 3 hours would seem more appropriate as in general gliders will circle in cloud to gain altitude then straighten out in the general direction of track until clear of cloud then head towards the next likely source of lift which could be up to 40 deg either side of track, varying heading to stay in lift or reduced sink when possible. Flying on a fixed heading or turning onto headings by use of the compass is very rare.

For these reasons I believe there should be an option 3, combining options 1 and 2.

response

Partially accepted

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

258

comment by: *Mr N Cosmos*

Re: NPA 2011-16
Dear Sirs,
I attach my comments below.

Within the UK sailplane sport flying has been regulated by the British Gliding Association (BGA) for the CAA, successfully for a significant period of time, and it appears this is with safety comparable to other European countries.

Flying in cloud by sailplane pilots has been common in the UK for many, many years and it appears that this has not significantly increased the level of accidents occurring in cloud. I think that any proposals that exclude cloud flying or flying in proximity to cloud in sailplanes would seriously increase extras hazards, such as an increase in the likelihood of an off airfield landing, due to the vastly decreased range of the sailplane under these limitations. I would not therefore support this approach at all.

The Rulemaking group FCL.008 for Sailplanes outlined options 0, 1 & 2 within the NPA 2011-16 Qualifications for flying in Instrument Meteorological Conditions. I feel that I agree with their analysis in general terms and therefore support option 1, recommending a sailplane cloud flying rating (SCFR) for sailplane licence holders. Nevertheless, I feel the requirement for 5 hours training that is suggested is excessive given the rating is based upon a skills test. I do not think that a minimum number of hours rule is necessarily reasonable or proportional given that the rating needs to be skills based. This is the current situation operated by the BGA not requiring a specified minimum amount of training and has worked well in the UK for many years. If the pilot has acquired the required skills to pass the test standard, then that should be enough without needing a minimum number of hours additional training. Whilst I support the groups recommendations for option 1 in general terms, I do not support the premise that a minimum training period is required.

I am also disappointed that the working group has not considered a "Restricted Sailplane Cloud Flying Rating" (RSCFR) as an option for flying sailplanes under Instrument Flight Rules (IFR) but clear of cloud. There are areas of airspace that this type of flying is important, particularly for sailplanes flying cross country. Such a formal qualification would not necessarily require any new skills for Licenced sailplane pilots and could be covered by theoretical knowledge training and if necessary a log book endorsement. In the UK this is currently covered by the BGA training system without serious problems. I would therefore strongly suggest that this extra option is re-considered by the working group.

Mr N Cosmos
UK glider pilot with ICAO Glider Pilot License.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 289

comment by: *Simon Kahn*

The risk assessment scoring and analysis is flawed. In the UK a "do nothing"

approach would allow cloud flying up to and in clouds and this has not been considered. In the absence of any evidence showing significant probability of serious risk (significantly more mid air collisions out of cloud than near cloud and none in cloud) and negative impact on safety and emissions by restricting range due to more outfield landings the do nothing option for UK should be preferred.

However if an option allowing the existing UK sailplane IMC in and near cloud is not available the Option 2 is preferred but a reduced minimum training requirement is strongly recommended as many pilots currently fly in the UK and EU without a significant adverse impact and a skills test will ensure that minimum standards are maintained for this skill.

response *Partially accepted.*

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that the assessment scoring and analysis are 'flawed', but instead that the scoring and analysis have been carefully considered by the Agency. Option 1, development of the SCFR, is seen as the most viable option. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 290

comment by: *Simon Kahn*

Option 1 is the only option with a positive score but this is because the UK "do nothing" option has not been properly considered and a combined option with limited rating readily available and full cloud rating for committed cloud fliers is also not considered. This looks like an assessment designed to produce a regulatory result rather than a process designed to improve aviation safety.

response *Noted.*

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that not all options have been taken into account, but instead that the most appropriate options have been carefully considered. Option 1, development of the SCFR, is seen as the most viable Option by the Agency. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 302

comment by: *Geoff Pook*

Response to EASA cloud flying, sailplane/glider, proposal.
I reject Option 0 of the NPA 2011-16.
I strongly support Option 1, SCFR, But suggest some modification.
I support Option 2, RSCFR, but with some modification to make it a meaningful intermediate step to gaining the full SCFR.
Anything which restricts the operating range of gliders will be detrimental to the

sport in which, in these times of economic uncertainty, many clubs are struggling to retain existing members and attract new ones.
Option 0 would cause many experienced glider pilots to stop flying and clubs would find their reduced membership threaten their viability.
Option 1 with it's additional training and 2 yearly assessment should have a positive impact on safety in gliding.
Option 2 should be re-assessed as it has many positive aspects if adapted to form a pathway to the full SCFR. Although some pilots may see RSCFR as sufficient, some may prefer to use it as a stepping stone to the SCFR.
The SCFR should be available to SPL and LAPL(S) pilots who undertake the appropriate training and achieve the required standard.
A motor glider should be permitted for practical training sessions which would allow training to take place at times when dual sailplanes would not be suitable, ie. non thermic conditions.
5 hours would seem to be excessive for practical training in many cases. 3 hours minimum would suit most cases depending on the experience of the trainee. Instructors would be able to advise individual trainees if more training was required before taking the skills test.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/SPL and LAPL(S)/use of TMG/5 hours training) were also identified by BGA.

comment 318

comment by: *Mike Armstrong*

As stated above, I fail to see why Option1 and Option 2 are mutually exclusive. They could be combined to good effect and benefit to the sailplane community without detriment to the rest of the aviation community.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 323

comment by: *D. O'Brien*

I fully support the proposals relating to Glider (sailplane) pilots. The vast majority of cross country glider flights are undertaken in thermic conditions, which frequently by their nature require close proximity to or penetration of cumulus cloud. If the proposal is not adopted, the result would be an effective ban on thermal soaring flights in UK airspace.

response *Noted*

Thank you for providing this comment.

comment 324

comment by: *John McIver*

It is absolutely essential that the right to fly in cloud is retained and I would fully support the BGA in it's approval of the cloud flying rating, though the minimum training of 5hrs seems somewhat excessive when you consider that many of the pilots applying for the rating will have the skills already having been cloud flying for many years.

It would be even more useful had the option of a restricted rating been retained as well as the full cloud rating, the vast majority of glider pilots will not seek to enter cloud intentionally but will wish to fly close to cloud on very many occasions.

As a TMG pilot myself I can understand why the the proposed cloud rating should not be exercised in that class of aircraft BUT the TMG fleet would be the obvious tool for training for the rating, being readily available at many gliding clubs, it is therefore essential that that option is retained in the final ruling.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating/use of TMG) were also identified by BGA.

comment 325 ❖

comment by: *Julian RICHARDSON*

The following response applies to two segments, as follows:

Page 14, section 3: Regulatory Impact Assessment 2: Sailplane cloud flying rating

AND

Page 237, Sailplane Cloud Flying Rating: Conclusions and preferred option

I strongly support Option 1, which is the preferred option for the Sailplane Cloud Flying Rating.

However, this does not preclude also allowing a Restricted Sailplane Cloud Flying Rating (Option 2) in addition to the full rating of Option 1.

The creation of these two levels of Sailplane Cloud Flying Rating (SCFR) would be highly beneficial for the following reasons:

- It is a current privilege in a number of countries for appropriately-trained sailplane pilots to operate under conditions where the flight remains clear of cloud but occurs under IFR conditions - precisely the privileges of the Restricted SFCR. Removal of current privileges, or requiring more advanced training to exercise these privileges, is a very serious matter and is not the stated intent of this NPA.
- Best practice in flight training, like all learning, requires the student to progress through levels of assessed competence. This approach has many benefits, including providing the opportunity to consolidate learning in stages through practical experience between the levels. This is one of the best ways to ensure retention of learning.

This multi-level approach would also benefit sailplane cloud flying training. The Restricted rating requires the theory of the SCFR, but not the practical elements since cloud is not entered and is an excellent intermediate step towards the full SCFR.

The restricted SCFR will improve the learning process, increase knowledge

retention (because learning is practiced between the stages) and thereby enhance safety.

- In many countries, weather patterns mean that sailplane flight which remains clear of cloud but occurs under IFR conditions is very frequently encountered. Therefore, this Restricted rating would be particularly relevant to practical sailplane flying.
- The Restricted SCFR will encourage pilots who do not wish to pursue the full SCFR to take the theoretical test; the knowledge gained will further improve flight safety.

Other considerations: The primary objection to the Restricted Sailplane Cloud Flying Rating (Option 2) cited on page 237 of the NPA is that this may not be accepted by some member states due to airspace regulations and procedures.

If this is the case, the simple solution is to allow this only in those countries which ratify this Restricted rating. This approach would demonstrate sensitivity to the specific needs of individual countries for whom this is beneficial and an existing privilege, while also meeting the needs of countries for whom it is not suitable - a win-win situation.

Finally, while I understand the approach to using the scoring system on page 237 to determine the preferred option (i.e. an overall winner), I don't feel it does justice to the Restricted rating (option 2) when this is considered as an additional option.

For example, the restricted rating has a positive safety impact (though not as large as the full SCFR) because it increases range and reduces field landings over Option 0. Also it has a positive economic impact as it allows sailplane flying to continue with current privileges without requiring an advanced and costly additional qualification to be obtained. Also it has a positive social impact, as pilots not wishing to undertake the full SCFR would be excluded from current privileges and may therefore give up flying.

Therefore I strongly recommend that a Restricted SCFR be made available in addition to the full SCFR.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

In addition, please be advised that once EU regulations are applicable, Member States will not be able to apply additional criteria (less or more restrictive).

comment 361 ❖

comment by: *Colin Hamilton*

RESPONSE TO NPA 2011-16

I have been a sailplane pilot since 1976; a gliding instructor since 1983; I have all 3 FAI diamonds and a UK 750km diploma for cross-country soaring. I have recently been appointed a British Gliding Association Regional Examiner for Scotland. Additionally, I have a CAA Flight Instructors Rating for NPPL (SLMG).

I therefore have over 35 years experience as a participant and instructor and have a keen interest in the regulatory environment pertaining to both sailplane and light aircraft pilots.

It is important that any regulation is proportionate to the problem perceived to require regulation. The British Gliding Association as the Governing body of Gliding in the UK has successfully governed the sport for over 35 years and has managed the safety of UK gliding in a self regulated environment during this time. This is seen by all pilots as being proportionate. The safety record of UK gliding demonstrates that this arrangement has worked satisfactorily and there is therefore no need for further complex regulation.

In my time gliding, flight within and near to cloud has been an essential part of the sport. I find it quite worrying that proposals should exist, which would effectively prohibit *flight near cloud* unless pilots meet additional training and licensing requirements. There are significant additional hazards that would be introduced to gliding activity if pilots weren't allowed to fly near cloud. An Acceptable Means of Compliance with the absolute minimum amount of additional training or licensing should be brought forward within these proposals which will allow sailplane pilots to continue to fly near to cloud without requiring extensive additional training.

Gliding flight *within cloud* has been practiced in the UK for many years. Often competency in this has been gained in an informal manner but nevertheless competency has been demonstrated as evidenced by the very minimal incidence of accidents occurring in this flight environment. Perhaps some degree of formal training / testing needs to be introduced. This needs to be proportionate and should only be competency based and not have a minimum number of training hours associated with it.

Generally, I support, the main elements of the proposed Sailplane Cloud Flying, however I would offer the following detailed comments:-

1. SPL & LAPL(S)

The SCFR is a welcome proposal.

It essential that this privilege is available to both SPL and LAPL(S) holders.

2. Flight Training for the SCFR

This qualification should be competency based. If a specified skill test is in place, there should be no requirement to specify a minimum amount of dual flight instruction. It takes whatever it takes to reach the required level of competency.

3. Touring Motor Gliders

If the SCFR is to become a reality then there must be suitable aircraft in which to train pilots for it. The typical club training 2 seater sailplane would not be suitable as the number of times they could be taken to fly in cloud would be limited. TMGs however would be the ideal aircraft in which to train students for the SCFR.

4. Restricted SCFR

At earlier stages in the development of this NPA there had been proposals that, in addition to the SCFR, a Restricted SCFR be made available for flight under IFR but clear of cloud. For the reasons described in my initial comments above, I believe such provision to be essential in order not to introduce additional hazards into our sport. In this respect, I support the BGA's suggestion for a RSCFR.

Summary

1. I support the proposal for a SCFR for both LAPL(S) & SPL holders.
2. I do not support the requirement for 5 hours dual training for the SCFR. A competency test along with theoretical study is all that is required.
3. Training in TMGs is essential for the SCFR to be readily achievable for the majority of sailplane pilots new to the practice of cloud flying.
4. A Restricted SCFR option is essential for flying near cloud in certain classes of airspace and should be included in the EASA proposals.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (SPL and LAPL(S)/5 hours training/use of TMG/restricted cloud flying rating) were also identified by BGA.

comment 398

comment by: *Peter Batterby*

I would entirely agree with the conclusions and recommendations made in section 7.0. This would allow sailplane activity to continue to expand rather than stagnate should option 0 be adopted. In addition the work undertaken to date to ensure safe and effective cloud flying would be lost.

response *Noted.*

Thank you for providing this comment.

comment 426

comment by: *David Alan Benton*

Dear Sirs,
General details:-

1. Dave Benton
0121-745-4344
Stratford Gliding Club Ltd.,
2000 hrs. Power/3000 hrs. gliding/ex-CFI
Currently fly's LS6 G-CHSA
2. I have read all the technical notes and have extracted those which specifically concern glider pilots.
3. I'm concerned, because of the time necessary to evaluate this very important subject that the gliding fraternity may not respond in the numbers necessary to highlight the gravity to our sport if past privileges were removed.
4. I have registered with the CRT but confirm that this link is not working.

My personal response and comments:-

1. I wish to support the EASA proposals and the BGA's response but would wish to reinforce some of their concerns as follows:-

2. Organised official lectures on theoretical knowledge and safety for both the RSCFR and SCFR would be welcome. These could be organised in the individual clubs by the CFI's.

3. For the RSCFR, pilots must be permitted to thermal to near cloud base consistent with maintaining good horizontal vision and lookout. This privilege must remain to uphold the integrity of gliding. Pilots seeking the SCFR would have to do this anyway.

4. For both the initial and the two year renewal of the SCFR I see many problems with the practical side. I suggest that only cross country pilots of considerable experience elect to cloud fly in suitable cumulus cloud to cross a blue area or to get home late afternoon when conditions are decaying. To accommodate testing, in particular after initial training, (not overlooking weather conditions and instructor availability) you may be looking at a suitable two-seater, at least 6 high aero tows (rear cockpit covered), and access to a simulator. All quite a costly operation. Pass a flying test yes, but, on past experience is it necessary to go beyond this point and lay down specific minimum training sessions or retesting after two years?

5. One must not forget that making rules for rules sake is not always the correct answer. At the end of the line the responsibility to exercise common sense and abide by the rules rests with the individual pilot.
In conclusion I hope that my comments are worthwhile to the deliberations.

Yours faithfully,
Dave Benton.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (restricted cloud flying rating) was also identified by BGA.

In addition, it should be clarified that the SCFR only has a recency requirement, but no revalidation date. Holders of a cloud flying rating shall only exercise the privileges of the rating when they have completed, in sailplanes or powered sailplanes (excluding TMGs), at least 1 hour of flight time or 5 flights as PIC exercising the cloud flying privileges during the last 24 months. The privileges can be maintained also by performing a proficiency check or additional dual training.

comment

473

comment by: *John Bone*

I fully accept and support the SCFR (Sailplane Cloud Flying Rating)

response

Noted

Thank you for providing this comment.

comment 481 comment by: *Bryan Smith*

I would support option 1 for implementing the proposed Sailplane Cloud Flying rating in order to preserve the cloud flying privileges already accorded to UK glider pilots. Hitherto used by a small proportion of experienced pilots, the new rating requirement should ensure continued safe use of the privilege.

response *Noted*

Thank you for providing this comment.

comment 487 comment by: *Leslie Kaye*

I agree Option 0 is by far the worst option

Option 1 score is grossly overstated:

- The +3 safety score is overstated because there is no data to support the proposition that the existing practices are unsafe. Based on the likely reduction of the existing data of "no collisions attributable to cloud" the score should be zero - less 1 point to allow for the additional accidents on training flights owing to the pilot under training having their vision obscured. On tandem glider types the instructor's vision is already greatly restricted owing to the wings and the head of the person sitting in the front.
- It fails to take into account the negative environmental impact of the additional training flights
- The social and economic effects of Option 1 should be scored negative. The loss of participants to the sport would significantly exceed any economic benefit arising from the additional flight training.
- Proportionality should also be negative. The proposed 5 hours (typically more than 20 flights) training and biennial check are excessively honourous compared to the absolutely minimal safety impact.

Option 2 is therefore clearly the best scoring option.

response *Not accepted*

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that Option 1 is 'grossly overstated', but instead that the most appropriate options have been carefully considered. Option 1, development of the SCFR, is seen as the most viable option by the Agency. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

comment 548 ❖ comment by: *Laurence SMITH*

I disagree with the neutral MCA rating given for Option 2, for the Social, Economic and Proportionality impacts.

From 48 years of experience of gliding in UK weather conditions, I would suggest that in the UK, without a restricted SCFR, opportunities for post-solo flying, up to the stage where a pilot has gained sufficient skill and experience to attain a full SCFR, could often be affected, with consequent negative impact on the Social, Economic and Proportionality criteria, and, to some extent, the Safety Criteria. Quite often, especially in winter conditions, this would also apply to general local/club flying by pilots with no SCFR.

However, **Option 1**, for the full SCFR rating remains the fundamentally most important option for the long term future of gliding in the UK.

response *Noted*

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that Option 2 has been given an inappropriate MCA rating, but instead that the most appropriate options have been carefully considered. Option 1, development of the SCFR, is seen as the most viable option by the Agency. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 549

comment by: *Mike Knell*

NPA 2011 16. I found this website to be very complicated and confusing. It seems almost designed to prevent people making comments

I am a glider pilot

I support the Glider Cloud Flying proposals.

Glider pilots depend on clouds to provide energy and lift to climb vertically and use this height to travel large distances. As you climb, you need to keep a good lookout and to know where other aircraft are. This is a key to all glider flying using thermals from cumulus clouds.

For the gliding activity to continue, we need training and regulation

Please go for the proposal. Mike Knell

response *Noted*

Thank you for providing this comment.

comment 550

comment by: *ron LYNCH*

As a glider pilot with almost 50 years and several thousand hours experience I am very much in favour of a proposed sailplane cloud flying rating.

response *Noted*

Thank you for providing positive feedback.

comment	560	comment by: <i>Stephen Barter</i>
	<p>Overall, I support option 1, with a skills-based test but with a lower minimum requirement. Some people may need more training, but if they have to pass a flight test then this would be covered. Others may not need so much training due to previous / other experience.</p> <p>A restricted SCFR should be available for flight under IFR but clear of cloud to cover those pilots who wish to continue exercising current privileges but have no intention of making cloud-climbs. This would not need more training or testing in the air for a licence holder, but would benefit from the Theoretical Knowledge training from the SCFR.</p>	
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.</p>	

comment	593	comment by: <i>Brian Allen</i>
	<p>With regard to the preferred options. As a sailplane pilot for the last thirty years, I have enjoyed the benefit of flying near and in cloud and can see that option 0 will severely restrict my freedom and enjoyment of the sport. The whole ethos of staying away from cloud be it Cumulus or Lee Wave, will prohibit the fundamental core of the sport which in turn will have an impact on safety due to not being able to stay with a strong rate of climb and now risking a possible outlanding, with all its associated risks.</p> <p>With the limited space available and not wishing to go into too much detail I would be in favour of option 1 but would also consider option 2. If these options are adopted will they be fully implemented across all EU member states</p>	
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA. The Agency can confirm that once the proposed amendments are adopted by the European Commission, the amendments will be applicable in all EASA Member States.</p>	

comment	634	comment by: <i>Laurence SMITH</i>
	<p>I strongly support Option 1.</p> <p>However, it is disappointing that EASA has not included Option 2 as well as Option 1 in its recommendations, as it could have a useful complementary function in some UK weather conditions.</p> <p>I would recommend that EASA re-considers Option 2, but not as an alternative to Option 1, which remains the fundamentally necessary option for the long term future of gliding in the UK.</p>	

response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>645 comment by: <i>Derek Wilson</i></p> <p>Most glider pilots have no intention of making cloud-climbs and therefore a restricted SCFR should be available for flight under IFR but clear of cloud to cover those pilots who wish to continue exercising current privileges.</p> <p>No training or testing in the air would be necessary for this, however these pilots would benefit from the Theoretical Knowledge training from the SCFR.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>648 comment by: <i>Eric Norman</i></p> <p>A restricted SCFR should be available for flight under IFR but clear of cloud to cover those pilots who wish to continue exercising current privileges but have no intention of making cloud-climbs. This would not need more training or testing in the air for a licence holder, but would benefit from the Theoretical Knowledge training from the SCFR.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>649 comment by: <i>william shears</i></p> <p>Restricted SCFR should be mad avaiable for flight under IFR but clear of cloud the pilots who would like to continue exercising current privileges but do not intend of making cloud claims. This would not need more traing and testing in the air for a licence holder, but would benfit from the knowlefgge traing from the SCFR</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA)</p>

comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 669

comment by: *London Gliding Club*

I am an active sailplane pilot in the UK, and as such am directly impacted by these proposals. I am also the Chairman of one of the larger gliding clubs in the UK, so believe I have a broad view of the issues involved.

I support the proposed recommendation of Option 1 with the following additional comments.

Option 0 would have a direct negative impact on gliding activity in the UK. In our particular meteorological conditions Option 0 would be likely to have a negative impact on safety, and would definitely have a significant negative impact on the economics of the gliding movement. I feel these impacts are highly disproportionate to any notional gains.

Option 1 is acceptable in principle, but the requirement for 5 hours dual training is not appropriate for achievement of a rating that will mostly be used for IMC flight clear of cloud, many pilots will never enter cloud, and those that do will fly very few hours of IMC flight within cloud in total during any year, generally significantly less than 5. The requirement for 5 hours dual flying is also a significantly disproportionate economic burden on individual pilots.

Option 2 would be acceptable for IMC flight clear of cloud, but the loss of IMC flight within cloud is an unnecessary restriction on existing, safe procedures. I do not understand why there is not a proposal for an option for both a Cloud Flying Rating for IMC within cloud, and a Restricted Rating for those who only wish to fly IMC outside cloud, and as such I would urge consideration of the addition of a Restricted rating.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying rating) were also identified by BGA.

comment 687

comment by: *Andy Delaney*

I agree, from these three options option 1 seems the most sensible whereas option zero would have a massively disproportionate affect on gliding clubs and I have no doubt that many would be forced to close or scale back operations.

In terms of training requirement I think 5 hours is disproportionate and 3 hours would be adequate given that glider pilots would rarely fly in cloud (apart from at some clubs where that happens regularly due to local conditions - specifically mountain flying clubs) and would generally use this rating to fly at a sensible altitude when flying cross country and to reduce the risk of landouts.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

691

comment by: *Keith Clarke*

As I live in a member state where cloud flying is currently permitted, I would of course have preferred harmonisation which allowed this across Europe, and would alternatively have liked to see a restricted SCFR introduced. I recognise however why this would be difficult and read your arguments with great interest.

Living in the North West of England, where cloudbase is often low, and my home airfield is 600ft above sea level and surrounded by hills which rise above this, the removal of the ability to fly near / within cloud would make for such a restrictive local flying regime that I cannot envisage our club managing to continue to operate in its current form. A Sailplane Cloud Flying Rating however would enable us to continue, and the additional training would make for even safer flying.

As a result, I concur that the most practical, safe and fair option would be the instigation of a Sailplane Cloud Flying Rating.

I am surprised however that you assert that a 5 hour minimum training would be required, as I feel this to be excessive for some experienced pilots (others may take longer) – as an ex -teacher, it seems to make better sense to base training on skills acquired rather than set arbitrary limits.

A propos of training, it would seem to me essential to permit sailplane pilots to cover the SCFR in motor-gliders. Normal tandem sailplanes would be too restrictive, and it would seem reasonable for pilots to gain practise and experience in an aircraft that bears close similarities to the sailplanes they are used to flying and will be flying later. Also, sailplane pilots have much more access to TMGs and this would greatly facilitate the training programme. Please note, I am not calling for TMGs to be able to cloud-fly themselves.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/use of TMG) were also identified by BGA.

comment

713

comment by: *Bev Webb*

I think Option two is the best.

I would add a requirement to hold an R/T license and be in touch with an appropriate ground station if in IMC to further ensure no conflict with other gliders or powered a/c.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (Option 2 - restricted cloud flying rating) was also identified by BGA.

In addition, the Agency would like to highlight that an R/T licence is not regulated by Part-FCL; however, in most Member States such a licence would be required under national law. Thus ATC contact may be required depending on the procedures in place for cloud flying.

comment

719

comment by: *Alan PETTITT*

I would like to add my endorsement of option 1 as recommended by the BGA and the agency I fly low performance vintage gliders which need as much height as possible if they are to go cross country. Keeping clear from cloud would severely hamper my flying and increase the chances of a field landing.

AP

response

Noted

Thank you for providing this comment.

comment

741

comment by: *Andy Balkwill*

Page 237 Conclusion and Preferred Option

I agree with and support the conclusions presented.

However, there does not appear to be any consideration of the transition process for the FIs and FEs as well as for existing pilot that cloud fly. I assume that this aspect of the proposal will be left to individual member states to determine the most appropriate way to implement new proposals.

response

Noted

Thank you for providing this comment.

The Agency would like to confirm that an existing national licence/certificate (i.e. FI and FE) or rating may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment

754

comment by: *David A White*

The inability of sailplanes to fly within 1000ft of cloud let alone up to and into cloud would destroy gliding and recreational soaring across Europe and particularly within the UK and other countries which typically have relatively low cloudbases even at the peak of seasonal soaring conditions. This would have a considerable detrimental effect economically as well as to sporting and social opportunity.

I therefore strongly support the option for a sailplane cloud flying rating. However, the suggested minima of 5 hours of 'blind' instruction in order to gain such a rating is excessive. Different people learn at different rates so it would be much more reasonable, practical and ultimately safe to set learning criteria and to leave the time requirement to the judgement of appropriately

rated BGA examiners and Chief Flying Instructors locally. 5 hours is certainly not proportionate to the nature of sailplane flying and soaring, which is more concerned with maximising and holding the soaring potential of thermic lift (convection) in a cloud than it is of flying on a consistent heading. This is because the only reason that a glider pilot would conceivably want to fly close to or to enter into cloud is in order to seek thermic lift. This is the very nature of soaring flights in sailplanes and gliders.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 769 comment by: *Michael D Miskimmin*

Accept

response *Noted*

Thank you for this comment.

comment 780 comment by: *Chris Sterritt*

I agree that Option 1 is a good idea, but feel that 5 hours instrument training is excessive. Some instrument training is necessary, but perhaps 2 or 3 hours would be enough.

Option 2 should also be allowed. A Restricted SCFR would enable a much greater operating range for gliders in Class G airspace, and would align with the current practice of many glider pilots here in the UK. This would increase safety by reducing the time spent searching for landout fields and the total number of landouts. The score for safety impact of this option should be +2 and not 0.

I have regularly flown to closer than 1000 feet from cloudbase in excellent visibility whilst higher than 3000 feet amsl in my glider in the UK. This practice has an excellent safety record going back over 50 years. Provided that horizontal visibility remains 5km or more, there can be no safety benefit in mandating instrument training.

There may be difficulties within some countries where national regulations would restrict Option 2, but surely that is not enough of a justification to reduce safety for UK glider pilots.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying) were also identified by BGA.

comment 824 comment by: *Paul Harvey*

	<p>The proposals are fundamentally sound. However, the proposal for 5 hours training is excessive. The use of 'blacked out' gliders for simulating cloud flying should be accommodated; I am sure glider manufacturers would develop the equipment needed to ensure that training can be done when cloud flying is not possible yet the day is thermic. This could be followed up with an hour of entering, turning and leaving cloud in a powered aircraft. I would also insist on the use of an artificial horizon as opposed to a turn-and-slip for cloud flying. The theory section seems sensible. I do not believe any changes should be made to the current practice of flying close to cloud (within say 50 feet).</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>850 comment by: <i>Vic Blaxill</i></p> <p>Ref:- 7</p> <p>Option 1 is the obvious choice for maximum benefit and I totally support it but as Option 2 has little impact overall why not introduced the SCFR-R as an additional option to be implemented by individual member states of EASA at their discretion. This Restricted SCFR would allow sailplanes to fly to cloudbase, along the windward edge of lenticular wave clouds and orographic cloud in order to gain or maintain altitude.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>862 comment by: <i>Rob Williams</i></p> <p>The ability to fly gliders(sailplanes) up to cloudbase, close to and occasionally into the cloud, is important to all cross country glider pilots. This gives the ability to use the full operating height band below cloud which is essential to safe cross country flight and makes the difference between completing the flight safely or landing in a field (with its attendant dangers). Cloudbase varies around the UK, both hour by hour, and over short distances, eg around a sea breeze front. Conditions can also change from one area of the country to the next as the flight proceeds which makes it very difficult to stay VMC, or indeed to even be able to determine what the parameters are to remain VMC/VFR in the next thermal. Wave flying will also be seriously affected, maybe even prohibited, by requirements to maintain VMC.</p> <p>The requirement for 5hrs dual training to gain the SCFR is excessive. Gaining the SCFR rating should simply be based on a passing a competency test. Many glider pilots will not require 5hrs dual training to gain the SCFR. Gaining an SCFR should be competency based only and not depend on a predetermined</p>

number of hours of dual training.

Taining for the SCFR should be possible in TMGs but pilots of TMGs should be restricted to VFR, ie pilots of TMGs should prohibited from exercising the privileges of an SCFR.

A more general RSCFR option will be important to ALL glider pilots as training pilots need experience in widely varying conditions and cloudbases etc near their home airfield, both dual and solo, when learning to thermal soar, ie while remaining close to but clear of cloud. As such an RSCFR allowing flight close to but clear of cloud should be reconsidered by EASA.

The ability to fly close, to and occasionally enter cloud, is important to ALL sailplane pilots. This regime has been operating safely in the UK for many years. The analysis and final option should recognise and support the continuance this practice which is vital to the sport of gliding.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating/use of TMG/restricted cloud flying) were also identified by BGA.

comment 863

comment by: *Andy Jupp*

If a pilot has no intentions of cloud-climbing but wants to continue using the existing privileges they have, then a restricted SCFR should be available for flight under IFR but clear of cloud to cover those pilots.

Therefore a requirement for more airbourne training / testing would be unnecessary for the licence holder; benefits would be gained from the theoretical knowledge of the SCFR training.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.

comment 868

comment by: *rob belsey*

i feel a restricted SCFR should be made available for flight under IFR but clear of cloud to cover pilots that want to continue using current privileges but dont want to enter cloud. This would'nt need training or testing in the air for pilots but the Theoretical Knowledge training from the SCFR would prove useful and increase saftey.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was

also identified by BGA.

comment

892

comment by: *Norfolk Gliding Club*

I believe that the sailplane cloud flying rating is necessary but that the amount of training required will vary greatly with experience levels. For example in my case I have a background of 25 years of military fast jet flying and 15 years airline flying and was an instrument rating instructor through these times although of course my rating have since lapsed since my retirement. I would not expect to take 5 hrs.

response

Partially accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment

930

comment by: *John T Donovan*

It is encouraging that EASA recognises that sailplanes need to operate up to cloud base, to increase their gliding range and maximise the chances of finding the next source of soarable air or to reach their goal. It is also encouraging to see EASA acknowledge the safety benefits from reducing the chance of an out landing.

However I believe that EASA does still not fully understand the nature of gliding and are comparing the sport with aeroplane instrument flying.

Few glider pilots will ever actually want to fly into cloud for fear of risk of collision with another glider or aircraft. Most will however want to operate above the 3000ft (900m) transition level but remain clear of cloud.

On the rare occasion that a sailplane pilot needs to enter cloud it would only be for a brief duration. The most demanding example would be a pilot having to descend through cloud after soaring in wave.

Sailplane pilots are unlikely to spend a large proportion of flight flying solely by instruments, certainly not like aeroplane pilots may do.

The majority of sailplane pilots would only use the privileges of a SCFR to fly in the IMC, above the transition level but clear of cloud in good visual conditions.

Therefore the proposed training requirement for the SCFR is too demanding for the intent purpose.

We disagree with the agencies conclusion.

We believe that Option 2 the Restricted Sailplane Cloud Flying Rating should be reconsidered and made available along with the full SCFR.

This would enable sailplane pilots in the UK to continue to fly in IMC but clear of cloud and would have the least regulatory impact, i.e. no additional practical

training required. Those sailplane pilots most more likely to fly inside cloud (perhaps at clubs where near lee wave is common) would benefit more from the full SCFR.

Sailplane pilots in the UK currently have this privilege, ie flying in IMC without a specific rating.

There is no evidence of any negative safety implications.

In the UK we frequently have to fly in IMC conditions. Visibilty can still be good and safe for flying by visual refereces.

Because the SCFR is a post licence rating, the pilot must obtain 30 hour PIC before applying. The requirement for a SCFR would restrict solo student pilots from flying above the transistion level but still in good visual conditions. Such occasions are necessary for confidence, skill building and hour building.

This would have a negative impact on gliding and may discourage those progressing futher early beyond solo.

We welcome the introduction of the SCFR and agree that there will be increased safety benefit from the training, especially if pilots do need to enter cloud. But whilst remaining clear of cloud, the SCFR is over a example of unecessary over regulation.

Having both the SCFR and the Restricted SCFR would be a more constructive solution.

response *Partially accepted.*

Thank you for providing this comment.

This NPA has been developed by the Agency and a Review Group of sailplane experts. After careful group discussions, it was decided to develop the SCFR. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hour training requirement/restricted cloud flying rating) were also identified by BGA.

comment 935

comment by: *Colin Stevens*

Agreed, in the absense of a tiered rating structure through restricted to full, option 1 is the best option. 5 hours training may prove probematic particularly during transition.

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA.

comment 953

comment by: *Derek MITCHELL*

I would like to support the preferred option as shown by the weighted scoring

response	<p>system employed in this document on the basis of the ongoing feasibility of sailplanes as a sport (in the UK) and on the increased operational distance being available leading to a lower number of enforced field land-outs therefore reducing this hazard.</p> <p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>957 comment by: <i>Andrew Watson</i></p> <p>3.3 With the above-noted errors corrected (see comments on section 6.2, p235 and section 6.4, p236), the RIA conclusion (section 7, p237) should show Option 2 with a net positive score of at least 2, not -1. In my opinion the positive impact of the SCFR-R would be at least as great as that of the full SCFR.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.</p>
comment	<p>960 comment by: <i>Alan Morton</i></p> <p>Option 1 has a requirement of 5 hours dual instruction on instrument flying in a sailplane. This, in my opinion, would be difficult to achieve through the average gliding club in the UK. I also would contend that it would not be a particularly useful qualification for the average cross-country glider pilot to have. Far more useful would be option 2, which would allow the average glider pilot the facility to climb to cloud base without having to fly on instruments and, since this has been the case in the UK and has not caused any real problems in the past, I fail to see the advantages in change for change's sake. The loss of the freedom to climb in cloud would not impact on many glider pilot's cross-country flying and, if some pilots wish to maintain that right, then by all means subject them to the rigours of Option 1.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (5 hours training/restricted cloud flying) were also identified by BGA.</p>
comment	<p>975 comment by: <i>David GETHIN</i></p> <p>Option 2 - Restricted SCFR I am disappointed that this option has been discounted, as it would represent a valuable 'stepping stone' to a full cloud flying rating. It would open up certain flying opportunities, especially "lee wave" flying, to those who are unable (for financial or other reasons) to obtain and maintain a full cloud flying rating. It would also avoid any significant transitional impact on UK glider pilots, as these</p>

privileges are already available.

response *Noted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment 990 comment by: *stephen ancshell*

In summary, I fully support the cloud flying rating, Option 1, it having a positive benefit to safety and promulgation of a sport that is reliant on voluntary support in many cases. It is a sport and pastime facing tough challenges to keep youthful interest in this fascinating niche of aviation, thus keeping it alive and allowing progress.

I would be far more confident of the ability to cloud fly safely, confidently and thus extend my flying range and enjoyment therein.

response *Noted*

Thank you for providing this comment.

comment 991 comment by: *Bob BOYD*

This scoring system does not properly take into account the impact on a minority sport of significant limitations to current activities.

For example, if Option 2 were the sole result, then UK gliding activities would be seriously compromised, but this is not recognised in the scoring.

response *Noted*

Thank you for providing this comment.

comment 999 comment by: *mike vickery*

The analysis performed for this report is of a high standard and the team carrying it out are to be congratulated on their work.

From a UK perspective option 0 would be disasterous for the sport in this country since for most of the soaring season the cl.oudbase in the uk is often below 1500m on the majority of soarable days. As your analysis shows this would restrict the operating height band for sailplanes operating with an average cloudbase of 4000ft amsl to 1200m (4000ft)-330m(1000ft clearance from cloudbase)-500m(1600ft ground height amsl+height to select and land in field) to 320m when the cloudbase is 4000ft (1200m) or less. So a glider with a glide ratio of 40:1 would have an operating range of 13km. Operating with this range would certainly reduce the number of days for which it would be possible for all but the most experienced soaring pilots to fly cross country, so reducing the income to the gliding clubs and the associated businesses.

There is an additional option which would be good for the UK and other northern European countrys which would be to allow glider pilots to fly in IMC in

class F&G airspace, with an additional rating for cloud flying. During the early training of soaring pilots they frequently climb to cloudbase in thermals before going solo and so become familiar with and competent to fly in those IMC conditions and of course all solo pilots in the UK are familiar with operating in IMC up to cloudbase.

The report suggests a minimum of thirty hours PIC before commencing cloudflying, I think this is a sensible experience level and equates roughly with the level of experience between bronze and silver C. However the the minimum of 5hours dual training I feel is excessive. Many glider pilots in the UK teach themselves to fly on instruments, this is possible because sailplanes are mostly fitted with speed limiting airbrakes which aid the inexperienced glider pilot to recover control when it has been lost by limiting the speed of the glider to safe levels, and glider pilots routinely wear parachutes which enables them to biae out if it is required.

In summary

1 glider pilots should be allowed to continue flying in IMC up to cloudbase in class F&G airspace

2 I agree that there should be an instrument course for new glider pilots with a minimum of two hours instruction, but that existing experienced (200hrsPIC?) pilots should be given grandfather rights to this endorsement

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying/5 hours training) were also identified by BGA.

With regard to your comment on 'grandfather rights' for experienced pilots, the Agency would like to highlight that an existing national licence and rating may be converted into a Part-FCL licence and rating during the conversion process. This process is the responsibility of the Member State in consultation with the Agency.

comment *1010*

comment by: *Kathy SCOTT*

A restricted SCFR should be available to allow pilots to fly under IFR but clear of cloud. This would cover glider pilots who want to carry on using their current privileges but do not want to climb in cloud. A licence holder would not need more training or testing in the air. They would however benefit from the Theoretical Knowledge training from the SCFR.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment *1021*

comment by: *Liddiard*

response	<p>I would recommend option 2 as this is in line with current procedure and additional theoretical training is always helpful.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.</p>
comment	<p>1024 comment by: <i>Howard Torode</i></p> <p>Comment from Howard Torode – UK Glider Pilot.</p> <p>As an active UK glider pilot I fully support the measures proposed in NPA2011-16. While the measures represent a significant increase in regulation compare to those extant in UK at present, in most respect the premises are reasonable and only demand additional regulation/validation in areas where specific competences and skills are required.</p> <p>A good example is the licence rating required for sailplane flight in cloud. In UK we have traditionally held this privilege in UK and have also demonstrated, over many years, a high level of safety in this and other areas. I feel strongly that the capability for this regime of flight is necessary for our sport and justified. It should be available as a qualification on all forms of sailplane licence (LAPL and SPL). On the other hand, I can recognise that this is a skill that requires practice and that individual competence should be substantiated, particularly in a pan-European context. The scope of the measures in NPA2011-16 for the SCFR are competence based and amenable to self substantiation within the sport movement and are appropriate to flight inside clouds. However, the requirement for 5 hours of training is excessive, and would be a significant imposition on those with good skill levels. Further it is hard to see how this training could be delivered economically without the use of Training Motor Gliders (TMGs): although this training would be specific to pure sailplanes, unless a TMG licence is held separately sought by the applicant.</p> <p>I believe that, in addition to the SCFR, a Restricted SCFR (RSCFR) should be considered for flight under IFR, clear of cloud. This phase of flight, essential to all glider pilots, it needs no new flying skills pertinent to a licence examination, but should require the Theoretical Knowledge training from the SCFR. In addition I believe that airspace categories required for such RSCFR are important, and I trust will be consider by this in association with future airspace regulation.</p>
response	<p><i>Partially accepted.</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/restricted cloud flying/use of TMG/restricted cloud flying) were also identified by BGA.</p>
comment	<p>1045 comment by: <i>Rowland Ogden</i></p>

A restricted SCFR should be available for flight under IFR but clear of cloud to cover those pilots who wish to continue exercising current privileges but have no intention of making cloud-climbs. This would not need more training or testing in the air for a licence holder, but would benefit from the Theoretical Knowledge training from the SCFR."

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment

1048

comment by: *Lasham gliding society*

Summary

As Chief Flying Instructor of Lasham Gliding Society I Strongly supports the SCFR on the grounds of safety and retaining our current privileges and would regard it as vital that the rating be available to both LAPL(S) & SPL holders

Recommends that the requirement for 5 hrs dual flight instruction is too much and should be reduced or removed – if a minimum training time requirement is the only option available then in my view that time should not exceed 3hrs.

We need to retain the privileges of carrying out training in TMGs for the SCFR, but would be content to see pilots prohibited from exercising the privileges of an SCFR in TMGs.

It would be a step forward if the RSCFR option could be re-considered by EASA.

response *Partially accepted.*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (LAPL(A) and SPL/restricted cloud flying/use of TMG/restricted cloud flying) were also identified by BGA.

comment

1049

comment by: *Graham Northcott*

A restricted SCFR allowing flight above 3000ft within 1000ft and 1500m of cloud (but not in cloud) would be extremely helpful for glider pilots who have not yet gained a CFR because they would otherwise have very reduced cross country flying possibilities. All the theory for a SCFR but much less practical would be suitable training for this.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment	1058	comment by: <i>Graham WADFORTH</i>
	Unlike in warmer continental countries the UK, having a maritime climate, often has a great deal of cloud. Not allowing cloud flying would severely curtail a glider's height and therefore the distance flown.	
response	<i>Noted</i> Thank you for providing this comment.	
comment	1075	comment by: <i>George VOJTISEK</i>
	Attachment #11	
response	<i>Noted</i> Thank you for providing positive feedback.	
comment	1109	comment by: <i>Martin Roberts</i>
	Page 237 7. Conclusion and preferred options	
	<p>As stated, these "Options" are deeply flawed. Another serious issue is that just 3 "Options" were established from the outset - suggesting, falsely, that there are only 3 possibilities. This is patently not the case as a 4th "Option" - the current arrangements, already work well producing excellent safety outcomes across Europe.</p> <p>These are FALSE Options, engineered from the outset to produce the acceptance by the European gliding community of "Option 1" as the least unacceptable alternative. This approach should be condemned out of hand. Of course there are more than "3 Options" in any debate. The European gliding community have been treated like sheep - herded towards a false objective that someone who does not have their interests at heart has defined. This treatment is unacceptable.</p> <p>All sections devoted to the regulation of sailplane flight in an around cloud in this NPA are based on the mistaken initial premise that gliding needs regulation in these area. It does not. The EASA's own scanty data, occupying just one short paragraph (Page 231 Section 2.2), indicates that the cloud flying safety record in Europe 2001-2009 was excellent. In the UK it is perfect. Why then is regulation being proposed? And why was there "discussion" of only 3 Options - 2 of which were known to be entirely unacceptable from the outset?</p> <p>All The Agency statements in the sailplane sections of this NPA construct a case against 2 "Options" which sailplane pilots would never define in the first place; Options 0 & 2. The Agency themselves define the 3 Options and then themselves create the case against 2 of them throughout this NPA. It is a remarkable piece of manipulation and reflects poorly on the motivations and modes of operation of the overseeing body of European Aviation.</p> <p>This conclusion is entirely bogus and misleading. True consultation would have</p>	

defined other Options. True research would have revealed the impact of these options. None of that took place. Instead we are left with the assertion by the EASA that regulation is required, who then do not back this call for regulation with meaningful safety data. In these pages The Agency conducts its own discussion with itself and as a result fails to identify the true impact of its proposals because it does not ask the stakeholders most likely to be affected.

This is an appalling piece of work by the EASA, who in one swoop have managed to exclude and then alienate a large active and economically significant group of European pilots who are important for the future of European aviation and who already have an excellent safety record. Surely this cannot be the true remit of the European Aviation Safety Agency.

I would ask that The Agency undertake the following;

- 1) Go back to the beginning and ask whether any legislation is either indicated or necessary in the area of sailplane IMC/cloud flying in Europe, and particularly in the UK where we have a long and perfect training and flight safety record in this area.
- 2) Seek and engage in a genuine dialogue with European gliding stakeholders, discovering their valid needs and concerns.
- 3) With European gliding stakeholders at the centre establish options based on and reflecting their needs.

Please accept my submissions as a genuine picture of the true position of sailplane pilots in the UK and across Europe. Their interests must be identified and protected.

response

Noted

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that the identified options are 'flawed', but instead that they have been carefully considered by the Agency. Option 1, development of the SCFR, is seen as the most viable option.

comment

1124

comment by: *HILTON THATCHER*

I fully agree with glider pilots and feel a restricted SCFR should be available for IFR pilot use. Not every glider pilot climbs to cloud base and in most cases it is not possible. It will be more practical if existing glider pilots had a theoretical input in this instance.

response

Not accepted

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment

1189

comment by: *Michael Slatford*

I cannot believe that making glider pilots go through a complex and very

	<p>expensive and time consuming training schedule for something they are very unlikely to undertake (i.e. cloud flying) is going to increase gliding activity. Quite the reverse in fact. I think a restricted SCFR would cover the needs of the vast majority of glider pilots. Personally I think gliding safety overall would be improved by not flying in clouds.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.</p>
comment	<p><i>1198</i> <i>comment by: Ian Smith</i></p> <p>Option 1 would be my preference. However, I believe that the proposed training requirement of 5 hours to be too high. The vast majority of any sailplane instrument flying would consist of turning flight in convective cloud, followed by exit from the cloud in a general direction, or letting down through a cloud layer after flying in mountain wave. I believe that 3 hours of training would be sufficient to allow most glider pilots to pass the skill test. I also feel that any pilot who has previous instrument flying training and who holds, or has held either a UK IMC Rating or an Instrument Rating, should be exempt from any hours requirement prior to taking the skill test.</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (5 hours training) was also identified by BGA. Furthermore, the Agency partially accepts your comment on prior instrument experience and would like to clarify that holders of an EIR or an IR(A) will be credited towards the requirements of an SCFR training course. However in any case 1 hour of of dual instruction will need to be conducted in a sailplane or powered sailplane (except TMG) in an ATO. Finally, the UK IMC rating may be converted, into a Part-FCL rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency.</p>
comment	<p><i>1216</i> <i>comment by: Martin Ellis</i></p> <p>UK has a maritime climate with frequent moist air and relatively low cloudbases when compared to other European member states further inland. So any restriction on ability to fly in or near cloud would have a worse negative impact on UK glider pilots. It is essential that sailplane flying in and near clouds continues to be permitted in the UK. Sailplane cloud flying activities are already well regulated by the British Gliding Association and there is no evidence of any significant risk in these activities over many years. Further regulation should not be necessary, however, where the only way to maintain current UK cloud flying activity is by the introduction of a rating, the only practical option is Option 1, to introduce the SCFR.</p>
response	<p><i>Noted.</i></p>

Thank you for providing this comment. The new regulation is introducing a Sailplane Cloud Flying Rating which will allow the sailplane pilots to fly close to and also in the cloud.

The reasoning for the common rules is the harmonisation of licences and ratings. The main aim is to establish and maintain a high uniform level of civil aviation safety throughout all the Member States.

comment 1221 comment by: *Peter Blackman*

It would be preferred that a limited SCFR were available for those not wishing to climb in cloud to climb to cloudbase and then return to VMC.

response *Not accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted ('limited') cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 1229 comment by: *phil Jarvis*

I support option 1 relating to a cloud flying rating as this seems to be the most sensible of the options suggested. It is verifiable and biennial testing would seem sensible.

response *Noted*

Thank you for providing your feedback.

comment 1241 comment by: *DAVID BELL*

Easa,
My experience I am a glider pilot with over 1000hrs gliding experience , i started gliding in 1997 , i am a Full Category Gliding Instructor and a BGA MGIR 3 Motor Glider Instructor & Tug Pilot NPPL SSEA NPPL SLMG.
I support the proposed Sailplane Cloud Flying Rating for glider pilots as flying near to cloud and through cloud requires glider pilots to be trained in this type of flying to preserve and strive to improve our excellent record in this type of flying.
D.A.Bell

response *Noted*

Thank you for providing feedback.

comment 1244 comment by: James ODELL

A restricted SCFR should be available for sailplanes under IFR (but clear of cloud to cover those pilots who wish to continue exercising current privileges but have no intention of making climbs in cloud). This would not need more training or testing in the air for a licence holder, but would benefit from the theoretical knowledge training from the SFCR.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment 1260 comment by: Michael Williams

I believe that Option 0 is not an acceptable outcome in the UK.

Options 1 and 2 have many positive features, and each option described supports a particular type of gliding activity, and also a particular skill base of an individual pilot.

In the UK, gliders are excluded from substantial areas of controlled airspace, and hence ATC involvement. New regulations should not prohibit access to permitted airspace, or restrict normal flying activities, however, this is not the case.

If EASA concludes that ICAO regulations require enhancing for glider cloud flying & IMC flights, both Options 1 and 2 should be developed in accordance with individual Member States current aviation law.

However, as many Member States forbid IMC / cloud flying in gliders, those States that permit this aspect of flight should task their Regulatory authorities with implementing their own regulations as now.

response *Noted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

With regard to your comment on '...task regulatory authorities with implementing their own regulations...', this will no longer be possible once EU regulations become applicable in all Member States. Once applicable, a Member

State will not be able to add additional requirements (more or less restrictive).

comment 1262 comment by: *kilkelly*

A restricted qualification should be made available for pilots who don't actually want to climb up inside the cloud, but want to avail themselves of the strong lift associated with the proximity of cloud in IFR conditions. Wave /cumulus etc.. This would require a theoretical knowledge without the need for flight testing and recurrent testing.

response *Not accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements.

comment 1270 comment by: *Michael Pointon*

A restricted SCFR should be made available for flight under IFR but clear of cloud. This would not need more training or testing in the air for a Licence Holder but would benefit from the Theoretical Knowledge training from the SCFR.

response *Not accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.

comment 1322 comment by: *David Bowden*

I am afraid that the factors and assumptions in arriving at the scores are seriously flawed. It leads me to the conclusion that regulatory harmonization has blinded those doing the assessments. In particular the safety question ignores what is likely to happen.

There must be a concern that pilots without the necessary qualifications will stray too close to cloud. What will be the legal and insurance implications if anything happens.

None of the scores you have recorded show a strong case for change. All are categorised as "low impact" 1% of annual TO. If regulations are needed let us keep them and their cost to a minimum

response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that the factors and assumptions are 'flawed', but instead have been carefully considered by the Review Group experts. The Agency views Option 1, development of the SCFR, as the most viable option.</p>
comment	<p>1337 comment by: <i>Darren Baldwin</i></p> <p>A restricted SCFR should be available for flights under IFR but Clear of cloud to cover those pilots that wish to continue exercising current privileges but have no intention of cloud climbs. This would not need more training or testing in the air for a licence holder, but would benefit from the Theoretical Knowledge training from the SCFR.</p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying) was also identified by BGA.</p>
comment	<p>1346 comment by: <i>Ian Carruthers</i></p> <p>I feel that it is essential to implement the preferred option of the Sailplane Cloud Flying Rating.</p> <p>The absence of such a privilege would have a severe negative impact, especially in the UK where pilots have long been able to fly in IMC, and in cloud where appropriate and with suitable skill and experience.</p> <p>Soaring a glider successfully often requires flying near or occasionally in cloud and the UK tends to experience cloudy conditions on a high proportion of days. Many gliding sites are significantly above sea level and the cloudbase is often quite low, therefore without these options gliding operations at many locations could be limited and safety margins reduced. Gliding clubs relying a lot on hill soaring would be particularly badly affected.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p>
comment	<p>1365 comment by: <i>Royal Danish Aeroclub</i></p> <p>The Royal Danish Aeroclub does support the idea of letting some EU-countries rights to cloud flying with sailplane to a common EU-regulation.</p> <p>This new possibility for instrument and cloud flying improves the possibilities for glider pilots and are more than welcome. It is positive to see the EASA-regulations improve options.</p>

response	<p><i>Noted</i></p> <p>Thank you for your positive feedback.</p>
comment	<p>1409 comment by: <i>Player</i></p> <p>As a keen glider pilot I fully support the Option 1 (introduction of a cloud flying Rating)</p>
response	<p><i>Noted</i></p> <p>Thank you for providing positive feedback.</p>
comment	<p>1418 ❖ comment by: <i>Barry Thomas</i></p> <p>Comments on NPA 2011 – 16 Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all member states, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport. Barry Thomas, Glider pilot, 1000hrs, ex CFI.</p>
response	<p><i>Noted</i></p> <p>Thank you for providing this comment.</p> <p>This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the UK. The Agency therefore does not believe that the impact assessment was 'flawed', but instead has been carefully considered by the Review Group experts. Option 1, development of the SCFR, is seen as the most viable option. With regard to your comment on the restricted cloud flying rating, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised was also identified by BGA.</p>
comment	<p>1482 comment by: <i>Peter BOYALL</i></p> <p>This does seem indicative of an organised special interest group winning an argument. The possible outcome of TMGs being able to use this rating inappropriately requires careful consideration.</p>
response	<p><i>Noted</i></p>

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (use of TMG) was also identified by BGA.

comment

1495

comment by: *Richard Cooper*

I fear the social impact will be to destroy my club because it will reduce the soaring opportunities by about three-quarters.

The club is currently only marginally viable and will not survive such restrictions.

response

Noted

The Agency acknowledges your comment.

Please be advised that existing national licences and ratings may be converted into a Part-FCL licence and rating during the conversion process. The conversion process is the responsibility of the Member State in consultation with the Agency. This process should ensure that a majority of the existing sailplane pilots are able to continue using 'soaring opportunities', albeit with some further training requirements.

C. Regulatory Impact Assessment - II. Regulatory Impact Assessment for the sailplane cloud flying rating - Annex 1: Tables

p. 238-239

comment

606

comment by: *Bill LONGSTAFF*

In summary, I consider that the BGA recommendation to accept the recommendations of EASA is the right one but I do have some fairly considerable uneasiness about the fine detail of these recommendations, particularly in the way that "one rule fits all" will work in widely disparate weather and traffic densities over Europe. From a legislative point of view, exceptions make difficulties, but as there is little evidence that the current, non-regulated system in Britain has been unsafe so the rules should err nearer the lowest common denominator rather than the tendency to the highest c.d. I also think the dropping of Option 2 (restricted rating) is not a good one and it should be reinstated.

response

Noted

Thank you for providing this comment.

This NPA was developed by the Agency and a Review Group of sailplane experts, including experts from the BGA. It was decided to develop a SCFR, which would enable UK sailplane pilots to continue their sailplane operations in UK low cloud base weather conditions. With regard to the restricted cloud flying rating issue, please check the response provided to the British Gliding Association (BGA) comment No 121 as this issue was also identified by BGA.

comment

653

comment by: *East Sussex Gliding Club*

	<p><i>Sailplane flights that occur under IFR but clear of cloud should be classed under a new SCFR. This would include pilots who do not want to make climbs within cloud but wish to continue to fly within the current system of regulations and would not require further training or examination during flight for licenced pilots who have demonstrated a strong degree of safety through a successful licencing procedure. These pilots would benefit from ground training for the new SCFR.</i></p>
response	<p><i>Not accepted</i></p> <p>Thank you for providing this comment.</p> <p>Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issues you raised (restricted cloud flying rating) was also identified by BGA.</p>
comment	<p>781 comment by: <i>Gabriella Guglielminotti Trivel</i></p> <p>As a new glider pilot I am very concerned about the NPA 2011-16 and the implications that this will have for glider pilots in U.K. While I broadly accept the need a cloud flight rating for glider pilots, I believe that the proposed limitations of not flying closer than 1000 feet to cloud will reduce severely the gliding activities within U.K. The accident records over many years of flying shows that flying close to and in cloud has not been a hazard at all! Therefore I would strongly support the position of the BGA on this matter and the proposal of maximum 3 hours training for glider pilots to safely fly in cloud. Kind regards</p> <p>Gabriella Guglielminotti Trivel</p>
response	<p><i>Partially accepted</i></p> <p>Thank you for providing this comment.</p> <p>The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.</p>
comment	<p>848 comment by: <i>Peter Claiden</i></p> <p>As a long time glider pilot, motor glider pilot and power pilot in the UK (SEP and MEP), I cannot see the rationale behind any proposal to restrict gliders flying</p>

close to (ie not within 1000 ft) or in cloud. With relatively low cloudbases in the UK, this would have a significant negative effect on the viability of cross country flying and may well lead to more field landings, which history shows is one of the more risky elements of glider flying. Such a requirement may also result in a reduction of the number of pilots taking up/continuing in the sport of gliding. History also shows that collisions in or near cloud almost never occur and any such risk is mitigated by the wearing of a parachute.

I support the need to have a cloud flying rating of some sort for glider pilots but would argue that the arbutory hours requirement should be reconsidered to account for the existing experience of a glider pilot seeking to obtain such a rating.

Essentially, I support the comments sent to EASA by the BGA concerning the future operation of sailplanes within the UK.

Peter Claiden

response *Partially accepted*

Thank you for providing this comment.

The Agency is aware that the UK introduced a restricted cloud flying rating in the past allowing the rating holder not to comply with the visual flight rules (VFR) but clear of clouds. This issue was discussed earlier in the drafting phase and the reasons for the Agency's decision not to transfer this rating into the future European requirements are widely explained in the Explanatory Note of the NPA. Based on the strong comments from the BGA supported by several stakeholders, this issue was discussed again with the Review Group experts. The Agency would like to highlight that in certain airspace categories or above certain altitudes the visual flight rules require a vertical distance of 1 000 ft from cloud base. A Part-FCL rating cannot exempt certain airspace users flying VFR from complying with these ICAO requirements. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as you refer to the comment sent by it and as the issue you raised (5 hours training) was also identified by BGA.

comment 927

comment by: *MARK STOKES*

It would be advantageous to have an EU wide common regulation permitting glider flight within and near to cloud. This will allow glider pilots to fly throughout the EU and powered aircraft to know when and where to expect gliders. The effect of not allowing flight near to cloud would be very damaging within the UK where cloud base is generally lower than the rest of the EU and their thermal updafts weaker.

response *Noted*

Thank you for providing this comment.

comment 1008

comment by: *Terence Paul Bassett*

20th December 2011.

NPA 2011-16 The cloud base throughout the UK on many days throughout the

year would seriously limit our glider flying if we were required to remain clear of cloud by either 500 or 1000ft for this reason to enable us to continue flying in the vicinity of clouds I support the proposed Sailplane Cloud Flying Rating, on many occasions a cross country flight can be achieved and a field landing can be prevented by taking a cloud climb. Cloud flying in sailplanes is safe provided pilots are suitably trained and their gliders are adequately equipped to do so. The introduction of the SCFR would provide recreational pilots the opportunity to gain the necessary basic training required, provided that the time and costs involved are kept to a bare minimum and that individual gliding clubs were able to provide the training at a local level.

Gliding in the UK would be severely curtailed if pilots are prevented from flying in cloud or close to cloud as they have done for the past 50 years. It is my understanding that only 2 out of 37 fatal accidents in 10 years across Europe, have "cited proximity to cloud" as a possible contributory factor.

I fully support the continuation of cloud flying rights for pilots of gliders / sailplanes and the introduction of the SCFR should ensure that it can be allowed for future generations.

Terry Bassett.
Glider Pilot with 49years and 1000+ hours flying experience.
Silver C+

response *Partially accepted*

Thank you for providing this comment.

Please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (keeping training hours to a minimum) was also identified by BGA.

comment

1243

comment by: *Leon GREEN*

Regarding EASA NPA2011-16

I support the proposals as it will increase safety and with the correct training it will have a positive effect on cloud flying by sailplane pilots.

response

Noted

Thank you for your comments.

comment

1316

comment by: *AOPA France*

II. Regulatory Impact Assessment for the sailplane cloud flying rating
2.1 WHAT IS THE ISSUE AND WHO IS AFFECTED?

AOPA France considers that the content of this paragraph explains the issues with clarity. However, the ICAO criteria to which this section makes reference are not restricted to sailplanes. The SCR makes adequate provision for the sailplane pilot; however, no similar provision is currently available for aircraft involved in towing sailplanes. Hence in Class E airspace with a cloudbase of 3100ft, a sailplane towing aeroplane operating from an aerodrome with an elevation of 1900 ft could not legally fly above 200 ft under VFR; for a sailplane

towing pilot to be required to hold an EIR in order to conduct sailplane towing up to the cloudbase under such circumstances would, we consider, be disproportionate. This problem is more likely to exist in Member States with significant terrain elevation and large areas of Class E airspace than in others, demonstrating a clear need for flexibility in rulemaking to take account of national needs. We consider that a national rating permitting a pilot involved in sailplane towing operations to fly closer than 1000ft to the cloudbase, provided that the towing aeroplane does not enter cloud, would be an obvious solution. Hence we recommend the following amendment to **FCL.600 IR – General** in order for Member States with such national needs to develop suitable national ratings:

FCL.600 IR – General

(a) Except as provided in FCL.600(b) and FCL.825, operations under IFR of an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.

(b) In Member States where national legislation permits flight in accordance with IFR under specified circumstances, the holder of a pilot licence may fly under IFR, provided that the pilot holds a qualification appropriate to the circumstances, airspace and flight conditions in which the flight is conducted. National qualifications permitting pilots to fly in accordance with IFR other than in VMC without being the holder of a valid IR shall be restricted to use of the airspace of that Member State only.

response *Not accepted*

Thank you for providing this comment. Please refer to the response to comment 512 on the same issue.

comment *1362* comment by: *Windrushers Gliding Club*

It is vital to the gliding community that cloud flying is permitted. This activity has been safely carried out many thousands of times over the last 60 years without problems and so should continue into the future.
I fully support legislation to allow cloud flying in gliders to be permitted

response *Noted*

Thank you for providing positive feedback.

comment *1375* comment by: *Dave Unwin*

The only comment I would make is that a cloud flying rating is imperative for gliders, motorgliders and also tug pilots.

response *Noted*

Thank you for providing this comment.

The Agency can confirm that the SCFR will be available for sailplane and powered sailplanes, except TMGs. In addition, a tug pilot will require an EIR or IR(A) if flight in IMC conditions is required.

comment

1418 ❖

comment by: *Barry Thomas*

Comments on NPA 2011 – 16

Whilst appreciating that some form of sailplane cloud flying rating is inevitable with the EU's pre-occupation with standardisation across all Member States, I agree with the conclusion based on the stated facts, that Option 1 is the best Option. However, I believe that the Impact assessment is flawed as it does not take into account the actual usage by the vast majority of sailplane flights both in the UK & the rest of Europe. Due to the generally low cloud base in the UK, I would estimate that though most cross country (and local soaring) pilots do not enter cloud; they all use the maximum height possible between decision height and cloud base. Without so doing, cross country flying in the UK would be limited to a few weekends each year and those that do attempt it stand a far greater risk of out landing with its attendant risks. Actual cloud flying, in my opinion, is only used on rare occasions in order to get home. Whilst aware of the "Chicago Convention" I cannot see that there is more risk flying close to cloud at 4000' or 5000' than at 3000'; in fact the reverse as there is a lot more traffic at the lower altitudes. I believe that the RSCFR is of great importance for the survival of this noble sport.

Barry Thomas, Glider pilot, 1000hrs, ex CFI.


response


Not accepted

Thank you for providing this comment.


This NPA has been developed by the Agency in consultation with a Review Group of experts, including experts from the UK. Therefore, the Agency does not believe that the impact assessment was 'flawed'. In addition, please check the response provided to the British Gliding Association (BGA) comment No 121 as the issue you raised (restricted cloud flying rating) was also identified by BGA.


Appendix A – Attachments


 [Comments on NPA 2011-16.pdf](#)
Attachment #1 to comment [#816](#)


 [EASA SCFR.pdf](#)
Attachment #2 to comment [#974](#)

 [CommentIFR.pdf](#)
Attachment #3 to comment [#1402](#)

 [AOPA-NL Netherlands NPA 2011-16 RESPONSE V1.0.pdf](#)
Attachment #4 to comment [#1526](#)


 [EASA response.pdf](#)
Attachment #5 to comment [#1536](#)

 [NPA2011-16 HDF Statement Rega 20111223.pdf](#)
Attachment #6 to comment [#1555](#)

 [EASA commentspdf.pdf](#)
Attachment #7 to comment [#1557](#)

 [PPLIR Attachment 2.pdf](#)
Attachment #8 to comment [#76](#)

 [PPLIR Attachment 1.pdf](#)
Attachment #9 to comment [#76](#)

 [EASA Response.pdf](#)
Attachment #11 to comment [#1075](#)

**COMMENT-RESPONSE DOCUMENT (CRD)
TO NOTICE OF PROPOSED AMENDMENT (NPA) 2011-16**

amending Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council – Annex I (Part-FCL)

and

amending Decision 2011/016/R of the Executive Director of the European Aviation Safety Agency of 15 December 2011 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-FCL)

and

amending Decision 2012/006/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ARA)

and

amending Decision 2012/007/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 (Acceptable Means of Compliance and Guidance Material to Part-ORA)

'Qualifications for flying in Instrument Meteorological Conditions (IMC)'

CRD to NPA 2011-16 (C) – RESULTING TEXT

B.	DRAFT OPINION AND DECISION	777
I.	DRAFT OPINION.....	778
II.	DRAFT DECISION	793

B. Draft Opinion and Decision

I. Draft Opinion

The text of the amendment is arranged to show deleted text, new text or new paragraph as shown below:

1. deleted text is shown with a strike through: ~~deleted~~
2. new text is highlighted with grey shading: **new**
3. [...] indicates that the remaining text is unchanged in front of or following the reflected amendment.

I. Draft Opinion

DRAFT COMMISSION REGULATION (EU) No .../...
of [...]

amending Commission Regulation (EU) No 1178/2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC ⁽³⁾, and in particular Article 7 thereof,

Whereas:

- (1) Commission Regulation (EU) No 1178/2011⁴ lays down detailed rules for pilot licensing.
- (2) This Regulation contains in Annex I (Part-FCL) requirements for training and checking towards an instrument rating (IR).
- (3) These requirements for the IR are based on the former JAR-FCL requirements and have been transferred into the European regulation.
- (4) A need for a review of these requirements and for development of additional requirements for the qualification to fly in instrument meteorological conditions and for specific requirements to sailplane cloud flying operations was identified.
- (5) In order to ensure that instrument training or experience gained before the application of this Regulation may be taken into account for the purpose of obtaining these ratings, the conditions for crediting this training or the instrument experience gained should be laid down.
- (6) It should be possible for Member States to give credit for the instrument experience of a third-country rating holders if a level of safety equivalent to that specified by Regulation (EC) No 216/2008 can be guaranteed. Conditions for recognising this experience should also be laid down.
- (7) In order to ensure a smooth transition and a high uniform level of civil aviation safety in the European Union, implementing measures should reflect the state of the art, including best practices, and scientific and technical progress in the field of pilot training. Accordingly, technical requirements and administrative procedures agreed by

³ OJ L 79, 19.3.2008, p. 1.

⁴ OJ L 311, 25.11.2011, p. 1.

the International Civil Aviation Organization (ICAO) and the already developed requirements in Annex I as well as the existing national legislation, pertaining to a specific national environment, should be considered and reflected by this set of rules taking into account the specific needs of General Aviation pilots in Europe.

- (8) The Agency prepared draft Implementing Rules and submitted them as an Opinion to the Commission in accordance with Article 19(1) of Regulation (EC) No 216/2008.
- (9) The measures provided for in this Regulation are in accordance with the Opinion of the European Aviation Safety Agency Committee established by Article 65 of Regulation (EC) No 216/2008,

HAS ADOPTED THIS REGULATION:

Article 1

Annex I to Commission Regulation (EU) No 1178/2011 (Part-FCL) is amended in accordance with the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, ...

For the Commission
The President

Annex
Amendment to Part-FCL

Subpart A – General Requirements

1. FCL.025 is amended as follows:

‘FCL.025 Theoretical knowledge examinations for the issue of licences

[...]

(c) *Validity period*

(1) The successful completion of the theoretical knowledge examinations will be valid:

[...]

(ii) for the issue of a commercial pilot licence, ~~or~~ instrument rating (IR) or En-route Instrument Rating (EIR), for a period of 36 months;

[...]

2. FCL.035 is amended as follows:

‘FCL.035 Crediting of flight time and theoretical knowledge

[...]

(b) *Crediting of theoretical knowledge*

(1) An applicant having passed the theoretical knowledge examination for an airline transport pilot licence shall be credited with the theoretical knowledge requirements for the light aircraft pilot licence, the private pilot licence, the commercial pilot licence and, except in the case of helicopters, the IR and the EIR in the same category of aircraft.

[...]

(4) Notwithstanding (b)(3) above, the holder of an IR(A) who has completed a competency-based modular IR(A) course or the holder of an EIR shall only be credited in full towards the requirements for theoretical knowledge instruction and examination for an IR in another category of aircraft when also having passed the

theoretical knowledge instruction and examination for the IR part of the course required in accordance with FCL.720(b)(2).

(54)

[...]

Subpart G – Instrument Rating – Section 1

3. FCL.600 is amended as follows:

'FCL.600 IR – General

Except as provided in FCL.825, operations under IFR on an aeroplane, helicopter, airship or powered-lift aircraft shall only be conducted by holders of a PPL, CPL, MPL and ATPL with an IR appropriate to the category of aircraft or when undergoing skill testing or dual instruction.'

4. FCL.610 is amended as follows:

'FCL.610 IR – Prerequisites and crediting

Applicants for an IR shall:

(a) hold:

(1) at least a PPL in the appropriate aircraft category, and:

(i) the privileges to fly at night in accordance with FCL.810, if the IR privileges will be used at night; or

[...]

(b) have completed at least 50 hours of cross-country flight time as PIC in aeroplanes, TMGs, helicopters or airships of which at least 10 or, in the case of airships, 20 hours shall be in the relevant aircraft category.

[...]

Subpart H – Class and type ratings – Section 1

5. FCL.725 is amended as follows:

'FCL.725 Requirements for the issue of class and type ratings

[...]

(b) *Theoretical knowledge examination.* The applicant for a class or type rating shall pass a theoretical knowledge examination organised by the ATO to demonstrate the level of theoretical knowledge required for the safe operation of the applicable aircraft class or type.

[...]

(4) For single-pilot aeroplanes that are classified as high performance aeroplanes, the examination shall be written and comprise at least 6100 multiple-choice questions distributed appropriately across the main subjects of the syllabus.

[...]'

Subpart H — Class and type ratings — Section 2

6. FCL.740 is amended as follows:

'FCL.740.A Revalidation of class and type ratings — aeroplanes

(a) Revalidation of multi-engine class ratings and type ratings. For revalidation of multi-engine class ratings and type ratings, the applicant shall:

[...]

(4) The revalidation of an En-route Instrument Rating (EIR) or an IR(A), if held, may be combined with a proficiency check for the revalidation of a class or type rating.

[...]'

Subpart I — Additional Ratings

7. A new paragraph FCL.825 is added:

'FCL.825 En-route Instrument Rating (EIR)

(a) *Privileges and conditions*

(1) The privileges of the holder of an en-route instrument rating (EIR) are to conduct flights by day under IFR and in IMC in the en-route phase of flight, with any aeroplane for which a class or type rating is held. The privilege may be extended to

conduct flights by night under IFR and in IMC in the en-route phase of flight if the pilot holds a night rating in accordance with FCL.810.

- (2) The holder of the EIR shall only initiate or continue a flight on which he/she intends to exercise the privileges of his/her rating if the latest available meteorological information indicates that:
- (i) the weather conditions on departure are such as to enable the segment of the flight from take-off to a planned VFR-to-IFR transition point to be conducted in compliance with VFR; and
 - (ii) at the estimated time of arrival at the planned destination aerodrome the weather conditions will be such as to enable the segment of the flight from an IFR-to-VFR transition point to landing to be conducted in compliance with VFR.
- (3) The holder of the EIR shall not, during departure or arrival, operate in IMC below 1 000 feet above the highest obstacle within 5 NM of the aerodrome reference point.
- (4) Pilots who only obtain their first multi-engine class or type rating after the initial issue of the EIR shall have the privileges of their EIR extended to multi-engine aeroplanes after completing at least 3 hours of instrument flight instruction in multi-engine aeroplanes in the en-route phase of flight in an ATO and passing the skill test referred to in (e).
- (b) *Pre-requisites.* Applicants for the EIR shall hold at least a PPL(A) and shall have completed at least 20 hours of cross-country flight time as PIC in aeroplanes.
- (c) *Training course.* Applicants for an EIR shall have completed, within a period of 36 months at an ATO:
- (1) theoretical knowledge instruction in accordance with FCL.615; and
 - (2) instrument flight instruction.
 - (i) The instrument flight instruction for a single-engine EIR shall include at least 15 hours of instrument time under instruction.
 - (ii) The instrument flight instruction for a multi-engine EIR shall include at least 16 hours of instrument time under instruction, including at least 4 hours on multi-engine aeroplanes.
 - (iii) When the applicant has completed instrument flight instruction provided by an IRI(A) or an FI(A) holding the privilege to provide training for the EIR these hours may be credited towards the hours required in (i) and (ii) above up to a maximum of 5 or 6 hours, respectively. The 4 hours of instrument flight instruction on ME required in (ii) above shall not be subject to this credit.
 - (iv) To determine the amount of hours to be credited and to establish the training needs, the applicant shall complete a pre-entry assessment at the ATO.
 - (v) The completion of the instrument flight instruction provided by an IRI(A) or FI(A) in accordance with (iii) above shall be documented in a specific training record and signed by the instructor.

- (d) *Theoretical knowledge.* Prior to taking the skill test, the applicant shall demonstrate a level of theoretical knowledge appropriate to the privileges granted, in the subjects referred to in FCL.615(b).
- (e) *Skill test.* After the completion of the training, the applicant shall pass a skill test in an aeroplane with an IRE. For a multi-engine EIR, the skill test shall be taken in a multi-engine aircraft. For a single-engine EIR, the test shall be taken in a single-engine aircraft.
- (f) By a way of derogation from (c) and (d) the holder of a single-engine EIR(A) who also holds a multi-engine class or type rating wishing to obtain a multi-engine EIR(A) for the first time shall complete a course at an ATO comprising at least 2 hours instruction time under instruction in multi-engine aeroplanes and shall pass the skill test referred to in (e).
- (g) *Validity, revalidation and renewal.*
- (1) An EIR shall be valid for 1 year.
 - (2) Applicants for the revalidation of an EIR shall:
 - (i) pass a proficiency check in an aeroplane within the 3 months immediately preceding the expiry date of the rating; or
 - (ii) within the 12 months preceding the expiry date of the rating, complete 6 hours as PIC under IFR and a training flight of at least 1 hour with an instructor holding privileges to provide training for the EIR.
 - (3) For the at least each alternate subsequent revalidation the holder of the EIR shall have to pass a proficiency check in accordance with (f)(2)(i) above.
 - (4) If an EIR has expired, in order to renew their privileges applicants shall:
 - (i) complete refresher training provided by an instructor holding privileges to provide training for the EIR to reach the level of proficiency needed; and
 - (ii) complete a proficiency check.
 - (5) If the EIR has not been revalidated or renewed within 7 years from the last validity date, the holder will also be required to pass again the EIR theoretical knowledge examinations in accordance with FCL.615(b).
 - (6) For a multi-engine EIR, the proficiency check for the revalidation or renewal, and the training flight required in (2)(ii) have to be completed in a multi-engine aeroplane. If the pilot also holds a single-engine EIR, this proficiency check shall also achieve revalidation or renewal of the single-engine EIR.
- (h) Applicants for the EIR(A) holding a Part-FCL PPL or CPL and a valid IR(A) issued in accordance with the requirements of Annex 1 to the Chicago Convention by a third country may be credited in full towards the training course requirements mentioned in (c) above. In order to be issued the EIR(A), the applicant shall:
- (1) successfully complete the skill test for the EIR;
 - (2) demonstrate during the skill test towards the examiner that he/she has acquired an adequate level of theoretical knowledge of air law, meteorology and flight planning and performance (IR);
 - (3) have a minimum experience of at least 25 hours of instrument flight time as PIC on aeroplanes.

Subpart I — Additional Ratings

8. A new paragraph FCL.830 is added as follows:

FCL.830 Sailplane Cloud Flying Rating

- (a) Holders of a pilot licence with privileges to fly sailplanes shall only operate a sailplane or a powered sailplane, excluding TMG, within cloud when they hold a sailplane cloud flying rating.
- (b) Applicants for a sailplane cloud flying rating shall have completed at least:
 - (1) 30 hours as PIC in sailplanes or powered sailplanes after the issue of the licence;
 - (2) a training course at an ATO including:
 - (i) theoretical knowledge instruction; and
 - (ii) at least 2 hours of dual flight instruction in sailplanes or powered sailplanes, controlling the sailplane solely by reference to instruments, of which at least one hour has to be completed on sailplanes or powered sailplanes, excluding TMG;
 - (3) a skill test with an FE qualified for this purpose.
- (c) Holders of an EIR or an IR(A) shall be credited against the requirements (b)(2)(i) and shall complete at least one hour of dual flight instruction in a sailplane or powered sailplane, excluding TMG, controlling the sailplane solely by reference to instruments.
- (d) Holders of a cloud flying rating shall only exercise their privileges when they have completed in the last 24 months at least 1 hour of flight time, or 5 flights as PIC exercising the privileges of the cloud flying rating, in sailplanes or powered sailplanes, excluding TMGs.
- (e) Holders of a cloud flying rating who do not comply with the requirements in (d) shall, before they resume the exercise of their privileges:
 - (1) undertake a proficiency check with an FE qualified for this purpose; or
 - (2) perform the additional flight time or flights required in (d) under the supervision of an instructor.
- (f) Holders of a valid EIR or an IR(A) shall be credited in full against the requirements in (d).

Subpart J — Instructors — Section 2

9. FCL.905.FI is amended as follows:

'FCL.905.FI FI — Privileges and conditions

The privileges of an FI are to conduct flight instruction for the issue, revalidation or renewal of:

[...]

- (f) a towing, ~~or~~ aerobatic ~~or, in the case of an FI(S), a cloud flying~~ rating, provided that such privileges are held and the FI has demonstrated the ability to instruct for that rating to an FI qualified in accordance with (i) below;
- (g) an EIR or an IR in the appropriate aircraft category, provided that the FI has:
 - (1) at least 200 hours of flight time under IFR, of which up to 50 hours may be instrument ground time in an FFS, an FTD 2/3 or FNPT II;
 - (2) completed as a student pilot the IRI training course and has passed an assessment of competence ~~the skill test~~ for the IRI certificate; and

[...]

Subpart J — Instructors — Section 4

10. FCL.905.TRI is amended as follows:

'FCL.905.TRI TRI — Privileges and conditions

The privileges of a TRI are to instruct for:

- (a) the revalidation and renewal of an EIR or an IRs, provided the TRI holds a valid IR; ...

[...]

Subpart J — Instructors — Section 6

11. FCL.905.IRI is amended as follows:

'FCL.905.IRI IRI — Privileges and conditions

- (a) The privileges of an IRI are to instruct for the issue, revalidation and renewal of an EIR or an IR on the appropriate aircraft category.

[...]'

Subpart K — Examiners — Section 2

12. FCL.1005.FE is amended as follows:

'FCL.1005.FE FE — Privileges and conditions

- (a) FE(A) The privileges of the FE for aeroplanes are to conduct:

(1) [...]....

(5) proficiency checks for the revalidation and renewal of EIRs, provided that the FE complies with the requirements in FCL.1010.IRE(a)

[...]

- (d) FE(S). The privileges of an FE for sailplanes are to conduct:

[...]

(3) skill tests for the extension of the SPL or LAPL(S) privileges to TMG, provided that the examiner has completed 300 hours of flight time as a pilot on sailplanes or powered sailplanes, including 50 hours of flight instruction on TMG-;

(4) skill tests and proficiency checks for the cloud flying rating, provided that the examiner has completed at least 200 hours of flight time as pilot on sailplanes, including at least 5 hours or 25 flights of flight instruction for the cloud flying rating or at least 10 hours of flight instruction for the EIR or IR(A).

[...]'

Subpart K — Examiners — Section 3

13. FCL.1005.TRE is amended as follows:

'FCL.1005.TRE TRE — Privileges and conditions

- (a) TRE(A) and TRE(PL). The privileges of a TRE for aeroplanes or powered-lift aircraft are to conduct:

(1) [...];

- (2) proficiency checks for revalidation or renewal of type ratings, EIRs and IRs;

[...]

Subpart K – Examiners – Section 4

14. FCL.1005.CRE is amended as follows:

‘FCL.1005.CRE CRE – Privileges

The privileges of a CRE are to conduct, for single-pilot aeroplanes, except for single-pilot high performance complex aeroplanes:

- (a) [...];
- (b) proficiency checks for:
- (1) [...];
- (2) revalidation and renewal of EIRs and IRs, provided that the CRE complies with the requirements in FCL.1010.IRE(a).’

Subpart K – Examiners – Section 5

15. FCL.1005.IRE is amended as follows:

‘FCL.1005.IRE IRE – Privileges

The privileges of the holder of an IRE certificate are to conduct skill tests for the issue, and proficiency checks for the revalidation or renewal of EIRs or IRs.’

Appendix 1 – Crediting of theoretical knowledge

16. Paragraph 4.1. of Appendix 1 to Part-FCL is amended as follows:

[...]

4. IR

4.1. An applicant for an IR or an EIR having passed the relevant theoretical examinations for a CPL in the same aircraft category is credited towards the theoretical knowledge requirements in the following subjects:

- Human Performance,
- Meteorology.

[...]

Appendix 6 — Modular training courses for IR — Section 2

17. Section A of Appendix 6 to Part-FCL is renumbered A.1. and a new Section A.2. is inserted, as follows:

A.2. IR(A) — Competency-based modular flying training course

GENERAL

1. The aim of the competency-based modular flying training course is to train PPL or CPL holders for the instrument rating taking into account prior instrument flight instruction and experience. It is designed to provide the level of proficiency needed to operate aeroplanes under IFR and in IMC. The course shall consist of a combination of instrument flight instruction under the supervision of an IRI(A) or an FI(A) holding the privilege to provide training for the IR and instrument instruction within an ATO.
2. An applicant for such a competency-based modular IR(A) shall be the holder of a PPL(A) or CPL(A).
3. The course of theoretical instruction shall be completed within 18 months. The instrument flight instruction and the skill test shall be completed within the period of validity of the pass of the theoretical knowledge examinations.
4. The course shall comprise:
 - (a) theoretical knowledge instruction to the IR(A) knowledge level;
 - (b) instrument flight instruction.

THEORETICAL KNOWLEDGE

5. An approved IR(A) competency-based modular course shall comprise at least 80 hours of theoretical knowledge instruction. The theoretical knowledge course may contain computer-based training and e-learning elements. A minimum amount of classroom teaching as required by ORA.ATO.305 has to be provided.

FLIGHT INSTRUCTION

6. The method of attaining an IR(A) following this modular course is competency-based. However, the minimum requirements below shall be completed by the applicant. Additional training may be required to reach required competencies.

(a) The flight instruction for the single-engine competency-based modular IR(A) shall include at least 40 hours of instrument time under instruction of which a maximum of 20 hours, where an FNTP I or II is used, or 30 hours, where an FFS is used, may be instrument ground time. A maximum of 10 hours instrument ground time may be conducted in an FNPT I.

(i) When the applicant has:

- completed instrument flight instruction provided by an IRI(A) or an FI(A) holding the privilege to provide training for the IR; or
- prior experience of instrument flight time as PIC on aeroplanes, under a rating providing the privileges to fly under IFR and in IMC,

these hours may be credited towards the 40 hours above up to a maximum of 30 hours.

(ii) In any case, the flight instruction part of the training course at an ATO shall include at least 10 hours of instrument time under instruction in an aeroplane.

(iii) The total amount of instrument time under instruction shall not be less than 25 hours.

(b) The flight instruction for the multi-engine competency-based modular IR(A) shall include at least 45 hours of instrument flight instruction of which a maximum of 20 hours, where an FNTP I or II is used, or 30 hours, where an FFS is used, may be instrument ground time. A maximum of 10 hours instrument ground time may be conducted in an FNPT I.

(i) When the applicant has:

- completed instrument flight instruction provided by an IRI(A) or an FI(A) holding the privilege to provide training for the IR; or
- prior experience of instrument flight time as PIC on aeroplanes, under a rating giving the privileges to fly under IFR and in IMC,

these hours may be credited towards the 45 hours above up to a maximum of 35 hours.

(ii) The flight instruction part of the training course at an ATO shall include at least 10 hours of instrument time under instruction in a multi-engine aeroplane.

(iii) The total amount of instrument time under instruction shall not be less than 25 hours of which at least 15 hours shall be completed on a multi-engine aeroplane.

- (c) To determine the amount of hours credited and to establish the training needs, the applicant shall complete a pre-entry assessment at an ATO.
- (d) The completion of the instrument flight instruction provided by an IRI(A) or FI(A) in accordance with (a)(i) or (b)(i) above shall be documented in a specific training record and signed by the instructor.

7. The flight instruction for the competency-based modular IR(A) shall comprise:

(a) procedures and manoeuvres for basic instrument flight covering at least:

- basic instrument flight without external visual cues:

- horizontal flight;
- climbing;
- descent;
- turns in level flight, climbing and descent;

- instrument pattern;
- steep turn;
- radio navigation;
- recovery from unusual attitudes;
- limited panel;
- recognition and recovery from incipient and full stall;

(b) pre-flight procedures for IFR flights, including the use of the flight manual and appropriate air traffic services documents for the preparation of an IFR flight plan;

(c) procedure and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:

- transition from visual to instrument flight on take-off;
- standard instrument departures and arrivals;
- en-route IFR procedures;
- holding procedures;
- instrument approaches to specified minima;
- missed approach procedures;
- landings from instrument approaches, including circling;

(d) in-flight manoeuvres and particular flight characteristics;

(e) if required, operation of a multi-engine aeroplane in the above exercises, including:

- operation of the aeroplane solely by reference to instruments with one engine simulated inoperative;
- engine shutdown and restart (to be carried out at a safe altitude unless carried out in an FFS or FNPT II).

8. Applicants for the competency-based modular IR(A) holding a Part-FCL PPL or CPL and a valid IR(A) issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country may be credited in full towards the training course mentioned in 4 above. In order to be issued the IR(A), the applicant shall:

(a) successfully complete the skill test for the IR(A) in accordance with Appendix 7;

- (b) demonstrate to the examiner during the skill test that he/she has acquired an adequate level of theoretical knowledge of air law, meteorology and flight planning and performance (IR);
- (c) demonstrate that he/she has acquired knowledge of English in accordance with FCL.055;
- (d) have a minimum experience of at least 50 hours of instrument flight time as PIC on aeroplanes.

PRE-ENTRY ASSESSMENT

9. The content and duration of the pre-entry assessment shall be determined by the ATO based on the prior instrument experience of the applicant.

MULTI-ENGINE

10. The holder of a single-engine IR(A) who also holds a multi-engine class or type rating wishing to obtain a multi-engine IR(A) for the first time shall complete a course at an ATO comprising at least 5 hours instrument flight instruction in multi-engine aeroplanes, of which 3 hours may be in an FFS or FNPT II and shall pass a skill test.

II. Draft Decision

The text of the amendment is arranged to show deleted text, new text or new paragraph as shown below:

1. deleted text is shown with a strike through: ~~deleted~~
2. new text is highlighted with grey shading: **new**
3. [...] indicates that the remaining text is unchanged in front of or following the reflected amendment.

Draft Decision of the Executive Director of the European Aviation Safety Agency amending Decision 2011/016/R of the Executive Director of the Agency of 15 December 2011 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

'Acceptable means of compliance and Guidance Material to Part-FCL'

Subpart G – Instrument Rating – Section 1

1. 7 new AMCs to FCL.615 are added. They contain the LOs for the TK subjects. The tables show the LOs for the existing IR (IR – A.1) in the left column and in the right column the proposed LOs to be taken into account for the EIR TK instruction and for the competency-based route (IR(A) – A.2).

AMC1 FCL.615**DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES**

Subject Air Law (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
010 00 00 00	AIR LAW		
010 04 00 00	PERSONNEL LICENSING		
010 04 01 00	ICAO Annex 1		
010 04 01 01	Differences between ICAO Annex 1 and Part-FCL		
LO	Describe the relationship and differences between ICAO Annex 1 and Part-FCL	X	
010 04 02 00	Regulation on Air Crew – Part-FCL		
010 04 02 01	Definitions		
LO	Define the following: Category of aircraft, cross country flight, dual instruction time, flight time, flight time as SPIC, instrument time, instrument flight time, instrument ground time, MCC, multi-pilot aeroplanes, night, PPL, CPL, proficiency check, rating, renewal, revalidation, skill test, solo flight time, type of aircraft	X	X
010 04 02 02	Part-FCL		
LO	Name the content of PART-FCL	X	X
LO	Understand the differences between sections for aeroplanes and helicopters in Part-FCL	X	
LO	Explain the requirements to act as a flight crew member of a civil aeroplane registered in an EU Member State	X	
LO	State to what extent EU Member States will accept licences etc. issued by other EU Member States	X	
LO	List the maximum period of time for which the different licences may be issued	X	
LO	Describe the two factors that are relevant for the validity of a licence	X	
LO	Define the term 'issuing competent authority'	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the requirement to carry a flight crew licence	X	
010 04 02 05	Ratings		
LO	Explain the requirements for plus validity and privileges of Instrument Ratings	X	X
010 04 02 06	Part-MED — Medical Requirements		
LO	Describe the relevant content of Part-MED — Medical Requirements (administrative parts and requirements related to licensing only)	X	
LO	State the requirements for a medical certificate	X	
LO	State the actions to be taken in case of a decrease in medical fitness	X	
010 05 00 00	RULES OF THE AIR		
010 05 01 00	Definitions in ICAO Annex 2		
LO	Explain the definitions in ICAO Annex 2	X	
010 05 02 00	Applicability of the Rules of the Air		
LO	Explain the duties of the PIC concerning pre-flight actions in case of an IFR flight	X	X
LO	Explain the problematic in the use of psychoactive substances by flight crew members	X	
010 05 03 00	General Rules		
LO	Describe the requirements when carrying out simulated instrument flights	X	X
LO	Explain why a time check has to be obtained before flight	X	X
LO	Describe the required actions to be carried out, if the continuation of a controlled VFR flight in VMC is not practicable anymore	X	X
LO	Describe the provisions for transmitting a position report to the appropriate ATS Unit including time of transmission and normal content of the message	X	X
LO	Describe the necessary action when an aircraft is experiencing a COM failure	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State what information an aircraft being subjected to unlawful interference shall give to the appropriate ATS Unit	X	
010 05 05 00	Instrument Flight Rules (IFR)		
LO	Describe the Instrument Flight Rules as contained in Chapter 5 of ICAO Annex 2	X	X
010 06 00 00	PROCEDURES FOR AIR NAVIGATION SERVICES – AIRCRAFT OPERATIONS (PANS OPS)		
010 06 01 00	Foreword and introduction		
LO	Translate the term 'PANS-OPS' into plain language	X	
LO	State the general aim of PANS-OPS Flight Procedures (ICAO Doc 8168, Volume I)	X	
010 06 02 00	Definitions and abbreviations		
LO	Recall all definitions included in ICAO Doc 8168 Volume I, Part I, Chapter 1	X	
LO	Interpret all abbreviations as shown in ICAO Doc 8168, Volume I, Part I, Chapter 2	X	
010 06 03 00	Departure procedures		
010 06 03 01	General criteria (assuming all engines operating)		
LO	Name the factors dictating the design of instrument departure procedures	X	X
LO	Explain in which situations the criteria for omni-directional departures are applied	X	X
010 06 03 02	Standard instrument departures (SIDs)		
LO	Define the terms 'straight departure' and 'turning departure'	X	X
LO	State the responsibility of the operator when unable to utilize the published departure procedures	X	X
010 06 03 03	Omni-directional departures		
LO	Explain when the 'omni-directional method' is used for departure	X	X
LO	Describe the solutions when an omni-directional procedures is not possible	X	X
010 06 03 04	Published information		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the conditions for the publication of a SID and/or RNAV route	X	X
LO	Describe how omni-directional departures are expressed in the appropriate publication	X	X
010 06 03 05	Area Navigation (RNAV) Departure Procedures and RNP-based Departures		
LO	Explain the relationship between RNAV/RNP-based departure procedures and those for approaches	X	X
010 06 04 00	Approach procedures		
010 06 04 01	General criteria		
LO	General criteria (except table 'Speeds for procedure calculations') of Approach Procedure Design. Instrument Approach Areas, Accuracy of fixes, Fixes formed by Intersections intersection fix tolerance factors, other fix tolerance factors, Approach Area Splays, Descent Gradient)	X	
LO	Name the five possible segments of an instrument approach procedure	X	X
LO	Give reasons for establishing aircraft categories for the approach	X	X
LO	State the maximum angle between the final approach track and the extended RWY centre-line to still consider a non-precision-approach as being a 'Straight-In Approach'	X	X
LO	State the minimum obstacle clearance provided by the minimum sector altitudes (MSA) established for an aerodrome	X	X
LO	Describe the point of origin, shape, size and sub-divisions of the area used for MSAs	X	X
LO	State that a pilot shall apply wind corrections wind when carrying out an instrument approach procedures	X	X
LO	Name the most significant performance factor influencing the conduct of Instrument Approach Procedures	X	X
LO	Explain why a Pilot should not descend below OCA/Hs which are established for -precision approach procedures -a non-precision approach procedures — visual (circling) procedures	X	X
LO	Describe in general terms, the relevant factors for the calculation of operational minima	X	X
LO	Translate the following abbreviations into plain language: DA, DH, OCA, OCH, MDA, MDH, MOC, DA/H, OCA/H, MDA/H	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Explain the relationship between the terms: DA, DH, OCA, OCH, MDA, MDH, MOC, DA/H, OCA/H, MDA/H	X	X
010 06 04 02	Approach Procedure Design		
LO	Describe how the vertical cross-section for each of the five approach segments is broken down into the various areas	X	X
LO	State within which area of the cross-section the Minimum Obstacle Clearance (MOC) is provided for the whole width of the area	X	X
LO	Define the terms IAF, IF, FAF, MAPt and TP	X	X
LO	Name the area within which the plotted point of an intersection fix may lie	X	
LO	Explain by which factors the dimensions of an intersection fix are determined	X	
LO	State the accuracy of facilities providing track (VOR, ILS, NDB)	X	X
LO	Describe the 'other fix tolerance factors': Surveillance Radar (Terminal Area Radar/TAR, En-route surveillance radar/RSR), DME, 75 MHz Marker Beacon, Fixes overhead a station (VOR, NDB)	X	
LO	Describe the basic information relating to approach area splays	X	X
LO	State the optimum descent gradient (preferred for a precision approach) in degrees and per cent	X	X
010 06 04 03	Arrival and approach segments		
LO	Name the five standard segments of an instrument APP procedure and state the beginning and end for each of them	X	X
LO	Describe where an ARR route normally ends	X	X
LO	State whether or not omni-directional or sector arrivals can be provided	X	X
LO	Explain the main task for the initial APP segment	X	X
LO	Describe the maximum angle of interception between the initial APP segment and the intermediate APP segment (provided at the intermediate fix) for a precision APP and a non-precision APP	X	X
LO	Describe the main task of the intermediate APP segment	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the main task of the final APP segment	X	X
LO	Name the two possible aims of a final APP	X	X
LO	Explain the term 'final approach point' in case of an ILS approach	X	X
LO	State what happens if an ILS GP becomes inoperative during the APP	X	X
010 06 04 04	Missed Approach		
LO	Name the three phases of a missed approach procedure and describe their geometric limits	X	X
LO	Describe the main task of a missed approach procedure	X	X
LO	State at which height/altitude the missed approach is assured to be initiated	X	X
LO	Define the term 'missed approach point (MAPt)'	X	X
LO	Describe how an MAPt may be established in an approach procedure	X	X
LO	State the pilot's reaction if, upon reaching the MAPt, the required visual reference is not established	X	X
LO	Describe what a pilot is expected to do in the event a missed approach is initiated prior to arriving at the MAPt	X	X
LO	State whether the pilot is obliged to cross the MAPt at the height/altitude required by the procedure or whether he is allowed to cross the MAPt at an altitude/height greater than that required by the procedure	X	X
010 06 04 05	Visual manoeuvring (circling) in the vicinity of the aerodrome:		
LO	Describe what is meant by 'visual manoeuvring (circling)'	X	X
LO	Describe how a prominent obstacle in the visual manoeuvring (circling) area outside the final approach and missed approach area has to be considered for the visual circling	X	X
LO	State for which category of aircraft the obstacle clearance altitude/height within an established	X	X
	visual manoeuvring (circling) area is determined		
LO	Describe how an MDA/H is specified for visual manoeuvring (circling) if the OCA /H is known	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the conditions to be fulfilled before descending below MDA/H in a visual manoeuvring (circling) approach	X	X
LO	Describe why there can be no single procedure designed that will cater for conducting a circling approach in every situation	X	X
LO	State how the pilot is expected to behave after initial visual contact during a visual manoeuvring (circling)	X	X
LO	Describe what the pilot is expected to do if visual reference is lost while circling to land from an instrument approach	X	X
010 06 04 06	Area navigation (RNAV) approach procedures based on VOR/DME		
LO	Describe the provisions that must be fulfilled before carrying out VOR/DME RNAV approaches	X	X
LO	Explain the disadvantages of the VOR/DME RNAV system	X	X
LO	List the factors on which the navigational accuracy of the VOR/DME RNAV system depends	X	X
LO	State whether the VOR/DME/RNAV approach is a precision or a non-precision procedure	X	X
010 06 04 07	Use of FMS/RNAV equipment to follow conventional non-precision approach procedures		
LO	State the provisions for flying the conventional non-precision approach procedures using FMS/RNAV equipment	X	
010 06 05 00	Holding procedures		
010 06 05 01	Entry and Holding		
LO	Explain why deviations from the in-flight procedures of a holding established in accordance with ICAO Doc 8168 are dangerous	X	X
LO	State that if for any reasons a pilot is unable to conform to the procedures for normal conditions laid down for any particular holding pattern, he should advise ATC as early as possible.	X	X
LO	Describe how the right turns holdings can be transferred to left turn holding patterns	X	X
LO	Describe the shape and terminology associated with the holding pattern	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the bank angle and rate of turn to be used whilst flying in a holding pattern	X	X
LO	Explain why pilots in a holding pattern should attempt to maintain tracks and how this can be achieved	X	X
LO	Describe where outbound timing begins in a holding pattern	X	X
LO	State where the outbound leg in a holding terminates if the outbound leg is based on DME	X	X
LO	Describe the three heading entry sectors for entries into a holding pattern	X	X
LO	Define the terms 'parallel entry', 'offset entry' and 'direct entry'	X	X
LO	Determine the correct entry procedure for a given holding pattern	X	X
LO	State the still air time for flying the outbound entry heading with or without DME	X	X
LO	Describe what the pilot is expected to do when clearance is received specifying the time of departure from the holding point	X	X
010 06 05 02	Obstacle clearance (except table)		
LO	Describe the layout of the basic holding area, entry area and buffer area of a holding pattern	X	X
LO	State which obstacle clearance is provided by a minimum permissible holding level referring to the holding area, the buffer area (general only) and over high terrain or in mountainous areas	X	X
010 06 06 00	Altimeter setting procedures		
010 06 06 01	Basic requirements and procedures		
LO	Describe the two main objectives for altimeter settings	X	X
LO	Define the terms 'QNH' and 'QFE'	X	X
LO	Describe the different terms of altitude or flight levels respectively which are the references during climb or descent to change the altimeter setting from QNH to 1013.2 hPa and vice versa	X	X
LO	Define the term 'flight level' (FL)	X	X
LO	State where flight level zero shall be located	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the interval by which consecutive flight levels shall be separated	X	X
LO	Describe how flight levels are numbered	X	X
LO	Define the term 'Transition Altitude'	X	X
LO	State how Transition Altitudes shall normally be specified	X	X
LO	Explain how the height of the Transition Altitude is calculated and expressed in practice	X	X
LO	State where Transition Altitudes shall be published	X	X
LO	Define the term 'Transition Level'	X	X
LO	State when the Transition Level is normally passed to aircraft	X	X
LO	State how the vertical position of aircraft shall be expressed at or below the Transition Altitude and Transition Level	X	X
LO	Define the term 'Transition Layer'	X	X
LO	Describe when the vertical position of an aircraft passing through the transition layer shall be expressed in terms of flight levels and when in terms of altitude	X	X
LO	State when the QNH altimeter setting shall be made available to departing aircraft	X	X
LO	Explain when the vertical separation of aircraft during en-route flight shall be assessed in terms of altitude and when in terms of flight levels	X	X
LO	Explain when, in air-ground communications during an en-route flight, the vertical position of an aircraft shall be expressed in terms of altitude and when in terms of flight levels	X	X
LO	Describe why QNH altimeter setting reports should be provided from sufficient locations	X	X
LO	State how a QNH altimeter setting shall be made available to aircraft approaching a controlled aerodrome for landing	X	X
LO	State under which circumstances the vertical position of an aircraft above the transition level may be referenced to altitudes	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
010 06 06 02	Procedures for Operators and Pilots		
	LO State the three requirements altitudes or flight levels selected should have	X	X
	LO Describe a pre-flight operational test in case of QNH setting and in case of QFE setting including indication (error) tolerances referred to the different test ranges	X	X
	LO State on which setting at least one altimeter shall be set prior to take off	X	X
	LO State where during the climb the altimeter setting shall be changed from QNH to 1013.2 hPa	X	X
	LO Describe when a pilot of an aircraft intending to land at an AD shall obtain the transition level	X	X
	LO Describe when a pilot of an aircraft intending to land at an AD shall obtain the actual QNH altimeter setting	X	X
	LO State where the altimeter settings shall be changed from 1013.2 hPa to QNH during descent for landing	X	X
010 06 07 00	Simultaneous Operation on parallel or near-parallel instrument Runways		
	LO Describe the difference between independent and dependent parallel approaches	X	X
	LO Describe the following different operations: — Simultaneous instrument departures — Segregated parallel approaches/departures — Semi-mixed and mixed operations	X	X
	LO Know about 'NOZ' and 'NTZ'	X	
	LO Name the aircraft equipment requirements for conducting parallel instrument approaches	X	
	LO State under which circumstances parallel instrument approaches may be conducted	X	
	LO State the radar requirements for simultaneous independent parallel instrument approaches and how weather conditions effect this	X	
	LO State the maximum angle of interception for an ILS localizer CRS or MLS final APP Track in case of simultaneous independent parallel instrument approaches	X	
	LO Describe the special conditions for tracks on missed approach procedures and departures in case of simultaneous parallel operations	X	
010 06 08 00	Secondary surveillance radar (transponder) operating procedures		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
010 06 08 01	Operation of transponders		
	LO State when and where the pilot shall operate the transponder	X	X
	LO State the modes and codes that the pilot shall operate in the absence of any ATC directions or regional air navigation agreements	X	X
	LO Indicate when the pilot shall operate Mode S	X	X
	LO State when the pilot shall 'SQUAWK IDENT'	X	X
	LO State the transponder mode and code to indicate: -a state of emergency -a Communication failure - unlawful interference	X	X
	LO Describe the consequences of a transponder failure in flight	X	X
	LO State the primary action of the pilot in the case of an unserviceable transponder before departure when no repair or replacement at this aerodrome is possible	X	X
010 06 08 02	Operation of ACAS equipment		
	LO Describe the main reason for using ACAS	X	X
	LO Indicate whether the 'use of ACAS indications' described in ICAO Doc 8168 is absolutely mandatory	X	
	LO Explain the pilots reaction required to allow ACAS to fulfil its role of assisting pilots in the avoidance of potential collisions	X	
	LO Explain why pilots shall not manoeuvre their aircraft in response to Traffic Advisories only	X	
	LO Explain the significance of Traffic Advisories in view of possible Resolution Advisories	X	
	LO State why a pilot should follow Resolution Advisories immediately	X	
	LO List the reasons which may force a pilot to disregard an Resolution Advisory	X	
	LO Decide how a pilot shall react if there is a conflict between Resolution Advisories in case of an ACAS/ACAS co-ordinated encounter Resolution Advisories	X	
	LO Explain the importance of instructing ATC immediately that an Resolution Advisories has been followed	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Explain the duties of a pilot as far as ATC is concerned when an Resolution Advisories situation is resolved	X	
010 07 00 00	AIR TRAFFIC SERVICES AND AIR TRAFFIC MANAGEMENT		
010 07 01 00	ICAO Annex 11 – Air Traffic Services		
010 07 01 01	Definitions		
LO	Recall the Definitions given in ICAO Annex 11	X	
010 07 01 02	General		
LO	Name the objectives of Air Traffic Services (ATS)	X	
LO	Describe the three basic types of Air Traffic Services	X	
LO	Describe the three basic types of Air Traffic Control services (ATC)	X	
LO	Indicate when aerodrome control towers shall provide an accurate time check to pilots	X	
LO	State on which frequencies a pilot can expect ATS to contact him in case of an emergency	X	
LO	Understand the procedure for the transfer of an aircraft from one ATC unit to another.		
010 07 01 03	Airspace		
LO	Describe the purpose for establishing FIRs including UIRs.	X	
LO	Understand the various rules and services that apply in the various classes of airspace	X	X
LO	Explain which airspace shall be included in an FIR or UIR	X	
LO	State the designation for those portions of the airspace where flight information service (FIS) and alerting service will be provided	X	
LO	State the designations for those portions of the airspace where ATC service will be provided	X	
LO	Indicate whether or not CTAs and CTRs designated within a FIR shall form part of that FIR	X	
LO	Name the lower limit of a CTA as far as ICAO standards are concerned	X	
LO	State whether or not the lower limit of a CTA has to be established uniformly	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Explain why an UIR or Upper CTA should be delineated to include the Upper Airspace within the lateral limits of a number of lower FIR or CTAs	X	
LO	Describe in general the lateral limits of CTRs	X	
LO	State the minimum extension (in NM) of the lateral limits of a CTR	X	
LO	State the upper limits of a CTR located within the lateral limits of a CTA	X	
010 07 01 04	Air Traffic Control Services		
LO	Name all classes of airspace in which ATC shall be provided	X	
LO	Name the ATS units providing ATC service (area control service, approach control service, aerodrome control service)	X	X
LO	Describe which unit(s) may be assigned with the task to provide specified services on the apron	X	X
LO	Name the purpose of clearances issued by an ATC unit	X	X
LO	Describe the aim of clearances issued by ATC with regard to IFR, VFR or special VFR flights and refer to the different airspaces	X	X
LO	List the various (five possible) parts of an ATC clearance	X	X
LO	Describe the various aspects of clearance co-ordination	X	
LO	State how ATC shall react when it becomes apparent that traffic, additional to that one already accepted, cannot be accommodated within a given period of time at a particular location or in a particular area, or can only be accommodated at a given rate	X	X
LO	Explain why the movement of persons, vehicles and towed aircraft on the manoeuvring area of an AD shall be controlled by the AD TWR (as necessary)	X	
010 07 01 05	Flight Information Service (FIS)		
LO	State for which aircraft FIS shall be provided	X	
LO	State whether or not FIS shall include the provision of pertinent SIGMET and AIRMET information	X	
LO	State which information FIS shall include in addition to SIGMET and AIRMET information	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Indicate which other information the FIS shall include in addition to the special information given in ANNEX 11	X	
LO	Name the three major types of operational FIS broadcasts	X	
LO	Give the meaning of the acronym ATIS in plain language	X	
LO	Show that you are acquainted with the basic conditions for transmitting an ATIS as indicated in ANNEX 11	X	
LO	Mention the four possible ATIS messages	X	
LO	List the basic information concerning ATIS broadcasts (e.g. frequencies used, number of ADs included, updating, identification, acknowledgment of receipt, language and channels, ALT setting)	X	
LO	State the reasons and circumstances when an ATIS message shall be updated	X	
010 07 02 00	ICAO Document 4444 – Air Traffic Management		
010 07 02 01	Foreword (Scope and purpose)		
LO	Explain in plain language the meaning of the abbreviation 'PANS-ATM'	X	
LO	State whether or not the procedures prescribed in ICAO Doc 4444 are directed exclusively to ATS services personnel	X	
LO	Describe the relationship between ICAO Doc 4444 and other documents	X	
LO	State whether or not a clearance issued by ATC units does include prevention of collision with terrain and if there is an exception to this, name the exception	X	X
010 07 02 02	Definitions		
LO	Recall all definitions given in ICAO Doc 4444 <u>except</u> the following: accepting unit/controller, AD taxi circuit, aeronautical fixed service (AFS), aeronautical fixed station, air-taxiing, allocation, approach funnel, assignment, data convention, data processing, discrete code, D-value, flight status, ground effect, receiving unit/controller, sending unit/controller, transfer of control point, transferring unit/controller, unmanned free balloon	X	
010 07 02 03	ATS System Capacity and Air Traffic Flow Management		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	LO Explain when and where an air traffic flow management (ATFM) service shall be implemented	X	X
010 07 02 04	General Provisions for Air Traffic services		
	LO Describe who is responsible for the provision of flight information and alerting service within a flight information region (FIR) within controlled airspace and at controlled aerodromes	X	
010 07 02 05	ATC Clearances		
	LO Explain 'the sole scope and purpose' of an ATC clearance	X	X
	LO State on which information the issue of an ATC clearance is based	X	X
	LO Describe what a PIC should do if an ATC clearance is not suitable	X	X
	LO Indicate who bears the responsibility for maintaining applicable rules and regulations whilst flying under the control of an ATC unit	X	X
	LO Name the two primary purposes of clearances issued by ATC units	X	
	LO State why clearances must be issued 'early enough' to en-route aircraft	X	
	LO Explain what is meant by the expression 'clearance limit'	X	X
	LO Explain the meaning of the phrases 'cleared via flight planned route', 'cleared via (designation) departure' and 'cleared via (designation) arrival' in an ATC clearance.	X	X
	LO List which items of an ATC clearance shall always be read back by the flight crew	X	X
010 07 02 06	Horizontal Speed Control Instructions		
	LO Explain the reason for speed control by ATC	X	X
	LO Define the maximum speed changes that ATC may impose	X	X
	LO State within which distance from the threshold the PIC must not expect any kind of speed control	X	X
010 07 02 07	Change from IFR to VFR flight		
	LO Explain how the change from IFR to VFR can be initiated by the PIC	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Indicate the expected reaction of the appropriate ATC unit upon a request to change from IFR to VFR	X	X
010 07 02 08	Wake turbulence		
LO	State the wake turbulence categories of aircraft	X	
LO	State the wake turbulence separation minima	X	
LO	Describe how a 'Heavy' aircraft shall indicate this on the initial radiotelephony contact with ATS	X	
010 07 02 09	Altimeter Setting Procedures		
LO	Define the following terms: — transition level — transition layer — and transition altitude	X	X
LO	Indicate how the vertical position of an aircraft in the vicinity of an aerodrome shall be expressed at or below the transition altitude, at or above the transition level and while climbing or descending through the transition layer	X	X
LO	Describe when the height of an aircraft using QFE during an NDB approach is referred to the landing threshold instead of the aerodrome elevation	X	X
LO	Indicate how far altimeter settings provided to aircraft shall be rounded up or down	X	X
LO	Define the expression 'lowest usable flight level'	X	X
LO	Determine how the vertical position of an aircraft on a flight en-route is expressed at or above the lowest usable flight level and below the lowest usable flight level	X	X
LO	State who establishes the transition level to be used in the vicinity of an aerodrome	X	X
LO	Decide how and when a flight crew shall be informed about the transition level	X	X
LO	State whether or not the pilot can request the transition level to be included in the approach clearance	X	X
LO	State in what kind of clearance the QNH altimeter setting shall be included	X	X
010 07 02 10	Position Reporting		
LO	Describe when position reports shall be made by an aircraft flying on routes defined by designated significant points	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	List the six items that are normally included in a voice position report	X	X
LO	Name the requirements for using a simplified position report with Flight level, next position (and time over) and ensuing significant points omitted	X	X
LO	Name the item of a position report which must be forwarded to ATC with the initial call after changing to a new frequency	X	X
LO	Indicate the item of a position report which may be omitted if SSR Mode C is used	X	X
LO	Explain in which circumstances the indicated air speed should be included in a position report	X	
LO	Explain the meaning of the abbreviation 'ADS'	X	
LO	State to which unit an ADS report shall be made	X	
LO	Describe how ADS reports shall be made	X	
LO	Describe which expression shall precede the level figures in a position report if the level is reported in relation to 1013.2 hPa (standard pressure)	X	
010 07 02 11	Reporting of Operational and Meteorological Information		
LO	List the occasions when special air reports shall be made	X	
010 07 02 12	Separation methods and minima		
LO	Explain the general provisions for the separation of controlled traffic	X	X
LO	Name the different kind of separation used in aviation	X	X
LO	Understand the difference between the type of separation provided within the various classes of airspace and between the various types of flight	X	X
LO	State who is responsible for the avoidance of collision with other aircraft when operating in VMC	X	X
LO	State the ICAO documents in which details of current separation minima are prescribed	X	X
LO	Describe how vertical separation is obtained	X	X
LO	State the required vertical separation minimum	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe how the cruising levels of aircraft flying to the same destination and the expected approach sequence are correlated between each other	X	X
LO	Name the conditions that must be adhered to, when two aircraft are cleared to maintain a specified vertical separation between them during climb or descent	X	X
LO	List the two main methods for horizontal separation	X	X
LO	Describe how lateral separation of aircraft at the same level may be obtained	X	X
LO	Explain the term 'Geographical Separation'	X	X
LO	Describe track separation between aircraft using the same navigation aid or method	X	X
LO	Describe the three basic means for the establishment of longitudinal separation	X	X
LO	Describe the circumstances under which a reduction in separation minima may be allowed	X	X
LO	Indicate the standard horizontal radar separation in NM	X	X
LO	State the wake turbulence radar separation for aircraft in the APP and DEP phases of a flight when an aircraft is operating directly behind another aircraft at the same ALT or less than 300 m (1 000 ft) below	X	X
010 07 02 13	Separation in the vicinity of aerodromes		
LO	Define the expression 'Essential Local Traffic'	X	
LO	State which possible decision the PIC may choose if departing aircraft are expedited by suggesting a take-off direction which is not 'into the wind'	X	
LO	State the condition to enable ATC to initiate a visual approach for an IFR flight	X	X
LO	Indicate whether or not separation will be provided by ATC between an aircraft executing a visual approach and other arriving or departing aircraft	X	X
LO	State in which case when the flight crew are not familiar with the instrument approach procedure being carried out, that only the final approach track has to be forwarded to them by ATC	X	X
LO	Describe which flight level should be assigned to an aircraft first arriving over a holding fix for landing	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Talk about the priority that will be given to aircraft for a landing	X	X
LO	Understand the situation when a pilot of an aircraft in an approach sequence indicates his intention to hold for weather improvements	X	X
LO	Explain the term 'Expected Approach Time' and the procedures for its use	X	X
LO	State the reasons which could probably lead to the decision to use another take-off or landing direction than the one into the wind	X	X
LO	Name the possible consequences for a PIC if the 'RWY-in-use' is not considered suitable for the operation involved	X	X
010 07 02 14	Miscellaneous separation procedures		
LO	Be familiar with the separation of aircraft holding in flight	X	X
LO	Be familiar with the minimum separation between departing aircraft	X	X
LO	Be familiar with the minimum separation between departing and arriving aircraft	X	X
LO	Be familiar with the non-radar wake turbulence longitudinal separation minima	X	X
LO	Know about a clearance to 'maintain own separation' while in VMC	X	X
LO	Give a brief description of 'Essential Traffic' and 'Essential Traffic Information'	X	X
LO	Describe the circumstances under which a reduction in separation minima may be allowed	X	X
010 07 02 15	Arriving and Departing aircraft		
LO	List the elements of information which shall be transmitted to an aircraft as early as practicable if an approach for landing is intended	X	X
LO	List the information to be transmitted to an aircraft at the commencement of final approach	X	X
LO	List the information to be transmitted to an aircraft during final approach	X	X
LO	Make yourself acquainted with all information regarding arriving and/or departing aircraft on parallel or near-parallel runways, including knowledge about NTZ and NOZ and the various combinations of parallel arrivals and/or departures.	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the sequence of priority between aircraft landing (or in the final stage of an approach to land) and aircraft intending to depart	X	X
LO	Explain the factors that influence the approach sequence	X	X
LO	State the significant changes in the meteorological conditions in the take-off or climb-out area that shall be transmitted without delay to a departing aircraft.	X	X
LO	Describe what information shall be forwarded to a departing aircraft as far as visual or non-visual aids are concerned	X	X
LO	State the significant changes that shall be transmitted as early as practicable to an arriving aircraft, particularly changes in the meteorological conditions.	X	X
010 07 02 16	Procedures for Aerodrome Control Service		
LO	Describe the general tasks of the Aerodrome Control Tower (TWR) when issuing information and clearances to aircraft under its control	X	X
LO	List for which aircraft and their given positions or flight situations the TWR shall prevent collisions	X	X
LO	Name the AD equipment the operational failure or irregularity of which shall be immediately reported by the TWR	X	X
LO	State that, after a given period of time, the TWR shall report to the ACC or FIC if an aircraft does not land as expected	X	X
LO	Describe the procedures to be observed by the TWR whenever VFR operations are suspended	X	X
LO	Explain the term 'RWY-in-use' and its selection	X	
LO	List the information the TWR should give to an aircraft — Prior to taxi for take-off — Prior to take-off — Prior to entering the traffic circuit	X	
LO	Explain that a report of surface wind direction given to a pilot by the TWR is magnetic	X	
LO	Explain the exact meaning of the expression 'Runway vacated'	X	
010 07 02 17	Radar services		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State to what extent the use of radar in air traffic services may be limited	X	X
LO	State what radar derived information shall be available for display to the controller as a minimum	X	X
LO	Name the two basic identification procedures used with radar	X	X
LO	Define the term 'PSR'	X	X
LO	Describe the circumstances under which an aircraft provided with radar service should be informed of its position	X	X
LO	List the possible forms of position information passed to the aircraft by radar services	X	X
LO	Define the term 'radar vectoring'	X	X
LO	State the aims of radar vectoring as shown in ICAO Doc 4444	X	X
LO	State how radar vectoring shall be achieved	X	X
LO	Describe the information which shall be given to an aircraft when radar vectoring is terminated and the pilot is instructed to resume own navigation	X	X
LO	Explain the procedures for the conduct of Surveillance Radar Approaches (SRA)	X	X
LO	Describe what kind of action (concerning the transponder) the pilot is expected to perform in case of emergency if he has previously been directed by ATC to operate the transponder on a specific code	X	X
010 07 02 18	Air Traffic Advisory Service		
LO	Describe the objective and basic principles of the Air Traffic Advisory Service	X	
LO	State to which aircraft Air Traffic Advisory Service will be provided	X	
LO	Explain why Air Traffic Advisory Service does not deliver 'Clearances' but only 'Advisory Information'	X	
010 07 02 19	Procedures related to emergencies, communication failure and contingencies		
LO	State the Mode and Code of SSR equipment a pilot might operate in a (general) state of emergency or (specifically) in case the aircraft is subject to unlawful interference	X	X
LO	State the special rights an aircraft in a state of emergency can expect from ATC	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the expected action of aircraft after receiving a broadcast from ATS concerning the emergency descent of an aircraft	X	X
LO	State how it can be ascertained, in case of a failure of two-way communication, whether the aircraft is able to receive transmissions from the ATS unit	X	X
LO	Explain the assumption based on which separation shall be maintained if an aircraft is known to experience a COM failure in VMC or in IMC	X	X
LO	State on which frequencies appropriate information, for an aircraft encountering two way COM failure, will be sent by ATS	X	X
LO	Describe the expected activities of an ATS-unit after having learned that an aircraft is being intercepted in or outside its area of responsibility	X	X
LO	State what is meant by the expression 'Strayed aircraft' and 'Unidentified aircraft'	X	X
LO	Explain the minimum level for fuel dumping and the reasons for this	X	
LO	Explain the possible request of ATC to an aircraft to change its RTF call sign	X	
010 07 02 20	Miscellaneous procedures		
LO	Explain the meaning of 'AIRPROX'	X	
LO	Determine the task of an Air Traffic Incident report	X	
010 08 00 00	AERONAUTICAL INFORMATION SERVICE		
010 08 01 00	Introduction		
LO	State, in general terms, the objective of the Aeronautical Information Service	X	
010 08 02 00	Definitions in ICAO Annex 15		
LO	Recall the following definitions: Aeronautical Information Circular (AIC), Aeronautical Information Publication (AIP), AIP amendment, AIP supplement, AIRAC, danger area, Integrated Aeronautical Information Package, international airport, international NOTAM office (NOF), manoeuvring area, movement area, NOTAM, pre-flight information bulletin (PIB), prohibited area, restricted area, SNOWTAM, ASHTAM	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
010 08 03 00	General		
LO	State during which period of time an aeronautical information service shall be available with reference to an aircraft flying in the area of responsibility of an AIS, provided a 24-hours service is not available	X	
LO	Name (in general) the kind of aeronautical information/data which an AIS service shall make available in a suitable form for flight crews	X	
LO	Summarize the duties of an aeronautical information service concerning aeronautical information data for the territory of the State	X	
LO	Understand the principles of WGS 84	X	
010 08 04 00	Integrated Aeronautical Information Package		
LO	Name the different elements that make up an Integrated Aeronautical Information Package	X	
010 08 04 01	Aeronautical Information Publications (AIP)		
LO	State the primary purpose of the AIP	X	
LO	Name the different parts of the AIP	X	
LO	State in which main part of the AIP the following information can be found: — Differences from ICAO Standards, Recommended Practices and Procedures — Location indicators, aeronautical information services, minimum flight altitude, VOLMET service, SIGMET service — General rules and procedures (especially general rules, VFR, IFR, ALT setting procedure, interception of civil aircraft, unlawful interference, air traffic incidents), — ATS airspace (especially FIR, UIR, TMA), — ATS routes (especially lower ATS routes, upper ATS routes, area navigation routes) — Aerodrome data including Aprons, TWYs and check locations/positions data — Navigation warnings (especially prohibited, restricted and danger areas) — aircraft instruments, equipment and flight documents — AD surface movement guidance and control system and markings, — RWY physical characteristics, declared distances, APP and RWY lighting, — AD radio navigation and landing aids, — charts related to an AD — entry, transit and departure of aircraft, passengers, crew and cargo	X	X
LO	State how permanent changes to the AIP shall be published	X	
LO	Explain what kind of information shall be published in form of AIP Supplements	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	LO Describe how conspicuousness of AIP Supplement pages is achieved	X	
010 08 04 02	NOTAMs		
	LO Describe how information shall be published which in principal would belong to NOTAMs but includes extensive text and/or graphics	X	X
	LO Summarize essential information which lead to the issuance of a NOTAM	X	X
	LO State to whom NOTAMs shall be distributed	X	
	LO Explain how information regarding snow, ice and standing water on AD pavements shall be reported	X	X
	LO Describe the means by which NOTAMs shall be distributed	X	
	LO State which information an ASHTAM may contain	X	
010 08 04 03	Aeronautical Information Regulation and Control (AIRAC)		
	LO List circumstances to which information are concerned which shall or should be distributed as AIRAC	X	X
	LO State the sequence in which AIRACs shall be issued and state how many days in advance of the effective date the information shall be distributed by AIS	X	X
010 08 04 04	Aeronautical Information Circulars (AIC)		
	LO Describe the reasons for the publication of AICs	X	
	LO Explain the organisation and standard colour codes for AICs	X	
	LO Explain the normal publication cycle for AICs	X	
010 08 04 05	Pre-flight and Post-flight Information/Data		
	LO List (in general) which details shall be included in aeronautical information provided for pre-flight planning purposes at the appropriate ADs	X	
	LO Summarize the additional current information relating to the AD of departure that shall be provided as pre-flight information	X	
	LO Describe how a recapitulation of current NOTAM and other information of urgent character shall be made	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	available to flight crews		
LO	State which post-flight information from aircrews shall be submitted to AIS for distribution as required by the circumstances	X	
010 09 00 00	AERODROMES (ICAO Annex 14, Volume I, Aerodrome Design and Operations)		
010 09 01 00	General		
LO	Recognise all definitions in ICAO Annex 14 except the following: Accuracy, cyclic redundancy check, data quality, effective intensity, ellipsoid height (geodetic height), geodetic datum, geoid, geoid undulation, integrity (aeronautical data), light failure, lighting system reliability, orthometric height, station declination, usability factor, Reference Code	X	
LO	Describe, in general terms, the intent of the AD reference code as well as its composition of two elements	X	
010 09 02 00	Aerodrome data		
010 09 02 01	Aerodrome Reference Point		
LO	Describe where the aerodrome reference point shall be located and where it shall normally remain	X	X
010 09 02 02	Pavement Strengths		
LO	Explain the terms PCN and ACN and describe their mutual dependence	X	
LO	Describe how the bearing strength for an aircraft with an apron mass equal to or less than 5700 kg shall be reported.	X	
010 09 02 03	Declared Distances		
LO	List the four most important declared RWY distances and indicate where you can find guidance on their calculation in ICAO Annex 14	X	
LO	Recall the definitions for the four main Declared Distances	X	
010 09 02 04	Condition of the Movement Area and related facilities		
LO	Understand the purpose of informing AIS and ATS units about the condition of the movement area and relating facilities	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	List the matters of operational significance or affecting aircraft performance which should be reported to AIS and ATS units for the transmission to aircraft involved	X	
LO	Describe the four different types of water deposit on runways	X	
LO	Name the three defined states of frozen water on the RWY	X	
010 09 03 00	Physical Characteristics		
010 09 03 01	Runways		
LO	Describe where a threshold should normally be located	X	
LO	Acquaint yourself with the general considerations concerning runways associated with a Stopway or Clearway	X	X
LO	State where in Annex 14 you can find detailed information about the required runway width dependent upon Code number and Code letter	X	X
010 09 03 02	Runway Strips		
LO	Explain the term 'Runway strip'	X	X
010 09 03 03	Runway end safety area		
LO	Explain the term 'RWY end safety area'	X	X
010 09 03 04	Clearway		
LO	Explain the term 'Clearway'	X	X
010 09 03 05	Stopway		
LO	Explain the term 'Stopway'	X	X
010 09 03 06	Radio-altimeter operating area		
LO	Describe where a radio-altimeter operating area should be established and how far it should extend laterally and longitudinally	X	
010 09 03 07	Taxiways		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the condition which must be fulfilled to maintain the required clearance between the outer main wheels of an aircraft and the edge of the taxiway	X	
LO	Describe the reasons and the requirements for rapid exit taxiways	X	
LO	State the reason for a taxiway widening in curves	X	
LO	Explain when and where holding bays should be provided	X	
LO	Describe where runway-holding positions shall be established	X	X
LO	Define the term 'road-holding position'	X	
LO	Describe where Intermediate taxi-way holding positions should be established	X	
010 09 04 00	Visual aids for navigation		
010 09 04 01	Indicators and signalling devices		
LO	Describe the wind direction indicators with which ADs shall be equipped	X	
LO	Describe a landing direction indicator	X	
LO	Explain the capabilities of a signalling lamp	X	
LO	State which characteristics a signal area should have	X	
LO	Interpret all indications and signals that may be used in a signals area	X	
010 09 04 02	Markings		
LO	Name the colours used for the various markings (RWY, TWY, aircraft stands, apron safety lines)	X	X
LO	State where a RWY designation marking shall be provided and how it is designed	X	
LO	Describe the application and characteristics of: — RWY centre line markings — THR marking	X	X
	- Touchdown Zone marking — RWY side stripe marking — TWY centre line marking — Runway-holding position marking — Intermediate holding position marking — Aircraft stand markings — Apron safety lines — Road holding position marking — Mandatory instruction marking — Information marking		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
010 09 04 03	Lights		
LO	Describe mechanical safety considerations regarding elevated approach lights and elevated RWY, stopway and taxiway-lights	X	X
LO	Discuss the relationship of the intensity of RWY lighting, the approach lighting system and the use of a separate intensity control for different lighting systems	X	X
LO	List the conditions for the installation of an AD beacon and describe its general characteristics	X	X
LO	Name the different kinds of operations for which a simple APP lighting system shall be used	X	X
LO	Describe the basic installations of a simple APP lighting system including the dimensions and distances normally used	X	X
LO	Describe the principle of a precision APP category I lighting system including such information as location and characteristics <i>Remark – This includes the 'Calvert' system with additional crossbars</i>	X	X
LO	Describe the principle of a precision APP category II and III lighting system including such information as location and characteristics, especially mentioning the inner 300 m of the system		
LO	Describe the wing bars of PAPI and APAPI	X	X
LO	Interpret what the pilot will see during approach, using PAPI, APAPI, T-VASIS and ATVASIS	X	X
LO	Explain the application and characteristics of: – RWY edge lights – RWY threshold and wing bar lights – RWY end lights – RWY centre line lights – RWY lead in lights – RWY touchdown zone lights – Stopway lights – Taxiway centre line lights – Taxiway edge lights – Stop bars – Intermediate holding position lights – RWY guard lights – Road holding position lights	X	X
010 09 04 04	Signs		
LO	State the general purpose for installing signs	X	X
LO	Explain what signs are the only ones on the movement area utilizing red	X	X
LO	List the provisions for illuminating signs	X	X
LO	State the purpose for installing mandatory instruction signs	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Name the kind of signs which mandatory instruction signs shall include	X	X
LO	Name the colours used with mandatory instruction signs	X	X
LO	Describe by which sign a pattern 'A' runway-holding position (i.e. at an intersection of a taxiway and a non-instrument, non-precision approach or take-off RWY) marking shall be supplemented	X	
LO	Describe by which sign a pattern 'B' runway-holding position i.e. at an intersection of a taxiway and a Precision approach RWY, marking shall be supplemented	X	
LO	Describe the location of: — a RWY designation sign at a taxiway/RWY intersection — a NO ENTRY sign — a RWY holding position sign	X	X
LO	Name the sign with which it shall be indicated that a taxiing aircraft is about to infringe an obstacle limitation surface or to interfere with the operation of radio navigation aids (e.g. ILS/MLS critical/sensitive area)	X	X
LO	Describe the various possible inscriptions on RWY designation signs and on holding position signs	X	X
LO	Describe the inscription on an Intermediate-holding position sign on a taxiway	X	X
LO	State when information signs shall be provided	X	
LO	Describe the colours used in connection with information signs	X	
LO	Describe the possible inscriptions on information signs	X	
LO	Explain the application, location and characteristics of aircraft stand identification signs	X	
LO	Explain the application, location and characteristics of road holding position signs	X	
010 09 04 05	Markers		
LO	Explain why Markers located near a runway or taxiway shall be limited in their height	X	
LO	Explain the application and characteristics of: <ul style="list-style-type: none"> - Unpaved RWY edge markers - TWY edge markers - TWY centre line markers - Unpaved TWY edge markers 	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	- Boundary markers - Stopway edge markers		
010 09 05 00	Visual aids for denoting obstacles		
010 09 05 01	Marking of objects		
LO	State how fixed or mobile objects shall be marked if colouring is not practicable	X	
LO	Describe marking by colours (fixed or mobile objects)	X	
LO	Explain the use of markers for the marking of objects, overhead wires, cables etc.	X	
LO	Explain the use of flags for the marking of objects	X	
010 09 05 02	Lighting of objects		
LO	Name the different types of lights to indicate the presence of objects which must be lighted	X	
LO	State the time period/s of the 24 hours of a day during which high-intensity lights are intended for use	X	
LO	Describe (in general terms) the location of obstacle lights	X	
LO	Describe (in general and for normal circumstances) colour and sequence of low-intensity obstacle lights, medium-intensity obstacle lights and high-intensity obstacle lights	X	
LO	State where you can find information about lights to be displayed by aircraft	X	
010 09 06 00	Visual aids for denoting restricted use of areas		
LO	Describe the colours and meaning of 'closed markings' on RWYs and taxiways	X	
LO	State how the pilot of an aircraft moving on the surface of a taxiway, holding bay or apron shall be warned that the shoulders of these surfaces are 'non-load-bearing'	X	
LO	Describe the pre-threshold marking (including colours) when the surface before the threshold is not suitable for normal use by aircraft	X	
010 09 07 00	Aerodromes Operational Services, Equipment and Installations		
010 09 07 01	Rescue and Fire Fighting (RFF)		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Name the principal objective of a rescue and fire fighting service	X	
LO	List the most important factors bearing on effective rescue in a survivable aircraft accident	X	
LO	Explain the basic information the AD category (for rescue and fire fighting) depends upon	X	
LO	Describe what is meant by the term 'response time' and state its normal and maximum limits	X	
LO	State the reasons for emergency access roads and for satellite fire fighting stations	X	
010 09 07 02	Apron Management Service		
LO	Describe the reason for providing a special apron management service and state what has to be observed if the AD control tower is not participating in the apron management service	X	
LO	State who has a right of way against vehicles operating on an apron	X	
010 09 07 03	Ground Servicing of Aircraft		
LO	Describe the necessary actions during the ground servicing of an aircraft with regard to the possible event of a fuel fire	X	
010 09 08 00	Attachment A to ICAO Annex 14, Volume 1 – Supplementary Guidance Material		
010 09 08 01	Declared distances		
LO	List the four types of 'declared distances' on a runway and also the appropriate abbreviations	X	
LO	Explain the circumstances which lead to the situation that the four declared distances on a runway are equal to the length of the runway	X	
LO	Describe the influence of a clearway, stopway and/or displaced threshold upon the four 'declared distances'	X	
010 09 08 02	Radio altimeter operating areas		
LO	Describe the purpose of a radio altimeter operating area	X	
LO	Describe the physical characteristics of a radio altimeter operating area	X	
LO	Describe dimensions of a radio altimeter operating area	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the position of a radio altimeter operating area	X	
010 09 08 03	Approach lighting systems		
LO	Name the two main groups of approach lighting systems	X	X
LO	Describe the two different versions of a simple approach lighting system	X	X
LO	Describe the two different basic versions of precision approach lighting systems for CAT I	X	X
LO	Describe the diagram of the inner 300 m of the precision approach lighting system in the case of CAT II and III		
LO	Describe how the arrangement of an approach lighting system and the location of the appropriate threshold are interrelated between each other	X	X

AMC2 FCL.615**DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES**

Subject Aircraft General Knowledge — Instrumentation (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
022 00 00 00	AIRCRAFT GENERAL KNOWLEDGE — INSTRUMENTATION		
022 02 00 00	MEASUREMENT OF AIR DATA PARAMETERS		
022 02 01 00	Pressure measurement		
022 02 01 01	Definitions		
LO	Define static, total and dynamic pressures and state the relationship between them	X	
LO	Define impact pressure as total pressure minus static pressure and discuss the conditions when dynamic pressure equals impact pressure	X	
022 02 01 02	Pitot/static system: design, and errors		
LO	Describe the design and the operating principle of a: — static source — Pitot tube — combined Pitot/static probe	X	X
LO	For each of these indicate the various locations, describe the following associated errors: — position errors — instrument errors -errors due to a non-longitudinal axial flow (including manoeuvre-induced errors), and the means of correction and/or compensation	X	X
LO	Describe a typical Pitot/static system and list the possible outputs	X	
LO	Explain the redundancy and the interconnections of typical Pitot/static systems	X	
LO	Explain the purpose of heating and interpret the effect of heating on sensed pressure	X	X
LO	List the affected instruments and explain the consequences for the pilot in case of a malfunction including blockage and leakage	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe alternate static sources and their effects when used	X	X
LO	Solid state sensors (to be introduced at a latter date)	X	
022 02 02 00	Temperature measurement		
022 02 02 01	Definitions		
LO	Define OAT, SAT, TAT and measured temperature	X	
022 02 02 02	Design and operation		
LO	Describe the following types of air temperature probes and their features: – expansion type: Bi-metallic strip, direct reading – electrical type wire resistance, remote reading	X	
LO	For each of these indicate the various locations, describe the following associated errors: -position errors – instrument errors and the means of correction and/or compensation	X	
LO	Explain the purpose of heating and interpret the effect of heating on sensed temperature	X	
022 02 04 00	Altimeter		
LO	Define ISA	X	
LO	List the following two units used for altimeters: – feet – meters and state the relationship between them	X	
LO	Define the following terms: -height, altitude, -indicated altitude, true altitude, -pressure altitude, density altitude	X	X
LO	Define the following barometric references: QNH, QFE, 1013,25 hPa	X	X
LO	Explain the operating principles of an altimeter	X	X
LO	Describe and compare the following three types of altimeters: – simple altimeter (single capsule) – sensitive altimeter (multi capsule) – servo-assisted altimeter	X	X
LO	Give examples of associated displays: pointer, multi pointer, drum, vertical straight scale	X	X
LO	Describe the following errors: – Pitot/static system errors – temperature error (air column not at ISA conditions) – time lag (altimeter response to change of height) and the means of correction	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Give examples of altimeter corrections table from an Aircraft Operations Manual (AOM)	X	X
LO	Describe the effects of a blockage or a leakage on the static pressure line	X	X
022 02 05 00	Vertical Speed Indicator (VSI)		
LO	List the two units used for VSI: — meters per second — feet per minute and state the relationship between them	X	
LO	Explain the operating principles of a VSI	X	X
LO	Describe and compare the following two types of vertical speed indicators: — barometric type — inertial type (inertial information provided by an Inertial Reference Unit)	X	X
LO	Describe the following VSI errors: — Pitot/static system errors — time lag and the means of correction	X	X
LO	Describe the effects on a VSI of a blockage or a leakage on the static pressure line	X	X
LO	Give examples of VSI display	X	
022 02 06 00	Airspeed Indicator (ASI)		
LO	List the following three units used for airspeed: — Nautical miles/hour (knots) — Statute miles/hour — Kilometers/hour and state the relationship between them	X	
LO	Define IAS, CAS, EAS, TAS and state and explain the relationship between these speeds	X	X
LO	Describe the following ASI errors and state when they must be considered: — Pitot/static system errors — compressibility error — density error	X	X
LO	Explain the operating principles of an ASI (as appropriate to aeroplanes or helicopters)	X	X
LO	Give examples of ASI display: pointer, vertical straight scale	X	
LO	Interpret ASI corrections tables as used in an Aircraft Operations Manual (AOM)	X	
LO	Describe the effects on an ASI of a blockage or a leak in the static and/or total pressure line(s)	X	X
022 03 00 00	MAGNETISM — DIRECT READING COMPASS AND FLUX VALVE		
022 03 01 00	Earth's magnetic field		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the magnetic field of the earth	X	
LO	Explain the properties of a magnet	X	
LO	Define the following terms: — magnetic variation, — magnetic dip (inclination)	X	
022 03 02 00	Aircraft magnetic field		
LO	Define and explain the following terms: — magnetic and non-magnetic material — hard and soft iron — permanent magnetism and electro-magnetism	X	
LO	Explain the principles and the reasons for the following procedures: — compass swinging (determination of initial deviations) — compass compensation (correction of deviations found) — compass calibration (determination of residual deviations)	X	
LO	List the causes of the aircraft's magnetic field and explain how it affects the accuracy of the compass indications	X	
LO	Describe the purpose and the use of a deviation correction card	X	
022 03 03 00	Direct Reading Magnetic Compass		
LO	Define the role of a direct reading magnetic compass	X	
LO	Describe and explain the design of a vertical card type compass	X	
LO	Describe the deviation compensation.	X	
LO	Describe and interpret the effects of the following errors: — acceleration — turning — attitude — deviation	X	
LO	Explain how to use and interpret the direct reading compass indications during a turn	X	
022 03 04 00	Flux valve		
LO	Explain the purpose of a flux valve	X	
LO	Explain the operating principle	X	
LO	Indicate various locations and precautions needed	X	
LO	Give the remote reading compass system as example of application	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State that because of the electromagnetic deviation correction, the flux valve output itself does not have a deviation correction card	X	
LO	Describe and interpret the effects of the following errors: — acceleration, — turning, — attitude, — deviation	X	
022 04 00 00	GYROSCOPIC INSTRUMENTS		
022 04 01 00	Gyroscope: basic principles		
LO	Define a gyro	X	X
LO	Explain the fundamentals of the theory of gyroscopic forces	X	X
LO	Define the degrees of freedom of a gyro <i>Remark: As a convention, the degrees of freedom of a gyroscope do not include its own axis of rotation (the spin axis)</i>	X	X
LO	Explain the following terms: — rigidity, — precession, — wander (drift/topple)	X	
LO	Distinguish between: — real wander and apparent wander — apparent wander due to the rotation of the Earth and transport wander	X	
LO	Describe a free (space) gyro and a tied gyro	X	
LO	Describe and compare electrically and pneumatically driven gyroscopes	X	
LO	Explain the construction and operating principles of a: — rate gyro — rate integrating gyro	X	
022 04 02 00	Rate of turn indicator /-Turn Co-ordinator — Balance (Slip) Indicator		
LO	Rate of turn indicator (1) — Turn co-ordinator (2)		
LO	Explain the purpose of a rate of turn and balance (slip) indicator	X	X
LO	Define a rate-one turn	X	X
LO	Describe the construction and principles of operation of a rate of turn indicator	X	
LO	State the degrees of freedom of a rate of turn indicator	X	
LO	Explain the relation between bank angle, rate of turn and TAS	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Explain why the indication of a rate of turn indicator is only correct for one TAS and when turn is co-ordinated	X	X
LO	Explain the purpose of a balance (slip) indicator	X	X
LO	Describe the indications of a rate of turn and balance (slip) indicator during a balanced, slip or skid turn	X	X
LO	Describe the construction and principles of operation of a Turn Co-ordinator (or Turn and Bank Indicator)	X	X
LO	Compare the rate of turn indicator and the turn co-ordinator	X	X
022 04 03 00	Attitude Indicator (Artificial Horizon)		
LO	Explain the purpose of the attitude indicator	X	X
LO	Describe the different designs and principles of operation of attitude indicators (air driven, electric)	X	X
LO	State the degrees of freedom	X	
LO	Describe the gimbal system	X	
LO	Describe the purpose and principles of operation of the following different erection systems: -air driven artificial horizon, -electric artificial horizon	X	
LO	Describe the effects, on the instrument indications, of aircraft acceleration and turns	X	
LO	Describe the attitude display and instrument markings	X	X
LO	Explain the purpose of a vertical gyro unit	X	
LO	List and describe the following components of a vertical gyro unit: — inputs: pitch and roll sensors — transmission and amplification (synchros and amplifiers) — outputs: display units such as Attitude Direction Indicator (ADI), Auto Flight Control Systems	X	
LO	State the advantages and disadvantages of a vertical gyro unit compared to an attitude indicator with regard to: — design (power source, weight and volume) — accuracy of the information displayed, — availability of the information for several systems (ADI, AFCS)	X	
022 04 04 00	Directional gyroscope		
LO	Explain the purpose of the directional gyroscope	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the following two types of directional gyroscopes: — Air driven directional gyro — Electric directional gyro	X	X
LO	State the degrees of freedom	X	
LO	Describe the gimbal system	X	
LO	Define the following different errors: — design and manufacturing imperfections (random wander) — apparent wander (rotation of the earth) — transport wander (movement relative to the earth's surface) and explain their effects	X	
LO	Calculate the apparent wander (apparent drift rate in degrees per hour) of an uncompensated gyro according to latitude	X	
022 04 05 00	Remote reading compass systems		
LO	Describe the principles of operation of a remote reading compass system	X	
LO	Using a block diagram, list and explain the function of the following components of a remote reading compass system: — flux detection unit, — gyro unit, — transducers, precession amplifiers, annunciator — display unit (compass card, synchronising and set heading knob, DG/compass switch)	X	
LO	State the advantages and disadvantages of a remote reading compass system compared to a direct reading magnetic compass with regard to: — design (power source, weight and volume) — deviation due to aircraft magnetism — turning and acceleration errors — attitude errors — accuracy and stability of the information displayed, — availability of the information for several systems (Compass card, RMI, AFCS)	X	
022 04 06 00	Solid-State Systems — AHRS		
LO	State that the Micro Electro-Mechanical Sensors (MEMS) technology can be used to make: — solid-state accelerometers, — solid-state rate sensor gyroscopes, — solid-state magnetometers (measurement of the earth magnetic field)	X	
LO	Describe the basic principle of a solid-state Attitude and Heading Reference System (AHRS) using a solid state 3-axis rate sensor, 3-axis accelerometer and a 3-axis magnetometer	X	X
LO	Compare the solid state AHRS with the mechanical gyroscope and flux gate system with regard to: — size and weight, — accuracy, — reliability — cost	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
022 12 00 00	ALERTING SYSTEMS, PROXIMITY SYSTEMS		
022 12 07 00	Altitude alert system		
LO	State the function and describe an Altitude alert system	X	
LO	List and describe the different types of displays and possible alerts	X	
022 12 08 00	Radio-altimeter		
LO	State the function of a low altitude radio-altimeter	X	
LO	Describe the principle of the distance (height) measurement	X	
LO	State the bandwidth and frequency range used	X	
LO	List the different components of a radio-altimeter and describe the different types of displays	X	
LO	List the systems using the radio-altimeter information	X	
LO	State the range and accuracy of a radio-altimeter	X	
LO	Describe and explain the cable length compensation	X	
022 12 10 00	ACAS/TCAS principles and operations		
LO	State that ACAS II is an ICAO standard for anti-collision purposes	X	
LO	State that TCAS II version 7 is compliant with ACAS II standard	X	
LO	Explain that ACAS II is an anti-collision system and does not guarantee any specific separation	X	
LO	Describe the purpose of an ACAS II system as an anti-collision system	X	
LO	Define a Resolution Advisory (RA) and a Traffic Advisory (TA)	X	
LO	State that resolution advisories are calculated in the vertical plane only (climb or descent)	X	
LO	Explain the difference between a corrective RA and a preventive RA (no modification of vertical speed)	X	
LO	Explain that if two aircraft are fitted with an ACAS II, the RA will be co-ordinated	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State that ACAS II equipment can take into account several threats simultaneously	X	
LO	State that a detected aircraft without altitude reporting can only generate a Traffic Advisory	X	
LO	Describe the TCAS II system in relation to: — Antenna used. — Computer and links with radio altimeter, air data computer and mode S transponder	X	
LO	Identify the inputs and outputs of TCAS II	X	
LO	Explain the principle of TCAS II interrogations	X	
LO	State that standard detection range is approximately 30 NM	X	
LO	State that the normal interrogation period is 1 second	X	
LO	Explain the principle of 'reduced surveillance'	X	
LO	Explain that in high density traffic areas the period can be extended to 5 seconds and the transmission power reduction can reduce the range detection down to 5 NM	X	
LO	Identify the equipment, which an intruder must be fitted with in order to be detected by TCAS II	X	
LO	Explain the anti-collision process: — that the criteria used to trigger an alarm (TA or RA) are the time to reach the Closest Point of Approach, called TAU, and the difference of altitude. — that an intruder will be classified as Proximate when being less than 6 NM and 1200 ft from the TCAS equipped aircraft — that the limit time to CPA is different depending on aircraft altitude, linked to a sensitivity level (SL) and state that the value to trigger a RA is from 15 to 35 seconds. — that, in case of RA, the intended vertical separation varies from 300 to 600 ft (700 ft above FL420), depending on the SL — that below 1 000 ft above ground, no RA can be generated — that below 1 450 ft (radio altimeter value) 'Increase descent' RA is inhibited. — that, in high altitude, performances of the type of aircraft are taken in account to inhibit 'Climb' and 'Increase Climb' RA	X	
LO	List and interpret the following information available from TCAS: — the different possible status for a detected aircraft: other, proximate, intruder — the appropriate graphic symbols and their position on the horizontal display. — different aural warnings	X	
LO	Explain that a RA is presented as a possible vertical speed, on a TCAS indicator or on the Primary Flight Display	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the possible presentation of a RA, on a VSI or on PFD	X	
LO	Explain that the pilot must not interpret the horizontal track of an intruder upon the display	X	
022 13 00 00	INTEGRATED INSTRUMENTS – ELECTRONIC DISPLAYS		
022 13 01 00	Electronic display units		
022 13 01 01	Design, limitations		
LO	List the different technologies used e.g. CRT and LCD and the associated limitations: - cockpit temperature - glare	X	X
022 13 02 00	Mechanical Integrated instruments: ADI/HSI		
LO	Describe an Attitude and Director Indicator (ADI) and a Horizontal Situation Indicator (HSI)	X	X
LO	List all the information that can be displayed for either instruments	X	X
022 13 03 00	Electronic Flight Instrument Systems (EFIS)		
022 13 03 01	Design, operation		
LO	List and describe the different components of an EFIS	X	X
LO	List the following possible inputs and outputs of an EFIS: - control panel - display units - symbol generator - remote light sensor	X	
LO	Describe the function of the symbol generator unit	X	
022 13 03 02	Primary Flight Display (PFD), Electronic Attitude Director Indicator (EADI)		
LO	State that a PFD (or an EADI) presents a dynamic colour display of all the parameters necessary to control the aircraft	X	X
LO	List and describe the following information that can be displayed on the Primary Flight Display (PFD) unit of	X	X

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	an aircraft: <ul style="list-style-type: none"> - Flight Mode Annunciation - basic T: - attitude - IAS - altitude - heading/track indications - vertical speed - maximum airspeed warning - selected airspeed - speed trend vector - selected altitude - current barometric reference - steering indications (FD command bars) - selected heading - Flight Path Vector (FPV) - Radio altitude - Decision height - ILS indications - ACAS (TCAS) indications - failure flags and messages 		
022 13 03 03	Navigation Display (ND), Electronic Horizontal Situation Indicator (EHSI)		
LO	State that a ND (or an EHSI) provides a mode-selectable colour flight navigation display	x	x
LO	List and describe the following four modes displayed on a Navigation Display (ND) unit: — MAP (or ARC): — VOR (or ROSE VOR) — APP (or ROSE LS) — PLAN	x	
LO	List and explain the following information that can be displayed with the MAP (or ARC) mode on a Navigation Display (ND) unit: <ul style="list-style-type: none"> - Selected and current track - Selected and current heading (magnetic or true north reference) - Cross track error 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	<ul style="list-style-type: none"> - Origin and destination airport with runway selected - Bearings To or From the tuned and selected stations - Active and/or secondary flight plan - Range marks - Ground speed - TAS and Ground Speed - Wind direction and speed - Next waypoint distance and estimated time of arrival - Additional navigation facilities (STA), waypoint (WPT) and airports (ARPT) - Weather radar information - Traffic information from the ACAS (TCAS) - Terrain information from the TAWS or HTAWS (EGPWS) - Failure flags and messages 		
LO	List and explain the following information that can be displayed with the VOR/APP (or ROSE VOR/ROSE LS) mode on a Navigation Display (ND) unit: — selected and current track, — selected and current heading (magnetic or true north reference), — VOR course or ILS localizer course. — VOR (VOR or ROSE VOR mode) or LOC course deviation (APP or ROSE LS) — Glide Slope pointer (APP or ROSE LS) — Frequency or identifier of the tuned station. — ground speed — TAS and Ground Speed — Wind direction and speed — Failure flags and messages	x	
LO	Give examples of possible transfers between units	x	
LO	Give examples of EFIS control panels	x	

AMC3 FCL.615**DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES**

Subject Flight Planning and Flight Monitoring (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
033 00 00 00	FLIGHT PLANNING AND FLIGHT MONITORING		
033 02 00 00	FLIGHT PLANNING FOR IFR FLIGHTS		
033 02 01 00	IFR Navigation plan		
033 02 01 01	Airways and routes		
LO	Select the preferred airway(s) or route(s) considering: - Altitudes and Flight levels - Standard routes - ATC restrictions - Shortest distance - Obstacles - Any other relevant data	x	x
033 02 01 02	Courses and distances from en-route charts		
LO	Determine courses and distances	x	x
LO	Determine bearings and distances of waypoints from radio navigation aids	x	x
033 02 01 03	Altitudes		
LO	Define the following altitudes: - Minimum En-route Altitude (MEA) - Minimum Obstacle Clearance Altitude (MOCA) - Minimum Off Route Altitude (MORA) - Grid Minimum Off-Route Altitude (Grid MORA) - Maximum Authorised Altitude (MAA) - Minimum Crossing Altitude (MCA) - Minimum Holding Altitude (MHA)	x	x
LO	Extract the following altitudes from the chart(s): - Minimum En-route Altitude (MEA) - Minimum Obstacle Clearance Altitude (MOCA)	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	<ul style="list-style-type: none"> - Minimum Off Route Altitude (MORA) - Grid Minimum Off-Route Altitude (Grid MORA) - Maximum Authorised Altitude (MAA) - Minimum Crossing Altitude (MCA) - Minimum Holding Altitude (MHA) 		
033 02 01 04	Standard Instrument Departures (SIDs) and Standard Arrival Routes (STARs)		
	LO Explain the reasons for studying SID and STAR charts	x	x
	LO State the reasons why the SID and STAR charts show procedures only in a pictorial presentation style which is not to scale	x	x
	LO Interpret all data and information represented on SID and STAR charts, particularly: <ul style="list-style-type: none"> - Routings - Distances - Courses - Radials - Altitudes/Levels - Frequencies - Restrictions 	x	x
	LO Identify SIDs and STARs which might be relevant to a planned flight	x	x
033 02 01 05	Instrument Approach Charts		
	LO State the reasons for being familiar with instrument approach procedures and appropriate data for departure, destination and alternate airfields	x	x
	LO Select instrument approach procedures appropriate for departure, destination and alternate airfields	x	x
	LO Interpret all procedures, data and information represented on Instrument Approach Charts, particularly: <ul style="list-style-type: none"> - Courses and Radials - Distances - Altitudes/Levels/Heights - Restrictions - Obstructions - Frequencies - Speeds and times - Decision Altitudes/Heights (DA/H) and Minimum Descent Altitudes/Heights (MDA/H) - Visibility and Runway Visual Ranges (RVR) 	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	- Approach light systems		
033 02 01 06	Communications and Radio Navigation planning data		
LO	Find communication frequencies and call signs for the following: - Control agencies and service facilities - Flight information services (FIS) - Weather information stations - Automatic Terminal Information Service (ATIS)	x	x
LO	Find the frequency and/or identifiers of radio navigation aids	x	x
033 02 01 07	Completion of navigation plan		
LO	Complete the navigation plan with the courses, distances and frequencies taken from charts	x	x
LO	Find Standard Instrument Departure and Arrival Routes to be flown and/or to be expected	x	x
LO	Determine the position of Top of Climb (TOC) and Top of Descent (TOD) given appropriate data	x	x
LO	Determine variation and calculate magnetic/true courses	x	x
LO	Calculate True Air Speed (TAS) given aircraft performance data, altitude and Outside Air Temperature (OAT)	x	x
LO	Calculate Wind Correction Angles (WCA)/Drift and Ground Speeds (GS)	x	x
LO	Determine all relevant Altitudes/Levels particularly MEA, MOCA, MORA , MAA, MCA, MRA and MSA	x	x
LO	Calculate individual and accumulated times for each leg to destination and alternate airfields	x	x
033 03 00 00	FUEL PLANNING		
033 03 01 00	General		
LO	Convert between volume, mass and density given in different units which are commonly used in aviation	x	x
LO	Determine relevant data from flight manual, such as fuel capacity, fuel flow/consumption at different power/thrust settings, altitudes and atmospheric conditions	x	x
LO	Calculate attainable flight time/range given fuel flow/consumption and available amount of fuel	x	x
LO	Calculate the required fuel given fuel flow/consumption and required time/range to be flown	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Calculate the required fuel for a VFR flight given expected meteorological conditions and expected delays under defined conditions	x	
LO	Calculate the required fuel for an IFR flight given expected meteorological conditions and expected delays under defined conditions.	x	x
033 04 00 00	PRE-FLIGHT PREPARATION		
033 04 01 00	NOTAM briefing		
033 04 01 01	Ground facilities and services		
LO	Check that ground facilities and services required for the planned flight are available and adequate	x	x
033 04 01 02	Departure, destination and alternate aerodromes		
LO	Find and analyse the latest state at the departure, destination and alternate aerodromes, in particular for: - Opening hours - Work in Progress (WIP) - Special procedures due to Work in Progress (WIP) - Obstructions - Changes of frequencies for communications, navigation aids and facilities	x	x
033 04 01 03	Airway routings and airspace structure		
LO	Find and analyse the latest en-route state for: - Airway(s) or Route(s) - Restricted, Dangerous and Prohibited areas - Changes of frequencies for communications, navigation aids and facilities	x	x
033 04 02 00	Meteorological briefing		
033 04 02 02	Update of navigation plan using the latest meteorological information:		
LO	Confirm the optimum altitude/FL given wind, temperature and aircraft data	x	x
LO	Confirm true altitudes to ensure that statutory minimum clearance is attained given atmospheric data	x	
LO	Confirm magnetic headings and ground speeds	x	x
LO	Confirm the individual leg times and the total time en route	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Confirm the total time en route for the trip to the destination	x	x
LO	Confirm the total time from destination to the alternate airfield	x	x
033 04 02 05	Update of fuel log		
LO	Calculate revised fuel data in accordance with changed conditions	x	x
033 05 00 00	ICAO FLIGHT PLAN (ATS Flight Plan)		
033 05 01 00	Individual Flight Plan		
033 05 01 01	Format of Flight Plan		
LO	State the reasons for a fixed format of an ICAO ATS Flight Plan (FPL)	x	x
LO	Determine the correct entries to complete an FPL plus decode and interpret the entries in a completed FPL, particularly for the following: - Aircraft identification (Item 7) - Flight rules and type of flight (Item 8) - Number and type of aircraft and wake turbulence category (Item 9) - Equipment (Item 10) - Departure aerodrome and time (Item 13) - Route (Item 15) - Destination aerodrome, total estimated elapsed time and Alternate aerodrome (Item 16) - Other information (Item 18) - Supplementary Information (Item 19)	x	x
033 05 01 02	Completion of an ATS Flight Plan (FPL)		
LO	Complete the Flight Plan using information from the following: - Navigation plan - Fuel plan - Operator's records for basic aircraft information	x	x
033 05 03 00	Submission of an ATS Flight Plan (FPL)		
LO	Explain the requirements for the submission of an ATS Flight Plan	x	x
LO	Explain the actions to be taken in case of Flight Plan changes	x	x
LO	State the actions to be taken in case of inadvertent changes to Track, TAS and time estimate affecting	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
	the current Flight Plan		
LO	Explain the procedures for closing a Flight Plan	x	x
033 06 00 00	FLIGHT MONITORING AND IN-FLIGHT RE-PLANNING		
033 06 01 00	Flight monitoring		
033 06 01 01	Monitoring of track and time		
LO	Assess deviations from the planned course, headings (by maintaining desired courses) and times.	x	
LO	State the reasons for possible deviations	x	
LO	Calculate the ground speed using actual in-flight parameters	x	
LO	Calculate expected leg times using actual flight parameters	x	
033 06 01 02	In-flight fuel management		
LO	Explain why fuel checks must be carried out in flight at regular intervals and why relevant fuel data must be recorded	x	
LO	Assess deviations of actual fuel consumption from planned consumption	x	
LO	State reasons for possible deviations	x	
LO	Calculate the fuel quantities used, fuel consumption and fuel remaining at navigation checkpoints/waypoints	x	
LO	Compare the actual and the planned fuel consumption by means of calculation or flight progress chart	x	
LO	Assess the remaining range and endurance by means of calculation or flight progress chart	x	

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DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES

Subject Human Performance (Competency-based modular course according to Appendix 6 A.2)

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
040 00 00 00	HUMAN PERFORMANCE		
040 01 00 00	HUMAN FACTORS: BASIC CONCEPTS		
040 01 01 00	Human Factors in aviation		
040 01 01 01	Becoming a competent pilot		
LO	State that competency is based on the knowledge, skill, and ability of an individual pilot	x	
LO	Outline the factors in training that will ensure the future competency of the individual pilot	x	
040 01 02 00	Accident statistics		
LO	Give an estimate of the accident rate in commercial aviation in comparison to other means of transport	x	
LO	State in general terms the percentage of aircraft accidents which are caused by human factors	x	
LO	Summarise the accident trend in modern aviation	x	
LO	Identify the role of accident statistics in developing a strategy for future improvements to flight safety	x	
040 01 03 00	Flight safety concepts		
LO	Explain the three components of the Threat and Error Management Model (TEM).	x	x
LO	Explain and give examples of latent threats	x	x
LO	Explain and give examples of Environmental Threats	x	x
LO	Explain and give examples of Organizational Threats	x	x
LO	Explain and give a definition of Error according the TEM-model in ICAO Annex 1	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	give examples of different countermeasures which may be used in order to manage Threats, Errors and Undesired Aircraft States	x	x
LO	Explain and give examples of Procedural Error	x	x
LO	Explain and give examples of 'Undesired Aircraft States'	x	
LO	Describe and compare the elements of the SHELL model	x	
LO	Summarise the relevance of the SHELL model to work in the cockpit	x	
LO	Analyse the interaction between the various components of the SHELL model	x	
LO	Explain how the interaction between individual crew members can affect flight safety	x	
LO	Identify and explain the interaction between flight crew and management as a factor in flight safety	x	
040 01 04 00	Safety culture		
LO	Distinguish between 'open cultures' and 'closed cultures'	x	x
LO	Illustrate how Safety Culture is reflected by National Culture	x	x
LO	Question the set expression 'Safety First' in a commercial entity	x	
LO	Explain James Reason 's Swiss Cheese Model	x	x
LO	State important factors that promote a good Safety Culture	x	x
LO	Distinguish between 'Just Culture' and 'Non-punative Culture'	x	x
LO	Name five components which form Safety Culture (According to James Reason)	x	x
040 02 00 00	BASIC AVIATION PHYSIOLOGY AND HEALTH MAINTENANCE		
040 02 01 00	Basics of flight physiology		
040 02 01 01	The Atmosphere		
LO	State the units used in measuring total and partial pressures of the gases in the atmosphere	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	State in terms of % and mm Hg the values of Oxygen, Nitrogen and other gases present in the atmosphere	x	
LO	State that the volume percentage of the gases in ambient air will remain constant for all altitudes at which conventional aircraft operate	x	
LO	State the physiological significance of the following laws: — Boyle's Law — Dalton's Law — Henry's Laws — The General Gas Law	x	
LO	State the ICAO standard temperature at Mean Sea Level and the Standard Temperature Lapse Rate	x	
LO	State at what approximate altitudes in the standard atmosphere the atmospheric pressure will be $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ of MSL pressure	x	
LO	State the effects of increasing altitude on the overall pressure and partial pressures of the various gases in the atmosphere	x	
LO	Explain the differences in gas expansion between alveolar and ambient air when climbing	x	
LO	State the condition required for human beings to be able to survive at any given altitude	x	
LO	State and explain the importance of partial pressure	x	
040 02 01 02	Respiratory and circulatory systems		
LO	List the main components of the respiratory system and their function	x	
LO	Identify the different volumes of air in the lungs and state the normal respiratory rate	x	
LO	State how oxygen and carbon dioxide are transported throughout the body	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the process by which oxygen is transferred to the tissues and carbon dioxide is eliminated from the body and the oxygen requirement of tissues	x	
LO	Explain the role of carbon dioxide in the control and regulation of respiration	x	
LO	Describe the basic processes of external respiration and internal respiration	x	
LO	List the factors determining pulse rate	x	
LO	Name the major components of the circulatory system and describe their function	x	
LO	State the values for a normal pulse rate and the average cardiac output (heart rate x stroke volume) of an adult at rest	x	
LO	Name the four chambers of the heart and state the function of the individual chambers	x	
LO	Differentiate between arteries, veins, and capillaries in their structure and function	x	
LO	State the functions of the coronary arteries and veins	x	
LO	Define 'systolic' and 'diastolic' blood pressure	x	
LO	State the normal blood pressure ranges and units of measurement	x	
LO	State that in an average pilot blood pressure will rise slightly with age as the arteries lose their elasticity	x	
LO	List the main constituents of the blood and describe their functions	x	
LO	Stress the function of haemoglobin in the circulatory system	x	
LO	Define 'anaemia' and state its common causes	x	
LO	Indicate the effect of increasing altitude on haemoglobin oxygen saturation	x	
	<i>Hypertension and Hypotension</i>		
LO	Define 'hypertension' and 'hypotension'	x	
LO	List the effects that high and low blood pressure will have on some normal functions of the human body	x	
LO	State that both hypotension and hypertension may disqualify the pilot from obtaining a medical clearance to fly	x	
LO	List the factors which can lead to hypertension in an individual	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	State the corrective actions that may be taken to reduce high blood pressure	X	
LO	Stress that hypertension is the major factor of 'strokes' in the general population	X	
	Coronary artery disease		
LO	Differentiate between 'angina' and 'heart attack'	X	
LO	Explain the major risk factors for coronary disease	X	
LO	State the role played by physical exercise in reducing the chances of developing coronary disease	X	
	<i>Hypoxia</i>		
LO	Define the two major forms of hypoxia (hypoxic and anaemic) and the common causes of both	X	
LO	State the symptoms of Hypoxia	X	
LO	State why living tissues require oxygen	X	
LO	State that healthy people are able to compensate for altitudes up to approximately 10 000–12 000 ft	X	
LO	Name the three physiological thresholds and allocate the corresponding altitudes for each of them	X	
LO	State the altitude at which short term memory begins to be affected by hypoxia	X	
LO	Define the terms 'Time of Useful Consciousness' (TUC)	X	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	List measures which may be taken to counteract hyperventilation	X	
	<i>Decompression Sickness/Illness</i>		
LO	State the normal range of cabin pressure altitude in pressurized commercial aircraft and describe its protective function for aircrew and passengers	X	
LO	Identify the causes of decompression sickness in flight operation	X	
LO	State how decompression sickness can be prevented	X	
LO	State the threshold for the onset of decompression sickness in terms of altitude	X	
LO	State the approximate altitude above which DCS is likely to occur	X	
LO	List the symptoms of decompression sickness	X	
LO	Indicate how decompression sickness may be treated	X	
LO	List the vital actions the crew has to perform when cabin pressurisation is lost	X	
LO	Define the hazards of diving and flying and give the recommendations associated with these activities	X	
	<i>Acceleration</i>		
LO	Define 'linear', 'angular' and 'radial acceleration'	X	X
LO	Describe the effects of acceleration on the circulation and blood volume distribution	X	X
LO	List the factors determining the effects of acceleration on the human body	X	X
LO	Describe measures which may be taken to increase tolerance to positive acceleration	X	X
LO	List the effects of positive acceleration with respect to type, sequence and the corresponding G-load	X	X
	<i>Carbon Monoxide</i>		

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	State how carbon monoxide may be produced	x	
LO	State how the presence of carbon monoxide in the blood affects the distribution of oxygen	x	
LO	List the signs and symptoms of carbon monoxide poisoning	x	
LO	Indicate how carbon monoxide poisoning can be treated and counter-measures that can be adopted	x	
040 02 02 00	Man and Environment: the sensory system		
LO	List the different senses	x	x
LO	State the multi-sensory nature of human perception	x	x
040 02 02 01	Central, peripheral and autonomic nervous systems		
LO	Name the main parts of the central nervous system	x	
LO	State the basic functions of the Central Nervous System (CNS), the Peripheral Nervous System (PNS) and the Autonomic (Vegetative) System (ANS)	x	
LO	Discuss broadly how information is processed by the nervous systems and the role of reflexes	x	
LO	Define the division of the peripheral nerves into sensory and motor nerves	x	
LO	State that a nerve impulse is an electro-chemical phenomenon	x	
LO	Define the term 'sensory threshold'	x	
LO	Define the term 'sensitivity', especially in the context of vision	x	
LO	Give examples of sensory adaptation	x	
LO	Define the term 'habituation' and state its implication for flight safety	x	
LO	Define biological control systems as neuro-hormonal processes that are highly self regulated in the normal environment	x	
040 02 02 02	Vision		
	<i>Functional anatomy</i>		

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Name the most important parts of the eye and the pathway to the visual cortex	x	
LO	State the basic functions of the parts of the eye	x	
LO	Define 'accommodation'	x	
LO	Distinguish between the functions of the rod and cone cells	x	
LO	Describe the distribution of rod and cone cells in the retina and explain their relevance on vision	x	
	<i>Visual foveal and peripheral vision</i>		
LO	Explain the terms 'visual acuity', 'visual field', 'central vision', 'peripheral vision', 'fovea' and explain their function in the process of vision	x	
LO	List the factors which may degrade visual acuity and the importance of 'lookout'	x	
LO	State the limitations of night vision and the different scanning techniques by both night and day (regularly spaced eye movements each covering an overlapping sector of about 10°)	x	
LO	Explain the adaptation mechanism in vision to cater for reduced and increased levels of illumination	x	
LO	State the time necessary for the eye to adapt both to the dark and bright light	x	
LO	State the effect of hypoxia and smoking on night vision	x	
LO	Explain the nature of colour blindness and the significance of the 'blind spot' on the retina in detecting other traffic in flight	x	
	<i>Binocular and monocular vision</i>		
LO	Distinguish between monocular and binocular vision	x	
LO	Explain the basis of depth perception and its relevance to flight performance	x	
LO	List possible monocular cues for depth perception	x	
LO	State the problems of vision associated with higher energy blue light and ultra violet rays	x	
	<i>Defective vision</i>		
LO	Explain long sightedness, short sightedness and Astigmatism	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	List the causes of and the precautions that may be taken to reduce the probability of vision loss due to: <ul style="list-style-type: none"> — Presbyopia — Cataracts — Glaucoma 	x	
LO	List the types of sunglasses which could cause perceptual problems in flight	x	
LO	List the measures which may be taken to protect oneself from flash-blindness	x	
LO	State the possible problems associated with contact lenses	x	
LO	State the current rules/regulations governing the wearing of corrective spectacles and contact lenses when operating as a pilot	x	
040 02 02 03	Hearing		
	<i>Descriptive and functional anatomy</i>		
LO	State the audible range of the human ear	x	
LO	State the unit of measure for the intensity of sound	x	
LO	Name the most important parts of the ear and the associated neural pathway	x	
LO	State the basic functions of the different parts of the auditory system	x	
LO	Differentiate between the functions of the vestibular apparatus and the cochlea in the inner ear	x	
LO	State the role of the Eustachian tube in equalizing pressure between the middle ear and the environment	x	
LO	Indicate the effects of colds or flu on the ability to equalize pressure in the above	x	
	<i>Hearing loss</i>		

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Define the main causes of the following hearing defects/loss: — 'Conductive deafness' — 'Noise Induced Hearing Loss' (NIHL) — 'Presbycusis'	x	
LO	Summarise the effects of environmental noise on hearing	x	
LO	State the decibel level of received noise that will cause NIHL	x	
LO	Indicate the factors, other than noise level, which may lead to NIHL	x	
LO	Identify the potential occupational risks which may cause hearing loss	x	
LO	List the main sources of hearing loss in the flying environment	x	
LO	List the precautions that may be taken to reduce the probability of onset of hearing loss	x	
040 02 02 04	Equilibrium		
	<i>Functional Anatomy</i>		
LO	List the main elements of the vestibular apparatus	x	x
LO	State the functions of the vestibular apparatus on the ground and in flight	x	x
LO	Distinguish between the component parts of the vestibular apparatus in the detection of linear and angular acceleration as well as on gravity	x	x
LO	Explain how the semicircular canals are stimulated	x	x
	<i>Motion sickness</i>		
LO	Describe air-sickness and its accompanying symptoms	x	x
LO	Indicate that vibration can cause undesirable human responses because of the resonance of the skull and the eyeballs.	x	
LO	List the causes of motion sickness	x	x
LO	Describe the necessary actions to be taken to counteract the symptoms of motion sickness	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
040 02 02 05	Integration of sensory inputs		
LO	State the interaction between vision, equilibrium, proprioception and hearing to obtain spatial orientation in flight	x	x
LO	Define the term 'illusion'	x	x
LO	Give examples of visual illusions based on shape constancy, size constancy, aerial perspective, atmospheric perspective, the absence of focal or ambient cues, autokinesis, vectional false horizons and surface planes	x	x
LO	Relate these illusions to problems that may be experienced in flight and identify the danger attached to them	x	x
LO	State the conditions which cause the 'black hole' effect and 'empty field myopia'	x	x
LO	Give examples of approach and landing illusions, state the danger involved and give recommendations to avoid or counteract these problems	x	x
LO	State the problems associated with flickering lights (strobe-lights, anti-collision lights, etc.)	x	x
LO	Give examples of vestibular illusions such as Somatogyral (the Leans), Coriolis, Somatogravic and g-effect illusions	x	x
LO	Relate the above mentioned vestibular illusions to problems encountered in flight and state the dangers involved	x	x
LO	List and describe the function of the proprioceptive senses ('Seat-of-the-Pants-Sense')	x	x
LO	Relate illusions of the proprioceptive senses to the problems encountered during flight	x	x
LO	State that the 'Seat-of-the-Pants-Sense' is completely unreliable when visual contact with the ground is lost or when flying in IMC or poor visual horizon	x	x
LO	Differentiate between Vertigo, Coriolis effect and spatial disorientation	x	x
LO	Explain The Flicker Effect (Stroboscopic Effect) and discuss counter measures	x	x
LO	Explain how spatial disorientation can result from a mismatch in sensory input and information processing	x	x
LO	List the measures to prevent and/or overcome spatial disorientation	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
040 02 03 00	Health and hygiene		
040 02 03 01	Personal hygiene		
LO	Summarise the role of personal hygiene as a factor in human performance	x	
040 02 03 03	Problem areas for pilots		
	<i>Common Minor Ailments</i>		
LO	State the role of the Eustachian tube in equalizing pressure between the middle ear and the environment	x	
LO	State that the in-flight environment may increase the severity of symptoms which may be minor while on the ground	x	
LO	List the negative effects of suffering from colds or flu on flight operations especially with regard to the middle ear, the sinuses, and the teeth	x	
LO	Indicate the effects of colds or flu on the ability to equalize pressure between the middle ear and the environment	x	
LO	State when a pilot should seek medical advice from an AME, and when the Aeromedical Section of an authority should be informed.	x	
LO	Describe the measures to prevent and/or clear problems due to pressure changes during flight	x	
	<i>Entrapped gases and barotrauma</i>		
LO	Define Barotrauma	x	
LO	Differentiate between otic, sinus, gastro-intestinal and aerodontalgia (of the teeth) barotraumas and explain avoidance strategies	x	
LO	Explain why the effects of otic barotrauma can be worse in the descent	x	
	<i>Gastro-intestinal upsets</i>		
LO	State the effects of gastro-intestinal upsets that may result during flight	x	
	List the precautions that should be observed to reduce the occurrence of gastro-intestinal upsets	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Indicate the major sources of gastro-intestinal upsets	x	
	<i>Obesity</i>		
LO	Define 'obesity'	x	
LO	State the cause of obesity	x	
LO	State the harmful effects of obesity on: <ul style="list-style-type: none"> – Possibility of developing coronary problems – Increased chances of developing diabetes – Ability to withstand g forces – The development of problems with the joints of the limbs – General circulatory problems – Ability to cope with Hypoxia and/or Decompression Sickness 	x	
LO	State the relationship between obesity and Body Mass Index (BMI)	x	
LO	Calculate the BMI of an individual (given weight in Kg and height in metres) and state whether this BMI indicates that the individual is underweight, overweight, obese or within the normal range of body weight	x	
LO	Describe the problems associated with type 2 (mostly adult) diabetes <ul style="list-style-type: none"> – risk factors – insulin resistance – complications (vascular, neurological) and the consequences for the medical licence – pilots are not protected from type 2 diabetes more than other people 	x	
	<i>Back Pain</i>		

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the typical back problems (unspecific back pain, slipped disc) that pilots have. Explain also the ways of preventing and treating these problems <ul style="list-style-type: none"> — good sitting posture — lumbar support — good physical condition — in-flight exercise if possible — physiotherapy 	X	
	<i>Food Hygiene</i>		
LO	Explain the significance of food hygiene with regards to general health	X	
LO	Stress the importance of and methods to be adopted by aircrew especially when travelling abroad to avoid contaminated food and liquids	X	
LO	List the major contaminating sources in foodstuffs	X	
LO	State the major constituents of a healthy diet	X	
LO	State the measure to avoid hypoglycaemia	X	
LO	State the role vitamins and trace elements are playing in a healthy diet	X	
LO	State the importance of adequate hydration	X	
	<i>Infectious diseases</i>		
LO	State the major infectious diseases that may kill or severely incapacitate individuals	X	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	State which preventative hygienic measures, vaccinations, drugs, and other measures, reduce the chances of catching these diseases	x	
LO	State the precautions which must be taken to ensure that disease carrying insects are not transported between areas	x	
040 02 03 04	Intoxication		
	<i>Tobacco</i>		
LO	State the harmful effects of tobacco on: <ul style="list-style-type: none"> – The respiratory system – The cardio-vascular system – The ability to resist hypoxia – The ability to tolerate g forces – Night vision 	x	
	<i>Caffeine</i>		
LO	Indicate the level of caffeine dosage at which performance is degraded	x	
LO	Besides coffee, indicate other beverages containing caffeine	x	
	<i>Alcohol</i>		
LO	State the maximum acceptable limit of alcohol for flight crew	x	
LO	State the effects of consuming alcohol on: <ul style="list-style-type: none"> – Ability to reason – Inhibitions and self control – Vision – Sense of balance and sensory illusions – Sleep patterns – Hypoxia 	x	
LO	State the effects alcohol may have if consumed together with other drugs	x	
LO	List the signs and symptoms of alcoholism	x	
LO	List the factors which may be associated with the development of alcoholism	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Define the 'unit' of alcohol and state approximate elimination rate from the blood	x	
LO	State the maximum daily and weekly intake of units of alcohol which may be consumed without causing damage to organs and systems in the body	x	
	<i>Drugs and self-medication</i>		
LO	State the dangers associated with the use of non-prescription drugs	x	
LO	State the side effects of common non prescription drugs used to treat colds, flu, hay fever and other allergies especially medicines containing anti-histamine preparations	x	
LO	Interpret the rules relevant to using drugs (prescriptive or not prescriptive) that the pilot has not used before.	x	
LO	Interpret the general rule that 'if a pilot is so unwell that he/she requires any medication then he/she should consider him/herself unfit to fly	x	
	<i>Toxic materials</i>		
LO	List those materials present in an aircraft which may, when uncontained, cause severe health problems	x	
LO	List those aircraft component parts which if burnt may give off toxic fumes	x	
040 02 03 05	Incapacitation in flight		
LO	State that incapacitation is most dangerous when its onset is insidious	x	
LO	List the major causes of in-flight incapacitation.	x	
LO	Explain coping methods and procedures	x	
040 03 00 00	BASIC AVIATION PSYCHOLOGY		
040 03 01 00	Human information processing		
040 03 01 01	Attention and vigilance		
LO	Differentiate between 'attention' and 'vigilance'	x	
LO	Differentiate between 'selected' and 'divided' attention	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Define 'hypovigilance'	x	
LO	Identify the factors which may affect the state of vigilance	x	
LO	List the factors that may forestall hypo vigilance during flight	x	
LO	Indicate signs of reduced vigilance	x	
LO	Name factors that affect a person's level of attention	x	
040 03 01 02	Perception		
LO	Name the basis of the perceptual process.	x	
LO	Describe the mechanism of perception ('bottom-up'/'top down' process)	x	
LO	Illustrate why perception is subjective and state the relevant factors which influence interpretation of perceived information	x	
LO	Describe some basic perceptual illusions	x	
LO	Illustrate some basic perceptual concepts	x	
LO	Give examples where perception plays a decisive role in flight safety	x	
LO	Stress how persuasive and believable mistaken perception can manifest itself both on an individual and a group	x	
040 03 01 03	Memory		
LO	Explain the link between the types of memory (to include sensory, working/short term and long term memories)	x	
LO	Describe the differences between the types of memory in terms of capacity and retention time	x	
LO	Justify the importance of sensory store memories in processing information	x	
LO	State the average maximum number of separate items that may be held in working memory.	x	
LO	Stress how interruption can effect the short-term/working memory	x	
LO	Give examples of items that are important for pilots to hold in working memory during flight.	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Describe how the capacity of the working memory store may be increased.	x	
LO	State the sub-divisions of long term memory and give examples of their content	x	
LO	Explain that skills are kept primarily in the long term memory	x	
LO	Explain amnesia and how it effects memory	x	
LO	Name the common problems with both the long and short-term memories and the best methods to try and counter-act them	x	
040 03 01 04	Response selection		
	<i>Learning principles and techniques</i>		
LO	Explain and distinguish between the following basic forms of learning: <ul style="list-style-type: none"> – Classical and operant conditioning (behaviouristic approach) – Learning by insight (cognitive approach) – Learning by imitating (modeling) 	x	
LO	Find pilot related examples for each of these learning forms	x	
LO	State factors which are necessary for and promote the quality of learning	x	
LO	Explain ways to facilitate the memorisation of information by the following learning techniques : <ul style="list-style-type: none"> – Mnemonics – Mental training 	x	
LO	Describe the advantage of planning and anticipation of future actions <ul style="list-style-type: none"> – Define the term 'skills' – State the 3 phases of learning a skill (ANDERSON) 	x	
LO	Explain the term 'motor-programme' or 'mental schema'	x	
LO	Describe the advantages and disadvantages of mental schemata	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the model by Rasmussen which describes the guidance of a pilot's behaviour in different situations	x	
LO	State possible problems or risks associated with skill-based, rule-based, and knowledge-based behaviour	x	
LO	Explain the following phases in connection with the acquisition of automated behaviour <ul style="list-style-type: none"> — Cognitive phase — Associative phases — Automatic phase 	x	
	Motivation		
LO	Define motivation	x	
LO	Explain the influences of different levels of motivation on performance taking into consideration task difficulty	x	
LO	Explain the 'Model of Human Needs' (Maslow) and relate this to aviation	x	
LO	Explain the relationship between motivation and learning	x	
LO	Explain the problems of over-motivation especially in the context of extreme need of achievement	x	
040 03 02 00	Human error and reliability		
040 03 02 01	Reliability of human behaviour		
LO	Name and explain factors which influence human reliability	x	
040 03 02 02	Mental models and situation awareness		
LO	Define the term 'situation awareness'	x	x
LO	List cues which indicate the loss of situation awareness and name the steps to regain it	x	x
LO	List factors which influence one's Situation Awareness both positively and negatively and stress the importance of Situation Awareness in the context of flight safety	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
	LO Define the term 'mental model' in relation to a surrounding complex situation	x	x
	LO Describe the advantage/disadvantage of mental models	x	x
	LO Explain the relationship between personal 'mental models' and the creation of cognitive illusions	x	x
040 03 02 03	Theory and model of human error		
	LO Define the term 'error'	x	x
	LO Explain the concept of the 'error chain'	x	x
	LO Differentiate between an isolated error and an error chain	x	x
	LO Distinguish between the main forms/types of errors (i.e. slips, faults, omissions and violations)	x	x
	LO Discuss the above errors and their relevance in-flight	x	x
	LO Distinguish between an active and a latent error and give examples	x	x
040 03 02 04	Error generation		
	LO Distinguish between internal and external factors in error generation	x	x
	LO Identify possible sources of internal error generation	x	x
	LO Define and discuss the two errors associated with motor programmes	x	x
	LO List the three main sources for external error generation in the cockpit	x	x
	LO Give examples to illustrate the following factors in external error generation in the cockpit: <ul style="list-style-type: none"> — Ergonomics — Economics — Social environment 	x	x
	LO Name major goals in the design of human centred man-machine interfaces	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Define the term 'error tolerance'	X	X
LO	List (and describe) strategies which are used to reduce human error	X	X
040 03 03 00	Decision making		
040 03 03 01	Decision-making concepts		
LO	Define the term 'deciding' and 'decision-making'	X	X
LO	Describe the major factors on which a decision-making should be based during the course of a flight	X	X
LO	Describe the main human attributes with regard to decision making	X	X
LO	Discuss the nature of bias and its influence on the decision making process	X	X
LO	Describe the main error sources and limits in an individual's decision making mechanism	X	X
LO	State the factors upon which an individual's risk assessment is based	X	X
LO	Explain the relationship between risk assessment, commitment, and pressure of time on decision making strategies	X	X
LO	Describe the positive and negative influences exerted by other group members on an individual's decision making process	X	X

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the general idea behind the creation of a model for decision making based upon: <ul style="list-style-type: none"> — definition of the aim — collection of information — risk assessment — development of options — evaluation of options — decision — implementation — consequences — review and feedback 	x	x
040 03 04 00	Avoiding and managing errors: cockpit management		
040 03 04 01	<i>Safety awareness</i>		
LO	Justify the need for being aware of not only one's own performance but that of others before and during a flight and the possible consequences and/or risks	x	x
LO	Stress the overall importance of constantly and positively striving to monitor for errors and thereby maintaining situation awareness	x	x
040 03 04 04	Communication		
LO	Explain the function of 'information'	x	
LO	Define the term 'communication'	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	List the most basic components of interpersonal communication	x	
LO	Explain the advantages of two-way communication as opposed to one-way communication	x	
LO	Explain the statement by Watzlawick 'One cannot not communicate.'	x	
LO	Distinguish between verbal and non-verbal communication	x	
LO	Name the functions of non-verbal communication	x	
LO	Describe general aspects of non-verbal communication	x	
LO	Describe the advantages/disadvantages of implicit and explicit communication	x	
LO	State the attributes and possible problems of using 'professional' language	x	
LO	Name and explain major obstacles to effective communication	x	
LO	Give examples of aircraft accidents arising from poor communications	x	
LO	Explain the difference between intra and interpersonal conflict	x	
LO	Describe the escalation process in human conflict	x	
LO	List typical consequences of conflicts between crew members	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the following terms as part of communication practice in regard to preventing or solving conflicts: <ul style="list-style-type: none"> — Inquiry — Active listening — Advocacy — Feedback — Metacommunication — Negotiation 	x	
040 03 05 00	Human behaviour		
040 03 05 01	Personality, attitude and behaviour		
LO	Describe the factors which determine an individual's behaviour	x	
LO	Define and distinguish between personality, attitude, and behaviour	x	
LO	State the origin of personality and attitudes	x	
LO	State that with behaviours good and bad habits can be formed	x	
LO	Explain how behaviour is generally a product of personality and attitude	x	
LO	Discuss some effects that personality and attitudes may have on flight crew performance	x	
040 03 05 02	Individual differences in personality and motivation		
LO	Describe the individual differences in personality by the mean of a common trait model (e.g.Eysenck's personality factors) and use it to describe today's ideal pilot	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
	Self-concept		
LO	Define the term 'self-concept' and the part it plays in any change of personality	x	
LO	Explain how a self-concept of under-confidence may lead to an outward show of aggression and self-assertiveness	x	
	Self-discipline		
LO	Define 'self-discipline' and justify its importance for flight safety	x	
040 03 06 00	Human overload and underload		
040 03 06 01	Arousal		
LO	Explain the term 'arousal'	x	
LO	Describe the relationship between arousal and performance	x	
LO	Explain the circumstances under which underload may occur and its possible dangers	x	
040 03 06 02	Stress		
LO	Explain the term 'homeostasis'	x	
LO	Explain the term 'stress'. Why is stress a natural human reaction	x	
LO	State that the physiological response to stress is generated by the 'fight or flight' response	x	
LO	Describe the function of the autonomic nervous system (ANS) in stress response	x	
LO	Explain the biological reaction to stress by means of the general adaptation syndrome (GAS)	x	x
LO	Explain the relationship between arousal and stress	x	
LO	State the relationship between stress and performance	x	
LO	State the basic categories of stressors	x	
LO	List and discuss the major environmental sources of stress in the cockpit	x	
LO	Discuss the concept of 'break-point' with regard to stress, overload and performance	x	
LO	Name the principal causes of domestic stress	x	

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	State that the stress experienced as a result of particular demands varies between individuals	X	
LO	Explain the factors which lead to differences in the levels of stress experienced by individuals	X	
LO	List factors influencing the tolerance of stressors	X	
LO	Explain a simple model of stress	X	
LO	Explain the relationship between stress and anxiety	X	
LO	Describe the effects of anxiety on human performance	X	
LO	State the general effect of acute stress on the human system	X	
LO	Name the 3 phases of the GAS	X	X
LO	Name the symptoms of stress relating to the different phases of the GAS	X	X
LO	Describe the relationship between stress, arousal and vigilance	X	
LO	State the general effect of chronic stress on the human system	X	
LO	Explain the differences between psychological, psychosomatic and somatic stress reactions	X	
LO	Name typical common physiological and psychological symptoms of human overload	X	
LO	Describe effects of stress on human behaviour	X	
LO	Explain how stress is cumulative and how stress from one situation can be transferred to a different situation	X	X
LO	Explain how successful completion of a stressful task will reduce the amount of stress experienced when a similar situation arises in the future	X	X
LO	Describe the effect of human under/overload on effectiveness in the cockpit	X	X

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	List sources and symptoms of human underload	x	x
040 03 06 05	Fatigue and stress management		
LO	Explain the term 'fatigue' and differentiate between the two types of fatigue	x	
LO	Name causes for both types	x	
LO	Identify symptoms and describe the effects of fatigue	x	
LO	List strategies which prevent or delay the onset of fatigue and hypovigilance	x	
LO	List and describe coping strategies for dealing with stress factors and stress reactions	x	
LO	Distinguish between short-term and long-term methods of stress management	x	
LO	Give examples of short term methods of stress management	x	
LO	Give examples of long-term methods of coping with stress	x	
040 03 07 00	Advanced cockpit automation		
040 03 07 01	Advantages and disadvantages		
LO	Define and explain the basic concept of automation	x	x
LO	List the advantages/disadvantages of automation in the cockpit in respect of level of vigilance, attention, workload, situation awareness and crew coordination	x	x
LO	State the advantages and disadvantages of the two components of the man-machine system with regard to information input and processing, decision making, and output activities	x	x
LO	Explain the 'ironies of automation'	x	x
LO	Give examples of methods to overcome the disadvantages of automation	x	x
040 03 07 02	Automation complacency		
LO	State the main weaknesses in the monitoring of automatic systems	x	x

Syllabus Reference	Syllabus and Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the following terms in connection with automatic systems: <ul style="list-style-type: none"> — Passive monitoring — Blinkered concentration — Confusion — Mode awareness 	x	x
LO	Give examples of actions which may be taken to counteract ineffective monitoring of automatic systems	x	x
LO	Define 'complacency'	x	x
040 03 07 03	Working concepts		
LO	Summarise how the negative effects of automation on pilots may be alleviated	x	x
LO	Interpret the role of automation with respect to flight safety	x	x

AMC5 FCL.615**DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES**

Subject Meteorology (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
050 00 00 00	METEOROLOGY		
050 01 00 00	THE ATMOSPHERE		
050 01 01 00	Composition, extent, vertical division		
050 01 01 01	Structure of the atmosphere		
LO	Describe the vertical division of the atmosphere, based on the temperature variations with height	x	
LO	List the different layers and their main qualitative characteristics	x	
050 01 01 02	Troposphere		
LO	Describe the troposphere	x	
LO	Describe the main characteristics of the tropopause	x	
LO	Describe the proportions of the most important gases in the air in the troposphere	x	
LO	Describe the variations of the flight level and temperature of the tropopause from the poles to the equator	x	
LO	Describe the breaks in the tropopause along the boundaries of the main air masses	x	
LO	Indicate the variations of the flight level of the tropopause with the seasons and the variations of atmospheric pressure		
050 01 02 00	Air temperature		
050 01 02 01	Definition and units		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Define air temperature	x	
LO	List the units of measurement of air temperature used in aviation meteorology (°C, °F, Kelvin) (<i>Refer to 050 10 01 01</i>)	x	
050 01 02 02	Vertical distribution of temperature		
LO	Describe the mean vertical distribution of temperature up to 20 km	x	
LO	Mention general causes of the cooling of the air in the troposphere with increasing altitude	x	
LO	Calculate the temperature and temperature deviations at specified levels	x	
050 01 02 03	Transfer of heat		
LO	Explain how local cooling or warming processes result in transfer of heat	x	
LO	Describe radiation	x	
LO	Describe solar radiation reaching the earth	x	
LO	Describe the filtering effect of the atmosphere on solar radiation	x	
LO	Describe terrestrial radiation	x	
LO	Explain how terrestrial radiation is absorbed by some components of the atmosphere	x	
LO	Explain the greenhouse effect due to water vapour and some other gases in the atmosphere	x	
LO	Explain the effect of absorption and radiation in connection with clouds	x	
LO	Explain the process of conduction	x	
LO	Explain the role of conduction in the cooling and warming of the atmosphere	x	
LO	Explain the process of convection	x	
LO	Name situations in which convection occurs	x	
LO	Explain the process of advection	x	
LO	Name situations in which advection occurs	x	
LO	Describe transfer of heat by turbulence	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe transfer of latent heat	x	
050 01 02 04	Lapse rates		
LO	Describe qualitatively and quantitatively the temperature lapse rates of the troposphere (mean value 0.65°C/100 m or 2°C/1 000 ft and actual values)	x	x
050 01 02 05	Development of inversions, types of inversions		
LO	Describe development and types of inversions	x	x
LO	Explain the characteristics of inversions and of an isothermal layer	x	x
LO	Explain the reasons for the formation of the following inversions: – ground inversion (nocturnal radiation/advection), subsidence inversion, frontal inversion, inversion above friction layer, valley inversion – tropopause inversion	x	x
050 01 02 06	Temperature near the earth's surface, surface effects, diurnal and seasonal variation, effect of clouds, effect of wind		
LO	Describe how the temperature near the earth's surface is influenced by seasonal variations	x	x
LO	Explain the cooling and warming of the air on the earth or sea surfaces	x	x
LO	Sketch the diurnal variation of the temperature of the air in relation to the radiation of the sun and of the earth	x	x
LO	Describe qualitatively the influence of the clouds on the cooling and warming of the surface and the air near the surface	x	x
LO	– Distinguish between the influence of low or high clouds, thick or thin clouds	x	x
LO	Explain the influence of the wind on the cooling and warming of the air near the surfaces	x	x
050 01 03 00	Atmospheric pressure		
050 01 03 01	Barometric pressure, isobars		
LO	Define atmospheric pressure	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	List the units of measurement of the atmospheric pressure used in aviation (hPa, inches) (<i>Refer to 050 10 01 01</i>)	x	x
LO	Describe the principle of the barometers (mercury barometer, aneroid barometer)	x	
LO	Describe isobars on the surface weather charts	x	x
LO	Define high, low, trough, ridge, wedge, col	x	x
050 01 03 02	Pressure variation with height, contours (isohypses)		
LO	Explain the pressure variation with height	x	x
LO	Describe qualitatively the variation of the barometric lapse rate <i>Note: The average value for the barometric lapse rate near mean sea level is 27 ft (8 m) per 1 hPa, at about 5500 m/AMSL is 50 ft (15 m) per 1 hPa</i>	x	x
LO	Describe and interpret contour lines (isohypses) on a constant pressure chart (<i>Refer to 050 10 02 03</i>)	x	x
050 01 03 03	Reduction of pressure to mean sea level, QFF		
LO	Define QFF	x	x
LO	Explain the reduction of measured pressure to mean sea level, QFF	x	x
LO	Mention the use of QFF for surface weather charts	x	x
050 01 03 04	Relationship between surface pressure centres and pressure centres aloft		
LO	Illustrate with a vertical cross section of isobaric surfaces the relationship between surface pressure systems and upper air pressure systems	x	x
050 01 04 00	Air density		
050 01 04 01	Relationship between pressure, temperature and density		
LO	Describe the relationship between pressure, temperature and density	x	x
LO	Describe the vertical variation of the air density in the atmosphere	x	x
LO	Describe the effect of humidity changes on the density of air	x	x
050 01 05 00	ICAO Standard Atmosphere (ISA)		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
050 01 05 01	ICAO Standard Atmosphere		
	LO Explain the use of standardised values for the atmosphere	x	x
	LO List the main values of the ISA (mean sea level pressure, mean sea level temperature, the vertical temperature lapse rate up to 20 km, height and temperature of the tropopause)	x	x
	LO Calculate the standard temperature in degree Celsius for a given flight level	x	x
	LO Determine a standard temperature deviation by the difference between the given outside air temperature and the standard temperature	x	x
050 01 06 00	Altimetry		
050 01 06 01	Terminology and definitions		
	LO Define the following terms and abbreviations and explain how they are related to each other: height, altitude, pressure altitude, flight level, level, true altitude, true height, elevation, QNH, QFE and standard altimeter setting	x	x
	LO Describe the terms transition altitude, transition level, transition layer, terrain clearance, lowest usable flight level	x	x
050 01 06 02	Altimeter settings		
	LO Name the altimeter settings associated to height, altitude, pressure altitude and flight level	x	
	LO Describe the altimeter setting procedures	x	
050 01 06 03	Calculations		
	LO Calculate the different readings on the altimeter when the pilot changes the altimeter setting	x	x
	LO Illustrate with a numbered example the changes of altimeter setting and the associated changes in reading when the pilot climbs through the transition altitude or descends through the transition level	x	x
	LO Derive the reading of the altimeter of an aircraft on the ground when the pilot uses the different settings	x	x
	LO Explain the influence of the air temperature on the distance between the ground and the level read on the altimeter and between two flight levels	x	x
	LO Explain the influence of pressure areas on the true altitude	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Determine the true altitude/height for a given altitude/height and a given ISA temperature deviation	x	x
LO	Calculate the terrain clearance and the lowest usable flight level for given atmospheric temperature and pressure conditions	x	x
	<p><i>Note: The following rules shall be considered for altimetry calculations:</i></p> <ul style="list-style-type: none"> <i>a. All calculations are based on rounded pressure values to the nearest lower hPa</i> <i>b. The value for the barometric lapse rate near mean sea level is 27 ft (8 m) per 1 hPa</i> <i>c. To determine the true altitude/height the following rule of thumb, called the '4 %-rule', shall be used: the altitude/height changes by 4 % for each 10°C temperature deviation from ISA</i> <i>d. If no further information is given, the deviation of outside air temperature from ISA is considered to be constantly the same given value in the whole layer</i> <i>e. The elevation of the airport has to be taken into account. The temperature correction has to be considered for the layer between ground and the position of the aircraft</i> 		
050 01 06 04	Effect of accelerated airflow due to topography		
LO	Describe qualitatively how the effect of accelerated airflow due to topography (Bernoulli effect) affects altimetry	x	x
050 02 00 00	WIND		
050 02 01 00	Definition and measurement of wind		
050 02 01 01	Definition and measurement		
LO	Define wind	x	
LO	State the units of wind direction and speed (kt, m/s, km/h)	x	
LO	Explain how wind is measured in meteorology	x	
050 02 02 00	Primary cause of wind		
050 02 02 01	Primary cause of wind, pressure gradient, coriolis force, gradient wind		
LO	Define the term horizontal pressure gradient	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
050 02 02 03	Effects of convergence and divergence		
	LO Describe atmospheric convergence and divergence	x	x
	LO Explain the effect of convergence and divergence on the following: pressure systems at the surface and aloft; wind speed; vertical motion and cloud formation (relationship between upper air conditions and surface pressure systems)	x	x
050 02 03 00	General global circulation		
050 02 03 01	General circulation around the globe		
	LO Describe and explain the general global circulation (<i>Refer to 050 08 01 01</i>)	x	
050 02 04 00	Local winds		
050 02 04 01	Anabatic and katabatic winds, mountain and valley winds, venturi effects, land and sea breezes		
	LO Describe and explain anabatic and katabatic winds	x	x
	LO Describe and explain mountain and valley winds	x	x
	LO Describe and explain the venturi effect, convergence in valleys and mountain areas	x	x
	LO Describe and explain land and sea breezes, sea breeze front	x	x
050 02 05 00	Mountain waves (standing waves, lee waves)		
050 02 05 01	Origin and characteristics		
	LO Describe and explain the origin and formation of mountain waves	x	x
	LO State the conditions necessary for the formation of mountain waves	x	x
	LO Describe the structure and properties of mountain waves	x	x
	LO Explain how mountain waves may be identified by their associated meteorological phenomena	x	x
050 02 06 00	Turbulence		
050 02 06 01	Description and types of turbulence		
	LO Describe turbulence and gustiness	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	List common types of turbulence (convective, mechanical, orographic, frontal, clear air turbulence)	x	x
050 02 06 02	Formation and location of turbulence		
LO	Explain the formation of convective turbulence, mechanical and orographic turbulence, frontal turbulence, clear air turbulence (<i>Refer to 050 02 06 03</i>)	x	x
LO	State where turbulence will normally be found (rough ground surfaces, relief, inversion layers, CB, TS zones, unstable layers)	x	x
050 02 06 03	Clear Air Turbulence (CAT): Description, cause and location		
LO	Describe the term CAT	x	
LO	Explain the formation of CAT (<i>Refer to 050 02 06 02</i>)	x	
050 02 07 00	Jet streams		
050 02 07 01	Description		
LO	Describe jet streams	x	
LO	State the defined minimum speed of a jet stream	x	
LO	State typical figures for the dimensions of jet streams	x	
050 03 00 00	THERMODYNAMICS		
050 03 01 00	Humidity		
050 03 01 01	Water vapour in the atmosphere		
LO	Describe humid air	x	x
LO	Describe the significance for meteorology of water vapour in the atmosphere	x	x
LO	Indicate the sources of atmospheric humidity	x	x
050 03 01 02	Mixing ratio		
LO	Define mixing ratio, saturation mixing ratio	x	
LO	Name the unit used in meteorology to express the mixing ratio (g/kg)	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	LO Explain the factors influencing the mixing ratio	x	
	LO Recognise the lines of equal mixing ratio on a simplified diagram (T,P)	x	
	LO Define saturation of air by water vapour	x	
	LO Illustrate with a diagram (T, mixing ratio) the influence of the temperature on the saturation mixing ratio, at constant pressure	x	
	LO Explain the influence of the pressure on the saturation mixing ratio	x	
	<p><i>Note: A simplified diagram (T,P) contains</i></p> <ul style="list-style-type: none"> — on the x-axis temperature (T) — on the y-axis height corresponding to pressure (P) <p><i>The degree of saturation/mixing ratio, stability/instability are shown as functions of temperature change with height (as lines or curves in the diagram)</i></p>		
050 03 01 03	Temperature/dew point, relative humidity		
	LO Define dew point	x	x
	LO Recognise the dew point curve on a simplified diagram (T,P)	x	x
	LO Define relative humidity	x	x
	LO Explain the factors influencing the relative humidity at constant pressure	x	x
	LO Explain the diurnal variation of the relative humidity	x	x
	LO Describe the relationship between relative humidity, the amount of water vapour and the temperature	x	x
	LO Describe the relationship between temperature and dew point	x	x
	LO Estimate the relative humidity of the air from the difference between dew point and temperature	x	x
050 03 02 00	Change of state of aggregation		
050 03 02 01	Condensation, evaporation, sublimation, freezing and melting, latent heat		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Define condensation, evaporation, sublimation, freezing, melting and latent heat	x	
LO	List the conditions for condensation/evaporation	x	
LO	Explain the condensation process	x	
LO	Explain the nature of and the need for condensation nuclei	x	
LO	Explain the effects of condensation on the weather	x	
LO	List the conditions for freezing/melting	x	
LO	Explain the process of freezing	x	
LO	Explain the nature of and the need for freezing nuclei	x	
LO	Define supercooled water (<i>Refer to 050 09 01 01</i>)	x	
LO	List the conditions for sublimation	x	
LO	Explain the sublimation process	x	
LO	Explain the nature of and the need for sublimation nuclei	x	
LO	Describe the absorption or release of latent heat in each change of state of aggregation	x	
LO	Explain the influence of atmospheric pressure, the temperature of the air and of the water or ice on the changes of state of aggregation	x	
LO	Illustrate all the changes of state of aggregation with practical examples	x	
050 03 03 00	Adiabatic processes		
050 03 03 01	Adiabatic processes, stability of the atmosphere		
LO	Describe the adiabatic processes	x	
LO	Describe the adiabatic process in an unsaturated rising or descending air particle	x	
LO	— Explain the variation of temperature with changing altitude	x	
LO	— Explain the changes which take place in relative humidity with changing altitude	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	— Use the dry adiabatic and mixing ratio lines on a simplified diagram (T,P) for a climbing or descending air particle	x	
LO	Describe the adiabatic process in a saturated rising or descending air particle	x	
LO	— Explain the variation of temperature with changing altitude	x	
LO	— Explain the difference in temperature lapse rate between saturated and unsaturated air	x	
LO	— Explain the influence of different air temperatures on the temperature lapse rate in saturated air	x	
LO	— Use the saturated adiabatic lines on a simplified diagram (T,P) for a climbing or descending air particle	x	
LO	— Find the condensation level, or base of the clouds on a simplified diagram (T,P)	x	
LO	Explain the static stability of the atmosphere with reference to the adiabatic lapse rates	x	
LO	Define qualitatively and quantitatively the terms stability, conditional instability, instability and indifferent (neutral)	x	
LO	Explain with a sketch on a simplified diagram (T,P) the different possibilities of atmospheric stability: absolute stability, absolute instability, conditional instability and indifferent	x	
LO	Illustrate with a sketch of the adiabatic lapse rates and the vertical temperature profile of the atmosphere the effect of an inversion on the vertical motion of air	x	
LO	Illustrate with a schematic sketch of the saturated adiabatic lapse rate and the vertical temperature profile the instability inside a cumuliform cloud	x	
LO	Illustrate with a schematic sketch the formation of the subsidence inversion	x	
LO	Illustrate with a schematic sketch the formation of Foehn	x	
LO	Explain the effect on the stability of the air caused by advection of air (warm or cold)	x	
	<i>Note: Dry adiabatic lapse rate = 1°C/100 m or 3°C/1 000 ft; average value at lower levels for saturated adiabatic lapse rate = 0.6°C/100 m or 1.8°C/1 000 ft (values to be used in examinations)</i>		
050 04 00 00	CLOUDS AND FOG		
050 04 01 00	Cloud formation and description		
050 04 01 01	Cloud formation		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain cloud formation by adiabatic cooling, conduction, advection and radiation	x	x
LO	Describe the cloud formation based on the following lifting processes: unorganised lifting in thin layers and turbulent mixing; forced lifting at fronts or over mountains; free convection	x	x
LO	Determine the cloud base and top in a simplified diagram (temperature, pressure, humidity)	x	x
LO	Explain the influence of relative humidity on the height of the cloud base	x	x
LO	Illustrate in a thermodynamic diagram the meaning of convective temperature (temperature at which formation of cumulus starts)	x	x
LO	List cloud types typical for stable and unstable air conditions	x	x
LO	Summarise the conditions for the dissipation of clouds	x	x
050 04 01 02	Cloud types and cloud classification		
LO	Describe cloud types and cloud classification	x	x
LO	Identify by shape cirriform, cumuliform and stratiform clouds	x	x
LO	Identify by shape and typical level the ten cloud types (genera)	x	x
LO	Describe and identify by shape the following species and supplementary feature: castellanus, lenticularis, fractus, humilis, mediocris, congestus, calvus, capillatus and virga	x	x
LO	Distinguish between low, medium and high level clouds according to the WMO cloud étage (including heights) — for mid-latitudes — for all latitudes	x	x
LO	Distinguish between ice clouds, mixed clouds and pure water clouds	x	x
050 04 01 03	Influence of inversions on cloud development		
LO	Explain the influence of inversions on vertical movements in the atmosphere	x	x
LO	Explain the influence of an inversion on the formation of stratus clouds	x	x
LO	Explain the influence of ground inversion on the formation of fog	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Determine the top of a cumulus cloud caused by an inversion on a simplified diagram	x	x
050 04 01 04	Flying conditions in each cloud type		
LO	Assess the ten cloud types for icing and turbulence	x	x
050 04 02 00	Fog, mist, haze		
050 04 02 01	General aspects		
LO	Define fog, mist and haze with reference to WMO standards of visibility range	x	x
LO	Explain the formation of fog, mist and haze in general	x	x
LO	Name the factors contributing in general to the formation of fog and mist	x	x
LO	Name the factors contributing to the formation of haze	x	x
LO	Describe freezing fog and ice fog	x	x
050 04 02 02	Radiation fog		
LO	Explain the formation of radiation fog	x	x
LO	Explain the conditions for the development of radiation fog	x	x
LO	Describe the significant characteristics of radiation fog, and its vertical extent	x	x
LO	Summarise the conditions for the dissipation of radiation fog	x	x
050 04 02 03	Advection fog		
LO	Explain the formation of advection fog	x	x
LO	Explain the conditions for the development of advection fog	x	x
LO	Describe the different possibilities of advection fog formation (over land, sea and coastal regions)	x	x
LO	Describe significant characteristics of advection fog	x	x
LO	Summarise the conditions for the dissipation of advection fog	x	x
050 04 02 04	Steam fog		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	LO Explain the formation of steam fog	x	x
	LO Explain the conditions for the development of steam fog	x	x
	LO Describe significant characteristics of steam fog	x	x
	LO Summarise the conditions for the dissipation of steam fog	x	x
050 04 02 05	Frontal fog		
	LO Explain the formation of frontal fog	x	x
	LO Explain the conditions for the development of frontal fog	x	x
	LO Describe significant characteristics of frontal fog	x	x
	LO Summarise the conditions for the dissipation of frontal fog	x	x
050 04 02 06	Orographic fog (hill fog)		
	LO Summarise the features of orographic fog	x	x
	LO Explain the conditions for the development of orographic fog	x	x
	LO Describe significant characteristics of orographic fog	x	x
	LO Summarise the conditions for the dissipation of orographic fog	x	x
050 05 00 00	PRECIPITATION		
050 05 01 00	Development of precipitation		
050 05 01 01	Process of development of precipitation		
	LO Distinguish between the two following processes by which precipitation is formed	x	x
	LO — Summarise the outlines of the ice crystal process (Bergeron-Findeisen)	x	x
	LO — Summarise the outlines of the coalescence process	x	x
	LO Describe the atmospheric conditions that favour either process	x	x
	LO Explain the development of snow, rain, drizzle and hail	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
050 05 02 00	Types of precipitation		
050 05 02 01	Types of precipitation, relationship with cloud types		
LO	List and describe the types of precipitation given in the TAF and METAR codes (drizzle, rain, snow, snow grains, ice pellets, hail, small hail, snow pellets, ice crystals, freezing drizzle, freezing rain)	x	x
LO	State ICAO/WMO approximate diameters for cloud, drizzle and rain drops	x	x
LO	State approximate weights and diameters for hailstones	x	x
LO	Explain the mechanism for the formation of freezing precipitation	x	x
LO	Describe the weather conditions that give rise to freezing precipitation	x	x
LO	Distinguish between the types of precipitation generated in convective and stratiform cloud	x	x
LO	Assign typical precipitation types and intensities to different clouds	x	x
050 06 00 00	AIR MASSES AND FRONTS		
050 06 01 00	Air masses		
050 06 01 01	Description, classification and source regions of air masses		
LO	Define the term air mass	x	x
LO	Describe the properties of the source regions	x	x
LO	Summarise the classification of air masses by source regions	x	x
LO	State the classifications of air masses by temperature and humidity at source	x	x
LO	State the characteristic weather in each of the air masses	x	x
LO	Name the three main air masses that affect Europe	x	x
LO	Classify air masses on a surface weather chart	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<p><i>Note: Names and abbreviations of air masses used in examinations:</i></p> <ul style="list-style-type: none"> – first letter: humidity continental (c), maritime (m) – second letter: type of air mass Arctic (A), Polar (P), Tropical (T), Equatorial (E) – third letter: temperature cold (c), warm (w) 		
050 06 01 02	Modifications of air masses		
	LO List the environmental factors that affect the final properties of an air mass	x	x
	LO Explain how maritime and continental tracks modify air masses	x	x
	LO Explain the effect of passage over cold or warm surfaces	x	x
	LO Explain how air mass weather is affected by the season, the air mass track and by orographic and thermal effects over land	x	x
	LO Assess the tendencies of the stability for an air mass and describe the typical resulting air mass weather including the hazards for aviation	x	x
050 06 02 00	Fronts		
050 06 02 01	General aspects		
	LO Describe the boundaries between air masses (fronts)	x	x
	LO Define front and frontal surface (frontal zone)	x	x
	LO Name the global frontal systems (polar front, arctic front)	x	
	LO State the approximate seasonal latitudes and geographic positions of the polar front and the arctic front	x	
050 06 02 02	Warm front, associated clouds and weather		
	LO Define a warm front	x	x
	LO Describe the cloud, weather, ground visibility and aviation hazards at a warm front depending on the stability of the warm air	x	x
	LO Explain the seasonal differences in the weather at warm fronts	x	x
	LO Describe the structure, slope and dimensions of a warm front	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	LO Sketch a cross-section of a warm front, showing weather, cloud and aviation hazards	x	x
050 06 02 03	Cold front, associated clouds and weather		
	LO Define a cold front	x	x
	LO Describe the cloud, weather, ground visibility and aviation hazards at a cold front depending on the stability of the warm air	x	x
	LO Explain the seasonal differences in the weather at cold fronts	x	x
	LO Describe the structure, slope and dimensions of a cold front	x	x
	LO Sketch a cross-section of a cold front, showing weather, cloud and aviation hazards	x	x
050 06 02 04	Warm sector, associated clouds and weather		
	LO Define fronts and air masses associated with the warm sector	x	x
	LO Describe the cloud, weather, ground visibility and aviation hazards in a warm sector	x	x
	LO Explain the seasonal differences in the weather in the warm sector	x	x
	LO Sketch a cross-section of a warm sector, showing weather, cloud and aviation hazards	x	x
050 06 02 05	Weather behind the cold front		
	LO Describe the cloud, weather, ground visibility and aviation hazards behind the cold front	x	x
	LO Explain the seasonal differences in the weather behind the cold front	x	x
050 06 02 06	Occlusions, associated clouds and weather		
	LO Define the term occlusion	x	x
	LO Define a cold occlusion	x	x
	LO Define a warm occlusion	x	x
	LO Describe the cloud, weather, ground visibility and aviation hazards in a cold occlusion	x	x
	LO Describe the cloud, weather, ground visibility and aviation hazards in a warm occlusion	x	x
	LO Explain the seasonal differences in the weather at occlusions	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Sketch a cross-section of cold and warm occlusions, showing weather, cloud and aviation hazards	x	x
LO	In a sketch plan illustrate the development of an occlusion and the movement of the occlusion point	x	x
050 06 02 07	Stationary front, associated clouds and weather		
LO	Define a stationary or quasi-stationary front	x	x
LO	Describe the cloud, weather, ground visibility and aviation hazards in a stationary or quasi-stationary front	x	x
050 06 02 08	Movement of fronts and pressure systems, life cycle		
LO	Describe the movements of fronts and pressure systems and the life cycle of a mid-latitude depression	x	x
LO	State the rules for predicting the direction and the speed of movement of fronts	x	x
LO	Explain the difference between the speed of movement of cold and warm fronts	x	x
LO	State the rules for predicting the direction and the speed of movement of frontal depressions	x	x
LO	Describe, with a sketch if required, the genesis, development and life cycle of a frontal depression with associated cloud and rain belts	x	x
050 06 02 09	Changes of meteorological elements at a frontal wave		
LO	Sketch a plan and a cross-section of a frontal wave (warm front, warm sector and cold front) and illustrate the changes of pressure, temperature, surface wind and wind in the vertical axis	x	x
050 07 00 00	PRESSURE SYSTEMS		
050 07 02 00	Anticyclone		
050 07 02 01	Anticyclones, types, general properties, cold and warm anticyclones, ridges and wedges, subsidence		
LO	List the different types of anticyclones	x	x
LO	Describe the effect of high level convergence in producing areas of high pressure at ground level	x	x
LO	Describe air mass subsidence, its effect on the environmental lapse rate, and the associated weather	x	x
LO	Describe the formation of warm and cold anticyclones	x	x
LO	Describe the formation of ridges and wedges (<i>Refer to 050 08 03 02</i>)	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the properties of and the weather associated with warm and cold anticyclones	x	x
LO	Describe the properties of and the weather associated with ridges and wedges	x	x
LO	Describe the blocking anticyclone and its effects	x	x
050 07 03 00	Non frontal depressions		
050 07 03 01	Thermal-, orographic-, polar- and secondary depressions, troughs		
LO	Describe the effect of high level divergence in producing areas of low pressure at ground level	x	x
LO	Describe the formation and properties of thermal-, orographic- (lee lows), polar- and secondary depressions	x	x
LO	Describe the formation, the properties and the associated weather of troughs	x	x
050 08 00 00	CLIMATOLOGY		
050 08 03 00	Typical weather situations in the mid-latitudes		
050 08 03 01	Westerly situation (westerlies)		
LO	Identify on a weather chart the typical westerly situation with travelling polar front waves	x	x
LO	Describe the typical weather in the region of the travelling polar front waves including the seasonal variations	x	x
LO	State the differences between the northern and the southern hemisphere (roaring forties)		
050 08 03 02	High pressure area		
LO	Describe the high pressure zones with the associated weather	x	x
LO	Identify on a weather chart high pressure regions	x	x
LO	Describe the weather associated with wedges in the polar air (<i>Refer to 050 07 02 01</i>)	x	x
050 08 03 03	Flat pressure pattern		
LO	Identify on a surface weather chart the typical flat pressure pattern	x	x
LO	Describe the weather associated with a flat pressure pattern	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
050 08 03 04	Cold air pool (cold air drop)		
	LO Define cold air pool	x	
	LO Describe the formation of a cold air pool	x	
	LO Describe the characteristics of a cold air pool with regard to dimensions, duration of life, geographical position, seasons, movements, weather activities and dissipation	x	
	LO Identify cold air pools on weather charts	x	
	LO Explain the problems and dangers for aviation	x	
050 08 04 00	Local winds and associated weather		
050 08 04 01	Foehn, Mistral, Bora, Scirocco, Ghibli and Khamsin		
	LO Describe the classical mechanism for the development of Foehn winds (including Chinook)	x	
	LO Describe the weather associated with Foehn winds	x	
	LO Describe the formation of, the characteristics of, and the weather associated with the Mistral, the Bora, the Scirocco, the Ghibli and the Khamsin	x	
050 09 00 00	FLIGHT HAZARDS		
050 09 01 00	Icing		
050 09 01 01	Conditions for ice accretion		
	LO Summarise the general conditions under which ice accretion occurs on aircraft (temperatures of outside air; temperature of the airframe; presence of supercooled water in clouds, fog, rain and drizzle; possibility of sublimation)	x	x
	LO Indicate the general weather conditions under which ice accretion in venturi carburettor occurs	x	x
	LO Explain the general weather conditions under which ice accretion on airframe occurs	x	x
	LO Explain the formation of supercooled water in clouds, rain and drizzle (<i>Refer to 050 03 02 01</i>)	x	x
	LO Explain qualitatively the relationship between the air temperature and the amount of supercooled water	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain qualitatively the relationship between the type of cloud and the size and number of the droplets, in cumuliform and stratiform clouds	x	x
LO	Indicate in which circumstances ice can form on an aircraft on the ground: air temperature, humidity, precipitation	x	x
LO	Explain in which circumstances ice can form on an aircraft in flight: inside clouds, in precipitation, outside clouds and precipitation	x	x
LO	Describe the different factors influencing the intensity of icing: air temperature, amount of supercooled water in a cloud or in precipitation, amount of ice crystals in the air, speed of the aircraft, shape (thickness) of the airframe parts (wings, antennas, a.s.o.)	x	x
LO	Explain the effects of topography on icing	x	x
LO	Explain the higher concentration of water drops in stratiform orographic clouds	x	x
050 09 01 02	Types of ice accretion		
LO	Define clear ice	x	x
LO	Describe the conditions for the formation of clear ice	x	x
LO	Explain the formation of the structure of clear ice with the release of latent heat during the freezing process	x	x
LO	Describe the aspect of clear ice: appearance, weight, solidity	x	x
LO	Define rime ice	x	x
LO	Describe the conditions for the formation of rime ice	x	x
LO	Describe the aspect of rime ice: appearance, weight, solidity	x	x
LO	Define mixed ice	x	x
LO	Describe the conditions for the formation of mixed ice	x	x
LO	Describe the aspect of mixed ice: appearance, weight, solidity	x	x
LO	Describe the possible process of ice formation in snow conditions	x	x
LO	Define hoar frost	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the conditions for the formation of hoar frost	x	x
LO	Describe the aspect of hoar frost: appearance, solidity	x	x
050 09 01 03	Hazards of ice accretion, avoidance		
LO	State the ICAO qualifying terms for the intensity of icing (<i>See ICAO ATM Doc 4444</i>)	x	x
LO	Describe, in general, the hazards of icing	x	x
LO	Assess the dangers of the different types of ice accretion	x	x
LO	Describe the position of the dangerous zones of icing in fronts, in stratiform and cumuliform clouds and in the different precipitation types	x	x
LO	Indicate the possibilities of avoidance — in the flight planning: weather briefing, choice of track and altitude — during flight: recognition of the dangerous zones, choice of appropriate track and altitude	x	x
050 09 02 00	Turbulence		
050 09 02 01	Effects on flight, avoidance		
LO	State the ICAO qualifying terms for the intensity of turbulence (<i>See ICAO ATM Doc 4444</i>)	x	x
LO	Describe the effects of turbulence on an aircraft in flight	x	x
LO	Indicate the possibilities of avoidance — in the flight planning: weather briefing, choice of track and altitude — during flight: choice of appropriate track and altitude	x	x
050 09 03 00	Wind shear		
050 09 03 01	Definition of wind shear		
LO	Define wind shear (vertical and horizontal)	x	x
LO	Define low level wind shear	x	x
050 09 03 02	Weather conditions for wind shear		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	LO Describe conditions where and how wind shear can form (e.g. thunderstorms, squall lines, fronts, inversions, land and sea breeze, friction layer, relief)	x	x
050 09 03 03	Effects on flight, avoidance		
	LO Describe the effects on flight caused by wind shear	x	x
	LO Indicate the possibilities of avoidance – in the flight planning – during flight	x	x
050 09 04 00	Thunderstorms		
050 09 04 01	Conditions for and process of development, forecast, location, type specification		
	LO Name the cloud types which indicate the development of thunderstorms	x	x
	LO Describe the different types of thunderstorms, their location, the conditions for and the process of development and list their properties (air mass thunderstorms, frontal thunderstorms, squall lines, supercell storms, orographic thunderstorms)	x	x
050 09 04 02	Structure of thunderstorms, life history		
	LO Describe and sketch the stages of the life history of a thunderstorm: initial, mature and dissipating stage	x	x
	LO Assess the average duration of thunderstorms and their different stages	x	x
	LO Describe supercell storm: initial, supercell, tornado and dissipating stage	x	x
	LO Summarise the flight hazards of a fully developed thunderstorm	x	x
	LO Indicate on a sketch the most dangerous zones in and around a thunderstorm	x	x
050 09 04 03	Electrical discharges		
	LO Describe the basic outline of the electric field in the atmosphere	x	x
	LO Describe the electrical potential differences in and around a thunderstorm	x	x
	LO Describe and asses 'St. Elmo's fire'	x	x
	LO Describe the development of lightning discharges	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	LO Describe the effect of lightning strike on aircraft and flight execution	x	x
050 09 04 04	Development and effects of downbursts		
	LO Define the term downburst	x	x
	LO Distinguish between macroburst and microburst	x	x
	LO State the weather situations leading to the formation of downbursts	x	x
	LO Describe the process of development of a downburst	x	x
	LO Give the typical duration of a downburst	x	x
	LO Describe the effects of downbursts	x	x
050 09 04 05	Thunderstorm avoidance		
	LO Explain how the pilot can anticipate each type of thunderstorms: pre-flight weather briefing, observation in flight, use of specific meteorological information, use of information given by ground weather radar and by airborne weather radar (<i>Refer to 050 10 01 04</i>), use of the stormscope (lightning detector)	x	x
	LO Describe practical examples of flight techniques used to avoid the hazards of thunderstorms	x	x
050 09 05 00	Tornadoes		
050 09 05 01	Properties and occurrence		
	LO Define the tornado	x	x
050 09 06 00	Inversions		
050 09 06 01	Influence on aircraft performance		
	LO Explain the influence of inversions on the aircraft performance	x	x
	LO Compare the flight hazards during take-off and approach associated to a strong inversion alone and to a strong inversion combined with marked wind shear	x	x
050 09 08 00	Hazards in mountainous areas		
050 09 08 01	Influence of terrain on clouds and precipitation, frontal passage		
	LO Describe the influence of a mountainous terrain on cloud and precipitation	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the effects of the Foehn	x	x
LO	Describe the influence of a mountainous area on a frontal passage	x	x
050 09 08 02	Vertical movements, mountain waves, wind shear, turbulence, ice accretion		
LO	Describe the vertical movements, wind shear and turbulence typical of mountain areas	x	x
LO	Indicate in a sketch of a chain of mountains the turbulent zones (mountain waves, rotors)	x	x
LO	Explain the influence of relief on ice accretion	x	x
050 09 08 03	Development and effect of valley inversions		
LO	Describe the formation of valley inversion due to the katabatic winds	x	x
LO	Describe the valley inversion formed by warm winds aloft	x	x
LO	Describe the effects of a valley inversion for an aircraft in flight	x	x
050 09 09 00	Visibility reducing phenomena		
050 09 09 01	Reduction of visibility caused by precipitation and obscurations		
LO	Describe the reduction of visibility caused by precipitation: drizzle, rain, snow	x	x
LO	Describe the reduction of visibility caused by obscurations: – fog, mist, haze, smoke, volcanic ash – sand (SA), dust (DU)	x	x
LO	Describe the differences between the ground visibility, flight visibility, slant visibility and vertical visibility when an aircraft is above or within a layer of haze or fog	x	x
050 09 09 02	Reduction of visibility caused by other phenomena		
LO	Describe the reduction of visibility caused by – low drifting and blowing snow – low drifting and blowing dust and sand – duststorm (DS) and sandstorm (SS)	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> – icing (windshield) – the position of the sun relative to the visual direction – the reflection of sun's rays from the top of layers of haze, fog and clouds 	x	x
		x	x
		x	x
050 10 00 00	METEOROLOGICAL INFORMATION		
050 10 01 00	Observation		
050 10 01 01	Surface observations		
	LO Define surface wind	x	
	LO Describe the meteorological measurement of surface wind	x	
	LO List the ICAO units for the wind direction and speed used in the METARs (kt, m/s, km/h) (<i>Refer to 050 02 01 01</i>)	x	
	LO Define gusts, as given in the METARs	x	
	LO Distinguish wind given in METARs and wind given by the control tower for take-off and landing	x	
	LO Define visibility	x	x
	LO Describe the meteorological measurement of visibility	x	x
	LO Define prevailing visibility	x	x
	LO Define ground visibility	x	x
	LO List the units used for visibility (m, km)	x	x
	LO Define runway visual range	x	x
	LO Describe the meteorological measurement of runway visual range	x	x
	LO Indicate where the transmissometers/forward-scatter meters are placed on the airport	x	x
	LO List the units used for runway visual range (m)	x	x
	LO List the different possibilities to transmit information about runway visual range to pilots	x	x
	LO Compare visibility and runway visual range	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Indicate the means of observation of present weather	x	
LO	Indicate the means of observing clouds: type, amount, height of base (ceilometers) and top	x	
LO	List the clouds considered in meteorological reports, and how they are indicated in METARs (TCU, CB)	x	x
LO	Define oktas	x	x
LO	Define cloud base	x	x
LO	Define ceiling	x	x
LO	Name the unit and the reference level used for information about cloud base (ft)	x	x
LO	Define vertical visibility	x	x
LO	Explain briefly how and when the vertical visibility is measured	x	x
LO	Name the unit used for vertical visibility (ft)	x	x
LO	Indicate the means of observation of air temperature (thermometer)	x	
LO	List the units used for air temperature (°C, °F, Kelvin) <i>(Refer to 050 01 02 01)</i>	x	
LO	Indicate the means of observation of relative humidity (hygrometer and psychrometer) and dew point temperature (calculation)	x	
LO	Name the units of relative humidity (%) and dew point temperature (°C, °F)	x	
LO	Indicate the means of observation of atmospheric pressure (mercury and aneroid barometer)	x	
LO	List the units of atmospheric pressure (hPa, inches) <i>(Refer to 050 01 03 01)</i>	x	
050 10 01 02	Radiosonde observations		
LO	Describe the principle of radiosondes	x	
LO	Describe and interpret the sounding by radiosonde given on a simplified T,P diagram	x	
050 10 01 03	Satellite observations		
LO	Describe the basic outlines of satellite observations	x	
LO	Name the main uses of satellite pictures in aviation meteorology	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the different types of satellite imagery	x	
LO	Interpret qualitatively the satellite pictures in order to get useful information for the flights: – location of clouds (distinguish between stratiform and cumuliform clouds) – location of fronts – location of jet streams	x x	
050 10 01 04	Weather radar observations		
LO	Describe the basic principle and the type of information given by ground weather radar	x	
LO	Interpret ground weather radar images	x	x
LO	Describe the basic principle and the type of information given by airborne weather radar	x	x
LO	Describe the limits and the errors of airborne weather radar information	x	x
LO	Interpret typical airborne weather radar images	x	x
050 10 01 05	Aircraft observations and reporting		
LO	Describe routine air-report and special air-report	x	
LO	State the obligation of a pilot to make air-reports	x	
LO	Name weather phenomena to be stated in a special air-report	x	
050 10 02 00	Weather charts		
050 10 02 01	Significant weather charts		
LO	Decode and interpret significant weather charts (low, medium and high level)	x	x
LO	Describe from a significant weather chart the flight conditions at designated locations and/or along a defined flight route at a given flight level	x	x
050 10 02 02	Surface charts		
LO	Recognize the following weather systems on a surface weather chart (analysed and forecast): ridges, cols and troughs; fronts; frontal side, warm sector and rear side of mid-latitude frontal lows; high and low pressure areas	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Determine from surface weather charts the wind direction and speed	x	
050 10 02 03	Upper air charts		
LO	Define constant pressure chart	x	
LO	Define isohypse (contour line) (<i>Refer to 050 01 03 02</i>)	x	
LO	Define isotherm	x	
LO	Define isotach	x	
LO	Describe forecast upper wind and temperature charts	x	
LO	For designated locations and/or routes determine from forecast upper wind and temperature charts, if necessary by interpolation, the spot/average values for outside air temperature, temperature deviation from ISA, wind direction and wind speed	x	
LO	Name the most common flight levels corresponding to the constant pressure charts	x	
050 10 03 00	Information for flight planning		
050 10 03 01	Aviation weather messages		
LO	Describe, decode and interpret the following aviation weather messages (given in written and/or graphical format): METAR, SPECI, TREND, TAF, SIGMET, AIRMET, GAMET, special air-report, volcanic ash advisory information	x	x
LO	Describe the general meaning of MET REPORT and SPECIAL	x	x
LO	List, in general, the cases when a SIGMET and an AIRMET are issued	x	x
LO	Describe, decode (by using a code table) and interpret the following messages: Runway State Message (as written in a METAR), GAFOR	x	x
	<i>Note: For Runway State Message and GAFOR refer to Air Navigation Plan European Region ICAO Doc 7754</i>		
050 10 03 02	Meteorological broadcasts for aviation		
LO	Describe the meteorological content of broadcasts for aviation: — VOLMET, ATIS	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— HF-VOLMET		
050 10 03 03	Use of meteorological documents		
	LO Describe meteorological briefing and advice	x	x
	LO List the information that a flight crew can receive from meteorological services for pre-flight planning and apply the content of these information on a designated flight route	x	x
	LO List the meteorological information that a flight crew can receive from services during flight and apply the content of these information for the continuation of the flight	x	x
050 10 03 04	Meteorological warnings		
	LO Describe and interpret aerodrome warnings and wind shear warnings and alerts	x	x
050 10 04 00	Meteorological services		
050 10 04 01	World area forecast system and meteorological offices		
	LO Name the main objectives of the world area forecast system	x	
	— World area forecast centres (upper air forecasts)	x	
	— Meteorological offices (aerodrome forecasts, briefing documents)	x	
	— Meteorological watch offices (SIGMET, AIRMET)	x	
	— Aeronautical meteorological stations (METAR, MET reports)	x	
	— Volcanic ash advisory centres	x	
	— Tropical cyclone advisory centres		
050 10 04 02	International organisations		
	LO Describe briefly the following organisations and their chief activities:	x	
	— International Civil Aviation Organization (ICAO) (<i>Refer to subject 010</i>)		
	— World Meteorological Organization (WMO)		

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DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES

Subject Radio Navigation (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
062 00 00 00	RADIO NAVIGATION		
062 01 00 00	BASIC RADIO PROPAGATION THEORY		
062 01 01 00	Basic principles		
062 01 01 01	Electromagnetic waves		
	LO State that radio waves travel at the speed of light, being approximately 300 000km/s or 162 000 NM/s	x	
	LO Define a cycle. A complete series of values of a periodical process	x	
	LO Define Hertz. One Hertz is one cycle per second	x	
062 01 01 02	Frequency, wavelength, amplitude, phase angle		
	LO Define frequency. The number of cycles occurring in one second in a radio wave expressed in Hertz (Hz)	x	
	LO Define wavelength. The physical distance travelled by a radio wave during one cycle of transmission	x	
	LO Define amplitude. The maximum deflection in an oscillation or wave	x	
	LO State that the relationship between wavelength and frequency is: wavelength (λ) = <u>speed of light (c)</u> or $\lambda(\text{meters}) = \frac{300\,000}{\text{Frequency (f) kHz}}$	x	
	LO Define phase. The fraction of one wavelength expressed in degrees from 000° to 360°	x	
	LO Define phase difference/shift. The angular difference between the corresponding points of two cycles of	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	equal wavelength, which is measurable in degrees		
062 01 01 03	Frequency bands, sidebands, single sideband		
LO	List the bands of the frequency spectrum for electromagnetic waves: Very Low Frequency (VLF) 3 – 30 kHz Low Frequency (LF) 30 – 300 kHz Medium frequency (MF) 300 – 3 000 kHz High frequency (HF) 3 – 30 MHz Very high frequency (VHF) 30 – 300 MHz Ultra high frequency (UHF) 300 – 3 000 MHz Super high frequency (SHF) 3 – 30 GHz Extremely high frequency (EHF) 30 – 300 GHz	x	
LO	State that when a carrier wave is modulated, the resultant radiation consists of the carrier frequency plus additional upper and lower sidebands	x	
LO	State that HF Volmet, and HF two-way communication use a single sideband	x	
LO	State that a radio signal may be classified by three symbols in accordance with the ITU radio regulation vol.1: e.g. A1A – First symbol indicates the type of modulation of the main carrier – Second symbol indicates the nature of the signal modulating the main carrier – Third symbol indicates the nature of the information to be transmitted	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
062 01 01 04	Pulse characteristics		
LO	Define the following terms as associated with a pulse string <ul style="list-style-type: none"> — Pulse length — Pulse power — Continuous power 	x	
062 01 01 05	Carrier, modulation		
LO	Define carrier wave. The radio wave acting as the carrier or transporter	x	
LO	Define keying. Interrupting the carrier wave to break it into dots and dashes	x	
LO	Define modulation. The technical term for the process of impressing and transporting information by radio waves	x	
062 01 01 06	Kinds of modulation (amplitude, frequency, pulse, phase)		
LO	Define amplitude modulation. The information is impressed onto the carrier wave by altering the amplitude of the carrier	x	
LO	Define frequency modulation. The information is impressed onto the carrier wave by altering the frequency of the carrier	x	
LO	Describe pulse modulation. A modulation form used in radar, by transmitting short pulses followed by larger interruptions	x	
LO	Describe phase modulation. A modulation form used in GPS where the phase of the carrier wave is reversed	x	
062 01 02 00	Antennas		
062 01 02 01	Characteristics		
LO	Define antenna. A wave type transducer for the process of converting a line AC into a free electromagnetic wave	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that the simplest type of antenna is a dipole which is a wire of length equal to one half of the wavelength	x	
LO	State that in a wire which is fed with an AC (alternating current), some of the power will radiate into space	x	
LO	State that in a wire parallel to the wire fed with an AC but remote from it, an AC will be induced	x	
LO	State that an electromagnetic wave always consists of an oscillating electric (E) and an oscillating magnetic (H) field which propagates at the speed of light	x	
LO	State that the (E) and (H) fields are perpendicular to each other. The oscillations are perpendicular to the propagation direction and are in phase	x	
LO	State that the electric field is parallel to the wire and the magnetic field is perpendicular to it	x	
062 01 02 02	Polarisation		
LO	State that the polarisation of an electromagnetic wave describes the orientation of the plane of oscillation of the electrical component of the wave with regard to its direction of propagation	x	
LO	State that in Linear Polarisation the plane of oscillation is fixed in space whereas in Circular (elliptical) polarisation, the plane is rotating	x	
LO	Explain the difference between horizontal and vertical polarisation in the dependence of the alignment of the dipole	x	
062 01 02 03	Types of antennas		
LO	List and describe the common different kinds of directional antennas: <ul style="list-style-type: none"> — Loop antenna used in old ADF receivers — Parabolic antenna used in weather radars — Slotted planar array used in more modern weather radars — Helical antenna used in GPS transmitters 	x	
062 01 03	Wave propagation		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
00			
062 01 03 01	Structure of the ionosphere		
LO	State that the ionosphere is the ionized component of the Earth's upper atmosphere from 60 to 400 km above the surface, which is vertically structured in three regions or layers	x	
LO	State that the layers in the ionosphere are named D, E and F layers and their depth varies with time	x	
LO	State that electromagnetic waves refracted from the E and F layers of the ionosphere are called sky waves	x	
062 01 03 02	Ground waves		
LO	Define ground or surface waves. The electromagnetic waves travelling along the surface of the earth	x	
062 01 03 03	Space waves		
LO	Define space waves. The electromagnetic waves travelling through the air directly from the transmitter to the receiver	x	
062 01 03 04	Propagation with the frequency bands		
LO	State that radio waves in VHF, UHF, SHF and EHF propagate as space waves	x	
LO	State that radio waves in VLF, LF, MF and HF propagate as surface/ground waves and sky waves	x	
062 01 03 05	Doppler principle		
LO	State that Doppler effect is the phenomena that the frequency of an electromagnetic wave will increase or decrease if there is relative motion between the transmitter and the receiver	x	
LO	State that the frequency will increase if the transmitter and receiver are converging and will decrease if they are diverging	x	
062 01 03 06	Factors affecting propagation		
LO	Define Skip Distance. The distance between the transmitter and the point on the surface of the earth where the first sky return arrives	x	
LO	State that skip zone/dead space is the distance between the limit of the surface wave and the sky wave	x	
LO	Describe Fading. When a receiver picks up the sky signal and the surface signal, the signals will interfere with each other causing the signals to be cancelled out.	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that radio waves in the VHF band and above are limited in range as they are not reflected by the ionosphere and do not have a surface wave.	x	
LO	Describe the physical phenomena reflection, refraction, diffraction, absorption and interference	x	
062 02 00 00	RADIO AIDS		
062 02 01 00	Ground D/F		
062 02 01 01	Principles		
LO	Describe the use of a Ground Direction Finder	x	
LO	Explain why the service provided is subdivided as: <ul style="list-style-type: none"> — VHF direction finding (VDF) — UHF direction finding (UDF) 	x	
LO	Explain the limitation of range because of the path of the VHF signal	x	
LO	Describe the operation of the VDF in the following general terms: <ul style="list-style-type: none"> — Radio waves emitted by the radio telephony (R/T) equipment of the aircraft — Special directional antenna — Determination of the direction of the incoming signal — ATC display 	x	
062 02 01 02	Presentation and interpretation		
LO	Define the term QDM. The magnetic bearing to the station	x	
LO	Define the term QDR. The magnetic bearing from the station	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Define the term QUJ. The true bearing to the station	x	
LO	Define the term QTE. The true bearing from the station	x	
LO	Explain that by using more than one ground station, the position of an aircraft can be determined and transmitted to the pilot	x	
062 02 01 03	Coverage and range		
LO	Use the formula, $1,23 \times \sqrt{\text{transmitter height in feet}} + 1,23 \times \sqrt{\text{receiver height in feet}}$, to calculate the range in NM	x	x
062 02 01 04	Errors and accuracy		
LO	Explain why synchronous transmissions will cause errors	x	
LO	Describe the effect of multipath signals	x	
LO	Explain that VDF information is divided into the following classes according to ICAO Annex 10: <ul style="list-style-type: none"> — Class A. Accurate to within $\pm 2^\circ$ — Class B. Accurate to within $\pm 5^\circ$ — Class C. Accurate to within $\pm 10^\circ$ — Class D. Accurate to less than class C 	x	
062 02 02 00	NDB/ADF		
062 02 02 01	Principles		
LO	Define the abbreviation NDB Non Directional Beacon	x	x
LO	Define the abbreviation ADF Automatic Direction Finder	x	x
LO	State that the NDB is the ground part of the system	x	x
LO	State that the ADF is the airborne part of the system	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that NDB operates in the LF and MF frequency bands	x	x
LO	The frequency band assigned to aeronautical NDBs according to ICAO Annex 10 is 190–1750 kHz	x	x
LO	Define a locator beacon. An LF/MF NDB used as an aid to final approach usually with a range, according to ICAO Annex 10, of 10–25 NM	x	x
LO	Explain the difference between NDBs and locator beacons	x	x
LO	Explain which beacons transmit signals suitable for use by an ADF	x	x
LO	State that certain commercial radio stations transmit within the frequency band of the NDB	x	x
LO	Explain why it is necessary to use a directionally sensitive receiver antenna system in order to obtain the direction of the incoming radio wave	x	x
LO	Describe the use of NDBs for navigation	x	x
LO	Describe the procedure to identify an NDB station	x	x
LO	Interpret the term ‘cone of silence’ in respect of an NDB	x	x
LO	State that an NDB station emits a NON/A1A or a NON/A2A signal	x	x
LO	State the function of the BFO (Beat Frequency Oscillator)	x	x
LO	State that in order to identify a NON/A1A NDB, the BFO circuit of the receiver has to be activated	x	x
LO	State that the NDB emitting NON/A1A gives rise to erratic indications of the bearing while the station is identifying	x	x
LO	Explain that on modern aircraft the BFO is activated automatically	x	x
062 02 02 02	Presentation and interpretation		
LO	Name the types of indicator in common use: — Electronic navigation display	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Radio Magnetic Indicator RMI — Fixed card ADF (radio compass) — Moving card ADF 		
	LO Describe the indications given on RMI, fixed card and moving card ADF displays	x	x
	LO Given a display interpret the relevant ADF information	x	x
	LO Calculate the true bearing from the compass heading and relative bearing	x	x
	LO Convert the compass bearing into magnetic bearing and true bearing	x	x
	LO Describe how to fly the following in-flight ADF procedures according to Doc 8168 Vol. 1: <ul style="list-style-type: none"> — Homing and tracking and explain the influence of wind — Interceptions — Procedural turns — Holding patterns 	x	x
062 02 02 03	Coverage and range		
	LO State that the power limits the range of an NDB	x	x
	LO Explain the relationship between power and range	x	
	LO State that the range of an NDB over sea is better than over land due to better ground wave propagation over seawater than over land	x	x
	LO Describe the propagation path of NDB radio waves with respect to the ionosphere and the Earth's surface	x	x
	LO Explain that interference between sky and ground waves at night leads to 'fading'	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Define the accuracy the pilot has to fly the required bearing in order to be considered established during approach according to ICAO DOC 8168 as within $\pm 5^\circ$	x	x
LO	State that there is no warning indication of NDB failure	x	x
062 02 02 04	Errors and accuracy		
LO	Define Quadrantal Error. Distortion of the incoming signal from the NDB station by re-radiation from the airframe. This is corrected for during installation of the antenna	x	
LO	Explain Coastal Refraction. As a radio wave travelling over land crosses the coast, the wave speeds up over water and the wave front bends	x	x
LO	Define Night/twilight effect. The influence of sky waves and ground waves arriving at the ADF receiver with a difference of phase and polarisation which introduce bearing errors	x	x
LO	State that interference from other NDB stations on the same frequency may occur at night due to sky wave contamination	x	x
062 02 02 05	Factors affecting range and accuracy		
LO	State that there is no coastal refraction error when: <ul style="list-style-type: none"> — The propagation direction of the wave is 90° to the coast line — The NDB station is sited on the coast line 	x	x
LO	State that coastal refraction error increases with increased incidence.	x	x
LO	State that night effect predominates around dusk and dawn.	x	x
LO	Define multipath propagation of the radio wave (mountain effect).	x	x
LO	State that static emission energy from a cumulonimbus cloud may interfere with the radio wave and influence the ADF bearing indication.	x	x
062 02 03 00	VOR and Doppler-VOR		
062 02 03 01	Principles		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain the operation of VOR using the following general terms: <ul style="list-style-type: none"> — Reference phase — Variable phase — Phase difference 	x	
LO	State that the frequency band allocated to VOR according to ICAO Annex 10 is VHF and the frequencies used are 108.0–117.975 MHz.	x	x
LO	State that frequencies in the allocated VOR range with the first decimal place an odd number, are used by ILS	x	x
LO	State that the following types of VOR are in operation: <ul style="list-style-type: none"> — Conventional VOR (CVOR) a first generation VOR station emitting signals by means of a rotating antenna — Doppler VOR (DVOR) a second generation VOR station emitting signals by means of a combination of fixed antennas utilising the Doppler principle — En-route VOR for use by IFR traffic — Terminal VOR (TVOR) a station with a shorter range used as part of the approach and departure structure at major airports — Test VOR (VOT) a VOR station emitting a signal to test VOR indicators in an aircraft 	x	x
LO	Describe how ATIS information is transmitted on VOR frequencies.	x	x
LO	List the three main components of VOR airborne equipment: <ul style="list-style-type: none"> — The antenna — The receiver 	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— The indicator		
LO	Describe the identification of a VOR in terms of Morse-code letters, continuous tone or dots (VOT), tone pitch, repetition rate and additional plain text	x	x
LO	State that according to ICAO Annex 10, a VOR station has an automatic ground monitoring system	x	
LO	State that the VOR monitoring system monitors change in measured radial and reduction in signal strength	x	
LO	State that failure of the VOR station to stay within the required limits can cause the removal of identification and navigation components from the carrier or radiation to cease	x	x
062 02 03 02	Presentation and interpretation		
LO	Read off the radial on a Radio Magnetic Indicator (RMI)	x	x
LO	Read off the angular displacement, in relation to a pre-selected radial on an HSI or CDI	x	x
LO	Explain the use of the TO/FROM indicator in order to determine aircraft position relative to the VOR considering also the heading of the aircraft	x	x
LO	Interpret VOR information as displayed on HSI, CDI and RMI	x	x
LO	Describe the following in-flight VOR procedures as in DOC 8168 Vol.1: — Tracking and explain the influence of wind when tracking — Interceptions — Procedural turns — Holding patterns	x	x
LO	State that when converting a radial into a true bearing, the variation at the VOR station has to be taken into account	x	x
062 02 03 03	Coverage and Range		
LO	Describe the range with respect to the transmitting power and radio signal	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Calculate the range using the formula: $1,23 \times \sqrt{\text{transmitter height in feet}} + 1,23 \times \sqrt{\text{receiver height in feet}}$	x	x
062 02 03 04	Errors and accuracy		
LO	Define the accuracy the pilot has to fly the required bearing in order to be considered established on a VOR track when flying approach procedures according to ICAO Doc 8168 as within half full scale deflection of the required track	x	x
LO	State that due to reflections from terrain, radials can be bent and lead to wrong or fluctuating indications which is called 'scalloping'.	x	x
LO	State that DVOR is less sensitive to site error than CVOR	x	
062 02 04 00	DME		
062 02 04 01	Principles		
LO	State that DME operates in the UHF band between 960–1215 MHz according to ICAO Annex 10	x	x
LO	State that the system comprises two basic components: — The aircraft component, the interrogator — The ground component, the transponder	x	x
LO	Describe the principle of distance measurement using DME in terms of: — Pulse pairs — Fixed frequency division of 63 MHz — Propagation delay	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — 50 microsecond delay time — Irregular transmission sequence — Search mode — Tracking mode — Memory mode 		
	LO State that the distance measured by DME is slant range	x	x
	LO Illustrate that a position line using DME is a circle with the station at its centre	x	x
	LO Describe how the pairing of VHF and UHF frequencies (VOR/DME) enables selection of two items of navigation information from one frequency setting	x	x
	LO Describe, in the case of co-location, the frequency pairing and identification procedure	x	x
	LO Explain that depending on the configuration, the combination of a DME distance with a VOR radial can determine the position of the aircraft	x	x
	LO Explain that military TACAN stations may be used for DME information	x	x
062 02 04 02	Presentation and interpretation		
	LO Explain that when identifying a DME station co-located with a VOR station, the identification signal with the higher tone frequency is the DME which idents approximately every 40 seconds	x	x
	LO Calculate ground distance given slant range and altitude	x	x
	LO Describe the use of DME to fly a DME arc in accordance with DOC 8168 Vol. 1	x	x
	LO State that a DME system may have a groundspeed read out combined with the DME read out	x	x
062 02 04 03	Coverage and Range		
	LO Explain why a ground station can generally respond to a maximum of 100 aircraft.	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain which aircraft will be denied a DME range first when more than 100 interrogations are being made	x	x
062 02 04 04	Errors and accuracy		
LO	State that the error of the DME 'N' according to Annex 10 should not exceed $\pm 0,25$ NM + 1,25 % of the distance measured. For installations installed after 1 Jan 1989 the total system error should not exceed 0.2 NM DME 'P'	x	
062 02 04 05	Factors affecting range and accuracy		
LO	State that the groundspeed read out combined with DME is only correct when tracking directly to or from the DME station	x	x
LO	State that, close to the station, the groundspeed read out combined with DME is less than the actual groundspeed	x	x
062 02 05 00	ILS		
062 02 05 01	Principles		
LO	Name the three main components of an ILS: <ul style="list-style-type: none"> — The localiser (LLZ) — The glide path (GP) — Range information (markers or DME) 	x	x
LO	State the site locations of the ILS components: <ul style="list-style-type: none"> — The localiser antenna should be located on the extension of the runway centre line at the stop-end — The glide path antenna should be located 300 metres beyond the runway threshold, laterally displaced approximately 120 metres to the side of the runway centre line 	x	x
LO	Explain that marker beacons produce radiation patterns to indicate predetermined distances from the threshold along the ILS glide path	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain that marker beacons are sometimes replaced by a DME paired with the LLZ frequency	x	x
LO	State that in the ILS frequency assigned band 108,0–111,975 MHz, only frequencies with the first decimal odd are ILS frequencies	x	x
LO	State that the LLZ operates in the VHF band 108,0–111,975 MHz according to ICAO Annex 10	x	x
LO	State that the GP operates in the UHF band	x	x
LO	Describe the use of the 90 Hz and the 150 Hz signals in the LLZ and GP transmitters/receivers, stating how the signals at the receivers vary with angular deviation	x	
LO	Draw the radiation pattern with respect to the 90 Hz and 150 Hz signals	x	
LO	Describe how the UHF glide path frequency is selected automatically by being paired with the LLZ frequency	x	
LO	Explain the term 'difference of depth of modulation (DDM)'	x	
LO	State that the difference in the modulation depth increases with displacement from the centre line	x	
LO	State that both the LLZ and the GP antenna radiate side lobes (false beams) which could give rise to false centreline and false glide path indication	x	x
LO	Explain that the back beam from the LLZ antenna may be used as a published 'non-precision approach'	x	x
LO	State that according to ICAO Annex 10 the nominal glide path is 3°	x	x
LO	<p>Name the frequency, modulation and identification assigned to all marker beacons according to ICAO Annex 10:</p> <p>all marker beacons operate on 75 MHz carrier frequency</p> <p>modulation frequencies are:</p> <p>outer marker 400 Hz</p> <p>middle marker 1 300 Hz</p> <p>inner marker 3 000 Hz</p>	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<p>The audio frequency modulation (for identification) is continuous modulation of the audio frequency and is keyed as follows:</p> <p>outer marker 2 dashes per second continuously</p> <p>middle marker a continuous series of alternate dots and dashes</p> <p>inner marker 6 dots per second continuously</p>		
LO	State that according to ICAO DOC 8168, the final approach area contains a fix or facility that permits verification of the ILS glide path/altimeter relationship. The outer marker or DME is usually used for this purpose.	x	x
062 02 05 02	Presentation and interpretation		
LO	Describe the ILS identification regarding frequency and Morse code and/or plain text	x	x
LO	<p>Calculate the rate of descent for a 3° glide path angle given the groundspeed of the aircraft using the formula:</p> $\text{Rate of descent (ROD) in ft/min} = \frac{\text{groundspeed in kt} \times 10}{2}$	x	x
LO	<p>Calculate the rate of descent using the following formula when flying any glide path angle:</p> $\text{ROD ft/min} = \text{Speed factor (SF)} \times \text{glide path angle} \times 100$	x	x
LO	Interpret the markers by sound, modulation, and frequency	x	x
LO	State that the outer marker cockpit indicator is coloured blue, the middle marker amber and the inner marker white	x	x
LO	State that in accordance with ICAO Annex 10 an ILS installation has an automatic ground monitoring system	x	
LO	State that the LLZ and GP monitoring system monitors any shift in the LLZ and GP mean course line or reduction in signal strength	x	
LO	State that a failure of either the LLZ or the GP to stay within predetermined limits will cause:	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> – Removal of identification and navigation components from the carrier – Radiation to cease – A warning to be displayed at the designated control point 		
LO	State that an ILS receiver has an automatic monitoring function	x	x
LO	Describe the circumstances in which warning flags will appear for both the LLZ and the GP: <ul style="list-style-type: none"> – Absence of the carrier frequency – Absence of the 90 and 150 Hz modulation simultaneously – The percentage modulation of either the 90 or 150 Hz signal reduced to zero 	x	
LO	Interpret the indications on a Course Deviation Indicator (CDI) and a Horizontal Situation Indicator (HSI): <ul style="list-style-type: none"> – Full scale deflection of the CDI needle corresponds to approximately 2,5° displacement from the ILS centre line – Full scale deflection on the GP corresponds to approximately 0,7° from the ILS GP centre line 	x	x
LO	Interpret the aircraft's position in relation to the extended runway centre line on a back-beam approach	x	x
LO	Explain the setting of the course pointer of an HSI for front-beam and back-beam approaches	x	x
062 02 05 03	Coverage and Range		
LO	Sketch the standard coverage area of the LLZ and GP with angular sector limits in degrees and distance limits from the transmitter in accordance with ICAO Annex 10: <ul style="list-style-type: none"> – LLZ coverage area is 10° on either side of the centre line to a distance of 25 NM from the runway, and 35° on either side of the centre line to a distance of 17 NM from the runway – GP coverage area is 8° on either side of the centre line to a distance of minimum 10 NM from the runway 	x	x
062 02 05 04	Errors and accuracy		
LO	Explain that ILS approaches are divided into facility performance categories defined in ICAO Annex 10	x	x
LO	Define the following ILS operation categories: <ul style="list-style-type: none"> – Category I 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Category II — Category IIIA — Category IIIB — Category IIIC 		
LO	Explain that all category III ILS operations guidance information is provided from the coverage limits of the facility to, and along, the surface of the runway	x	
LO	Explain why the accuracy requirements are progressively higher for CAT I, CAT II and CAT III ILS	x	
LO	State the vertical accuracy requirements above the threshold for CAT I, II and III for the signals of the ILS ground installation	x	
LO	<p>Explain the following in accordance with ICAO DOC 8168:</p> <ul style="list-style-type: none"> — The accuracy the pilot has to fly the ILS localiser to be considered established on an ILS track is within half full scale deflection of the required track — The aircraft has to be established within half scale deflection of the LLZ before starting descent on the GP — The pilot has to fly the ILS GP to a maximum of half scale fly-up deflection of the GP in order to stay in protected airspace 	x	x
LO	State that if a pilot deviates by more than half scale deflection on the LLZ or by more than half course fly-up deflection on the GP, an immediate missed approach should be executed, because obstacle clearance may no longer be guaranteed	x	x
LO	Describe ILS beam bends. Deviations from the nominal position of the LLZ and GP respectively. They are ascertained by flight test.	x	
LO	Explain multipath interference. Reflections from large objects within the ILS coverage area	x	
062 02 05 05	Factors affecting range and accuracy		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Define the ILS critical Area. An area of defined dimensions about the LLZ and GP antennas where vehicles, including aircraft, are excluded during all ILS operations	x	
LO	Define the ILS sensitive area. An area extending beyond the critical area where the parking and/or movement of vehicles, including aircraft, is controlled to prevent the possibility of unacceptable interference to the ILS signal during ILS operations	x	
LO	Describe the effect of FM broadcast stations that transmit on frequencies just below 108 MHz	x	
062 02 06 00	MLS		
062 02 06 01	Principles		
LO	Explain the Principle of operation: <ul style="list-style-type: none"> – — Horizontal course guidance during the approach – — Vertical guidance during the approach – — Horizontal guidance for departure and missed approach – — DME (DME/P) distance – — Transmission of special information regarding the system and the approach conditions 	x	
LO	State that MLS operates in the S band on 200 channels	x	
LO	Explain the reason why MLS can be installed at airports on which, as a result of the effects of surrounding buildings and/or terrain, ILS siting is difficult.	x	
062 02 06 02	Presentation and interpretation		
LO	Interpret the display of airborne equipment designed to continuously show the position of the aircraft, in relation to a preselected course and glide path along with distance information, during approach and departure.	x	
LO	Explain that segmented approaches can be carried out with a presentation with two cross bars directed by a computer which has been programmed with the approach to be flown	x	
LO	Illustrate that segmented and curved approaches can only be executed with DME-P installed	x	
LO	Explain why aircraft are equipped with a multi mode receiver (MMR) in order to be able to receive ILS, MLS and GPS	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain why MLS without DME-P gives an ILS look-alike straight line approach	x	
062 02 06 03	Coverage and range		
LO	Describe the coverage area for the approach direction as being within a sector of +/- 40° of the centre line out to a range of 20 NM from the threshold (according to ICAO Annex 10)	x	
062 02 06 04	Error and accuracy		
LO	State the 95 % lateral and vertical accuracy within 20 NM (37 km) of the MLS approach reference datum and 60 ft above the MLS datum point (according to ICAO Annex 10)	x	
062 03 00 00	RADAR		
062 03 01 00	Pulse techniques and associated terms		
LO	Name the different applications of radar with respect to ATC, MET observations and airborne weather radar	x	x
LO	Describe the pulse technique and echo principle on which primary radar systems are based.	x	x
LO	Explain the relationship between the maximum theoretical range and the pulse repetition frequency (PRF)	x	
LO	Calculate the maximum theoretical unambiguous range if the PRF is given using the formula: $\text{range in km} = \frac{300\,000}{\text{PRF} \times 2}$	x	
LO	Calculate the PRF if the maximum theoretical unambiguous range of the radar is given using the formula: $\text{PRF} = \frac{300\,000}{\text{range (km)} \times 2}$	x	
LO	Explain that pulse length defines the minimum theoretical range of a radar	x	
LO	Explain the need to harmonise the rotation speed of the antenna, the pulse length and the pulse repetition frequency for range.	x	
LO	Describe, in general terms, the effects of the following factors with respect to the quality of the target depiction on the radar display:	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Atmospheric conditions; super refraction and sub refraction — Attenuation with distance — Condition and size of the reflecting surface 		
062 03 02 00	Ground Radar		
062 03 02 01	Principles		
LO	Explain that primary radar provides bearing and distance of targets.	x	x
LO	Explain that primary ground radar is used to detect aircraft that are not equipped with a secondary radar transponder.	x	x
LO	Explain why Moving Target Indicator (MTI) is used	x	x
062 03 02 02	Presentation and interpretation		
LO	State that modern ATC systems use computer generated display.	x	x
LO	Explain that the radar display enables the ATS controller to provide information, surveillance or guidance service.	x	x
062 03 03 00	Airborne Weather Radar		
062 03 03 01	Principles		
LO	List the two main tasks of the weather radar in respect of weather and navigation	x	x
LO	State the wavelength (approx. 3 cm) and frequency of most AWRs (approx. 9 GHz)	x	
LO	Explain how the antenna is attitude-stabilised in relation to the horizontal plane using the aircraft's attitude reference system	x	x
LO	Explain that in older AWR have two different radiation patterns which can be produced by a single antenna, one for mapping (cosecant squared) and the other for weather (pencil/cone shaped)	x	
LO	Describe the cone shaped pencil beam of about 3° to 5° beam width used for weather depiction	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain that in modern AWRs a single radiation pattern is used for both mapping and weather with the scanning angle being changed between them	x	x
062 03 03 02	Presentation and interpretation		
LO	Explain the functions of the following different modes on the radar control panel <ul style="list-style-type: none"> — Off/on switch — Function switch, with modes WX, WX+T and MAP. — Gain control setting (auto/manual) — Tilt/auto tilt switch. 	x	x
LO	Name, for areas of differing reflection intensity, the colour gradations (green, yellow, red and magenta) indicating the increasing intensity of precipitation	x	x
LO	Illustrate the use of azimuth marker lines and range lines in respect of the relative bearing and the distance to a thunderstorm or to a landmark on the screen	x	x
062 03 03 03	Coverage and Range		
LO	Explain how the radar is used for weather detection and for mapping (range, tilt and gain if available)	x	x
062 03 03 04	Errors, accuracy, limitations		
LO	Explain why AWR should be used with extreme caution when on the ground	x	x
062 03 03 05	Factors affecting range and accuracy		
LO	Explain the danger of the area behind heavy rain (shadow area) where no radar waves will penetrate	x	x
LO	Explain why the tilt setting should be higher when the aircraft descends to a lower altitude	x	x
LO	Explain why the tilt setting should be lower when the aircraft climbs to a higher altitude	x	x
LO	Explain why a thunderstorm may not be detected when the tilt is set too high	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
062 03 03 06	Application for navigation		
	LO Describe the navigation function of the radar in the mapping mode	x	x
	LO Describe the use of the weather radar to avoid a thunderstorm (Cb)	x	x
	LO Explain how turbulence (not CAT) can be detected by a modern weather radar	x	x
	LO Explain how wind shear can be detected by a modern weather radar	x	x
062 03 04 00	Secondary Surveillance Radar and transponder		
062 03 04 01	Principles		
	LO Explain that the Air Traffic Control (ATC) system is based on the replies provided by the airborne transponders in response to interrogations from the ATC secondary radar	x	x
	LO Explain that the ground ATC secondary radar uses techniques which provide the ATC with information that cannot be acquired by primary radar	x	x
	LO Explain that an airborne transponder provides coded reply signals in response to interrogation signals from the ground secondary radar and from aircraft equipped with TCAS.	x	x
	LO Explain the advantages of SSR over a primary radar	x	x
062 03 04 02	Modes and codes		
	LO Explain that the interrogator transmits its interrogations in the form of a series of pulses.	x	x
	LO Name and explain the Interrogation modes: 1. Mode A and C 2. Intermode: Mode A/C/S all call Mode A/C only all call 3. Mode S:	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	Mode S only all call Broadcast (no reply elicited) Selective		
LO	State that the interrogation frequency is 1030 MHz and the reply frequency is 1090 MHz.	x	
LO	Explain that the decoding of the time between the interrogation pulses determines the operating mode of the transponder: — Mode A: transmission of aircraft transponder code — Mode C: transmission of aircraft pressure altitude — Mode S: aircraft selection and transmission of flight data for the ground surveillance	x	
LO	State that the ground interrogation signal is transmitted in the form of pairs of pulses P1 and P3 for Mode A and C and that a control pulse P2 is transmitted following the first interrogation pulse P1	x	
LO	Explain that the interval between P1 and P3 determines the mode of interrogation, Mode A or C	x	
LO	State that the radiated amplitude of P2 from the side-lobes and from the main lobe is different.	x	
LO	State that Mode A designation is a sequence of four digits can be manually selected from 4096 available codes.	x	x
LO	State that in mode C reply the pressure altitude is reported in 100 ft increments.	x	x
LO	State that in addition to the information pulses provided, a special position identification pulse (SPI) can be transmitted but only as a result of a manual selection (IDENT)	x	x
LO	Explain the need for compatibility of Mode S with Mode A and C	x	x
LO	Explain that the Mode S transponders receive interrogations from other Mode S transponders and SSR ground stations	x	x
LO	State that Mode S surveillance protocols implicitly use the principle of selective addressing	x	x
LO	Explain that every aircraft will have been allocated an ICAO Aircraft Address which is hard coded into the	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	airframe (Mode S address)		
LO	Explain that the ICAO Aircraft Address consists of 24 bits (therefore more than 16 000 000 possible codes) allocated by the registering authority of the state within which the aircraft is registered	x	
LO	Explain that this address (24-bit) is included in all Mode S transmissions, so that every interrogation can be directed to a specific aircraft, preventing multiple replies	x	
LO	State that the ground interrogation signal is transmitted in the form of pulses P1, P3 and P4 for Mode S	x	
LO	Interpret the following mode S terms: — Selective addressing — Mode 'all call' — Selective call	x	x
LO	State that Mode S interrogation contains either: — Aircraft address — All-call address — Broadcast address	x	x
LO	Mode A/C/S all-call consists of 3 pulses P1, P3 and the long P4. A control pulse P2 is transmitted following P1 to suppress responses from aircraft in the side lobes of the interrogation antenna	x	
LO	Mode A/C only all-call consists of 3 pulses P1, P3 and the short P4	x	
LO	State that there are 25 possible Mode S reply forms	x	
LO	State that the reply message consists of a preamble and a data block	x	
LO	State that the Aircraft Address shall be transmitted in any reply except in Mode S only all-call reply	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain that Mode S can provide enhanced vertical tracking, using a 25 feet altitude increment	x	
LO	Explain how SSR can be used for ADS B	x	
062 03 04 03	Presentation and interpretation		
LO	Explain how an aircraft can be identified by a unique code	x	x
LO	Illustrate how the following information is presented on the radar screen: <ul style="list-style-type: none"> — Pressure altitude — Flight level — Flight number or aircraft registration — Ground speed 	x	x
LO	Name and interpret the codes 7700, 7600 and 7500	x	x
LO	Interpret the selector modes: OFF, Standby, ON (mode A), ALT (mode A and C) and TEST	x	x
LO	Explain the function of the emission of a SPI (Special Position Identification) pulse after pushing the IDENT button in the aircraft	x	x
	ELEMENTARY SURVEILLANCE		
LO	Explain that the elementary surveillance provides the ATC controller with aircraft position, altitude and identification	x	x
LO	State that the elementary surveillance needs MODE S transponders with surveillance identifier (SI) code capacity and the automatic reporting of aircraft identification, known as ICAO level 2s	x	x
LO	State that the SI code must correspond to the aircraft identification specified in item 7 of the ICAO flight plan or to the registration marking	x	x
LO	State that only the ICAO identification format is compatible with the ATS ground system	x	
LO	State that Mode S equipped aircraft with a maximum mass in excess of 5700 kg or a maximum cruising true airspeed capability	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	in excess of 250kt must operate with transponder antenna diversity		
LO	Describe the different types of communication protocols. (A,B,C and D)	x	
LO	Explain that elementary surveillance is based on Ground Initiated Comm-B protocols	x	
	ENHANCED SURVEILLANCE		
LO	State that the enhanced surveillance consists of the extraction of additional aircraft parameters known as Downlink Aircraft Parameters (DAP) consisting of: <ul style="list-style-type: none"> — Magnetic Heading — Indicated Airspeed — Mach Number — Vertical rate — Roll angle — Track Angle Rate — True Track Angle — Ground speed — Selected Altitude 	x	
LO	Explain that the controller's information is improved by providing actual aircraft derived data such as Magnetic Heading, Indicated Airspeed, Vertical Rate and Selected Altitude	x	
LO	Explain that the automatic extraction of an aircraft's parameters, and their presentation to the controller, will reduce their R/T workload and will free them to concentrate on ensuring the safe and efficient passage of air traffic	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Explain that the reduction in radio telephony between the air traffic controllers and the pilots will reduce the workload on a pilot and remove a potential source of error	x	
062 03 04 04	Errors and Accuracy		
LO	Explain the following disadvantages of SSR (mode A/C): — Code garbling of aircraft less than 1.7 NM apart measured in the vertical plane perpendicular to and from the antenna — ‘Fruiting’ which results from reception of replies caused by interrogations from other radar stations	x	x
062 05 00 00	AREA NAVIGATION SYSTEMS, RNAV/FMS		
062 05 01 00	General philosophy and definitions		
062 05 01 01	Basic RNAV (B-RNAV)/precision RNAV (P-RNAV)/ RNP-PNAV		
LO	Define area navigation RNAV (ICAO Annex 11). A method of navigation permitting aircraft operations on any desired track within the coverage of station-referenced navigation signal, or within the limits of a self-contained navigation system	x	x
LO	State that basic RNAV (B-RNAV) systems require RNP 5	x	x
LO	State that precision RNAV (PRNAV) systems require RNP 1	x	x
062 05 01 02	Principles of 2D RNAV, 3D RNAV and 4D RNAV		
LO	State that a 2D RNAV system is able to navigate in the horizontal plane only.	x	x
LO	State that a 3D RNAV system is able to navigate in the horizontal plane and in addition has a guidance capability in the vertical plane.	x	x
LO	State that a 4D RNAV system is able to navigate in the horizontal plane, has a guidance capability in the vertical plane and in addition has a timing function	x	x
062 05 01 03	Required Navigation Performance (RNP) in accordance with ICAO DOC 9613		
LO	State that RNP is a concept that applies to navigation performance within an airspace	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	The RNP type is based on the navigation performance accuracy to be achieved within the airspace.	x	x
LO	State that RNP X requires a navigation performance accuracy of $\pm X$ NM both lateral and longitudinal 95 % of the flying time. (RNP 1 requires a navigation performance of ± 1 NM both lateral and longitudinal 95 % of the flying time)	x	x
LO	State that RNAV equipment is one requirement, in order to receive approval to operate in a RNP environment	x	x
LO	State that RNAV equipment operates by automatically determining the aircraft position.	x	x
LO	State the advantages of using RNAV techniques over more conventional forms of navigation: <ul style="list-style-type: none"> — Establishment of more direct routes permitting a reduction in flight distance — Establishment of dual or parallel routes to accommodate a greater flow of en-route traffic — Establishment of bypass routes for aircraft over flying high-density terminal areas — Establishment of alternatives or contingency routes on either a planned or ad hoc basis — Establishment of optimum locations for holding patterns — Reduction in the number of ground navigation facilities 	x	x
LO	State that RNP may be specified for a route, a number of routes, an area, volume of airspace or any airspace of defined dimensions.	x	x
LO	State that airborne navigation equipment uses inputs from navigational systems such as VOR/DME, DME/DME, GNSS, INS and IRS.	x	x
LO	State that aircraft equipped to operate to RNP 1 and better, should be able to compute an estimate of its position error, depending on the sensors being used and time elapsed	x	x
LO	Indicate navigation equipment failure.	x	x
062 05 02 00	Simple 2D RNAV		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<p><i>Info:</i> First generation of radio navigation systems allowing the flight crew to select a phantom waypoint on the RNAV panel and select a desired track to fly inbound to the waypoint.</p>		
062 05 02 01	Flight deck equipment		
LO	<p>The control unit allows the flight crew to:</p> <ul style="list-style-type: none"> — Tune the VOR/DME station used to define the phantom waypoint — Define the phantom waypoint as a radial and distance (DME) form the selected VOR/DME station — Select desired magnetic track to follow inbound to the phantom waypoint — Select between an en-route mode, an approach mode of operation and the basic VOR/DME mode of operation 	x	x
LO	Track guidance is shown on the HSI/CDI.	x	x
062 05 02 02	Navigation computer, VOR/DME navigation		
LO	The navigation computer of the simple 2D RNAV system computes the navigational problems by simple sine and cosine mathematics, solving the triangular problems.	x	x
062 05 02 03	Navigation computer input/output		
LO	<p>State the following input data to the navigation computer is:</p> <ul style="list-style-type: none"> — Actual VOR radial and DME distance from selected VOR station — Radial and distance to phantom waypoint — Desired magnetic track inbound to the phantom waypoint 	x	x
LO	State the following output data from the navigation computer:	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Desired magnetic track to the phantom waypoint shown on the CDI at the course pointer — Distance from present position to the phantom waypoint — Deviations from desired track as follows: <ul style="list-style-type: none"> — In en-route mode full scale deflection on the CDI is 5 NM — In approach mode full scale deflection on the CDI is 1¼ NM — In VOR/DME mode full scale deflection of the CDI is 10°. 		
LO	State that the system is limited to operate within range of selected VOR/DME station	x	x
062 05 03 00	4D RNAV		
	<p><i>Info:</i> The next generation of area navigation equipment allowed the flight crew to navigate on any desired track within coverage of VOR/DME stations</p>		
062 05 03 01	Flight deck equipment		
LO	<p>State that in order to give the flight crew control over the required lateral guidance functions, RNAV equipment should at least be able to perform the following functions:</p> <ul style="list-style-type: none"> — Display present position in latitude/longitude or as distance/bearing to selected waypoint; — Select or enter the required flight plan through the control and display unit (CDU); — Review and modify navigation data for any part of a flight plan at any stage of flight and store sufficient data to carry out the active flight plan; 	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Review, assemble, modify or verify a flight plan in flight, without affecting the guidance output; — Execute a modified flight plan only after positive action by the flight crew; — Where provided, assemble and verify an alternative flight plan without affecting the active flight plan; — Assemble a flight plan, either by identifier or by selection of individual waypoints from the database, or by creation of waypoints from the database, or by creation of waypoints defined by latitude/longitude, bearing/distance parameters or other parameters; — Assemble flight plans by joining routes or route segments; — Allow verification or adjustment of displayed position; — Provide automatic sequencing through waypoints with turn anticipation. Manual sequencing should also be provided to allow flight over, and return to, waypoints; — Display cross-track error on the CDU; — Provide time to waypoints on the CDU; — Execute a direct clearance to any waypoint; — Fly parallel tracks at the selected offset distance; offset mode should be clearly indicated; — Purge previous radio updates; — Carry out RNAV holding procedures (when defined); — Make available to the flight crew estimates of positional uncertainty, either as a quality factor or by reference to sensor differences from the computed position; — Conform to WGS-84 geodetic reference system; 		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— Indicate navigation equipment failure.		
	— Indicate navigation equipment failure	x	x
062 05 03 02	Navigation computer, VOR/DME navigation		
	LO State that the navigation computer uses signals from VOR/DME stations to determine position.	x	
	LO Explain that the system automatically tunes the VOR/DME stations, selecting stations which provide the best angular fix determination	x	
	LO Explain that the computer uses DME/DME to determine position if possible, and only if 2 DME's are not available the system will use VOR/DME to determine the position of the aircraft.	x	
	LO Explain that the computer is navigating on the great circle between waypoints inserted into the system	x	
	LO State that the system has a navigational database may contain the following elements: — Reference data for airports (four letter ICAO identifier); — VOR/DME station data (three letter ICAO identifier); — Waypoint data (five letter ICAO identifier); — STAR data; — SID data; — Airport runway data including thresholds and outer makers; — NDB stations (alphabetic ICAO identifier); — Company flight plan routes.	x	
	LO State that the navigational database is valid for a limited time, usually 28 days.	x	
	LO State that the navigational database is read only, but additional space exists so that crew created navigational data may be saved in the computer memory. Such additional data will also be deleted at the 28	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	days navigational update of the database.		
LO	State that the computer receives a TAS input from the air data computer, and a heading input in order to calculate actual wind velocity.	X	
LO	State that the computer calculates track error in relation to desired track. This data can easily be interfaced with the automatic flight control, and when done so enables the aircraft to automatically follow the flight plan loaded into the RNAV computer.	X	
LO	State that the computer is able to perform great circle navigation when receiving VOR/DME stations. If out of range, the system reverts to DR (dead reckoning) mode, where it updates the position by means of last computed wind and TAS and heading information. Operation in DR mode is time limited.	X	
LO	State that the system has 'direct to' capability to any waypoint.	X	
LO	State that the system is capable of parallel off-set tracking.	X	
LO	State that any waypoint can be inserted into the computer in one of the following ways: <ul style="list-style-type: none"> — Alphanumeric ICAO identifier — Latitude and longitude — Radial and distance from a VOR station 	X	
062 05 03 03	Navigation computer input/output		
LO	State that the following are input data into a 4D RNAV system: <ul style="list-style-type: none"> — DME distances from DME stations — Radial from a VOR station — TAS and altitude from the air data computer — Heading from aircraft heading system 	X	
LO	State that the following are output data from a 4D RNAV system:	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Distance to any waypoint — Estimated time overhead — Ground speed and TAS — True wind — Track error 		
062 05 04 00	FMS and general terms		
062 05 04 01	Navigation and flight management		
LO	Explain that development of computers combined with reliable liquid crystal displays, offer the means of accessing more data and displaying them to the flight crew.	x	
LO	Explain that a flight management system has the ability to monitor and direct both navigation and performance of the flight.	x	
LO	Explain the two functions common to all FMS systems: <ul style="list-style-type: none"> — Automatic navigation LNAV (lateral navigation) — Flight path management VNAV (vertical navigation) 	x	
LO	Name the main components of the FMS system as being: <ul style="list-style-type: none"> — FMC (flight management computer) — CDU (control and display unit) — Symbol generator — EFIS (electronic flight instrument system) consisting of the nav display including mode selector and the attitude display. 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	– A/T (auto throttle) and the FCC (flight control computer)		
062 05 04 02	Flight management computer		
LO	State that the centre of the flight management system is the FMC with its stored navigation and performance data.	x	
062 05 04 03	Navigation data base		
LO	State that the navigation database of the FMC may contain the following data: <ul style="list-style-type: none"> – Reference data for airports (four letter ICAO identifier) – VOR/DME station data (three letter ICAO identifier) – Waypoint data (five letter ICAO identifier) – STAR data – SID data – Holding patterns – Airport runway data – NDB stations (alphabetic ICAO identifier) – Company flight plan routes 	x	x
LO	State that the navigation database is updated every 28 days.	x	x
LO	State that the navigational database is write protected, but additional space exists so that crew created navigational data may be saved in the computer memory. Such additional data will also be deleted at the 28 days navigational update of the database.	x	x
062 05 04 04	Performance data base		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that the performance database stores all the data relating to the specific aircraft/engine configuration, and is updated by ground staff when necessary.	x	
LO	State that the performance database of the FMC contain the following data: <ul style="list-style-type: none"> – V_1, V_R and V_2 speeds – Aircraft drag – Engine thrust characteristics – Maximum and optimum operating altitudes – Speeds for maximum and optimum climb – Speeds for long range cruise, max endurance and holding – Maximum ZFM (zero fuel mass), maximum TOM (take-off mass) and maximum LM (landing mass) – Fuel flow parameters – Aircraft flight envelope 	x	
062 05 04 05	Typical input/output data from the FMC		
LO	State the following are typical input data to the FMC: <ul style="list-style-type: none"> – Time – Fuel flow – Total fuel – TAS, altitude, vertical speed, Mach number and outside air temperature from the air data computer (ADC) – DME and radial information from the VHF NAV receivers – Air/ground position 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Flap/slat position — IRS and GPS positions — CDU (control and display unit) entries 		
LO	<p>State that the following are typical output data from the FMC:</p> <ul style="list-style-type: none"> — Command signals to the flight directors and autopilot — Command signals to the auto-throttle — Information to the EFIS displays through the symbol generator — Data to the CDU and various annunciators 	x	
062 05 04 06	Determination of the FMS-position of the aircraft		
LO	State that modern FMS may use a range of sensors for calculating the position of the aircraft including VOR, DME, GPS, IRS and ILS.	x	x
LO	State that the information from the sensors used may be blended into a single position by using the Kalman filter method	x	
LO	State that the Kalman filter is an algorithm for filtering incomplete and noisy measurements of dynamical processes so that errors of measurements from different sensors are minimised leading to the calculated position being more accurate than that produced by any single sensor.	x	
062 05 05 00	Typical flight deck equipment fitted on FMS aircraft		
062 05 05 01	Control and display unit (CDU)		
LO	State that the communication link between the flight crew and the FMC is the CDU	x	
LO	Explain the main components of the CDU as follows:	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — CDU display including the following terms, <ul style="list-style-type: none"> page title data field scratchpad — Line select keys — Numeric keys — Alpha keys — Function and mode keys used to select specific data pages on the CDU display, to execute orders or to pages through the data presented — Warning lights, message light and offset light 		
062 05 05 02	EFIS instruments (attitude display, navigation display)		
LO	State that FMS equipped aircraft, typically has two displays on the instrument panel in front of each pilot.	x	
LO	State that the following data are typically displayed on the attitude display: <ul style="list-style-type: none"> — Attitude information — Flight director command bars — Radio height and barometric altitude — Course deviation indication 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— Glide path information (when an ILS is tuned) — Speed information		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
062 05 05 03	Typical modes of the navigation display		
LO	<p>State the following typical modes of the navigation display:</p> <ul style="list-style-type: none"> — Full VOR/ILS mode showing the whole compass rose — Expanded (arc) VOR/ILS mode showing the forward 90° sector — Map mode — Plan mode 	x	
062 05 05 04	Typical information on the navigation display		
LO	<p>List and interpret the following information typically shown on a navigation display in 'Full VOR/ILS' mode:</p> <ul style="list-style-type: none"> — The map display will be in full VOR mode when a VOR frequency is selected and full ILS mode when an ILS frequency is selected on the VHF NAV frequency selector — DME distance to selected DME station — A full 360° compass rose <p>At the top of the compass rose present heading is indicated and shown as digital numbers in a heading box. Next to the heading box is indicated if the heading is true or magnetic. True heading is available on aircraft with IRS</p> <p>A triangle (different symbols are used on different aircraft) on the compass rose indicates present track. Track indication is only available when the FMC navigation computer is able to compute aircraft position A square symbol on the outside of the compass rose indicates the selected heading for the autopilot, and if 'heading select' mode is activated on the autopilot this is the heading the aircraft will turn to</p> <p>Within the compass rose a CDI is shown. On the CDI the course pointer points to the selected VOR/ILS course SET on the OBS. On the CDI the course deviation bar will indicate angular deflection from selected VOR/ILS track. Full scale deflection side to side in VOR mode is 20°, and 5° in ILS mode. In VOR mode a TO/FROM indication is shown on the display</p> <ul style="list-style-type: none"> — The selected ILS/VOR frequency is shown 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — ILS or VOR mode is shown according to selected frequency — If an ILS frequency is selected a glide path deviation scale is shown 		
LO	A wind arrow indicating wind direction according to the compass rose, and velocity in numbers next to the arrow	x	
LO	Given an EFIS navigation display in full VOR/ILS mode, read off the following information: <ul style="list-style-type: none"> — Heading (Magnetic/True) — Track (Magnetic/True) — Drift — Wind correction angle — Selected course — Actual radial — Left or right of selected track — Above or below the glide path — Distance to the DME station — Selected heading for the autopilot heading select bug — Determine if the display is in VOR or ILS rose mode 	x	
LO	Given an EFIS navigation display in expanded VOR/ILS mode, read off the following information: <ul style="list-style-type: none"> — Heading (Magnetic/True) 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Track (Magnetic/True) — Drift — Wind correction angle — Tailwind/headwind — Wind velocity — Selected course — Actual radial — Left or right of selected track — Above or below the glide path — Distance to the DME station — Selected heading for the autopilot heading select bug — State if the display is in VOR or ILS rose mode 		
LO	<p>Given an EFIS navigation display in map mode, read off the following information:</p> <ul style="list-style-type: none"> — Heading (Magnetic/True) — Track (Magnetic/True) — Drift — Wind correction angle 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Tailwind/headwind — Wind velocity — Left or right of the FMS track — Distance to active waypoint — ETO next waypoint — Selected heading for the autopilot heading select bug — Determine if a depicted symbol is a VOR/DME station or an airport — Determine if a specific waypoint is part of the FMS route 		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Given an EFIS navigation display in plan mode, read off the following information: <ul style="list-style-type: none"> — Heading (Magnetic/True) — Track (Magnetic/True) — Drift — Wind correction angle — Distance to active waypoint — ETO active waypoint — State selected heading for the autopilot heading select bug — Measure and state true track of specific FMS route track 	x	
062 06 00 00	GLOBAL NAVIGATION SATELLITE SYSTEMS		
062 06 01 00	GPS/GLONASS/GALILEO		
062 06 01 01	Principles		
LO	State that there are two main Global Navigation Satellite Systems (GNSS) currently in existence with a third which is planned to be fully operational by 2011. They are: <ul style="list-style-type: none"> — USA NAVSTAR GPS (NAVigation System with Timing And Ranging Global Positioning System) — Russian GLONASS (GLOBAL NAVigation Satellite System) — European GALILEO 	x	x
LO	State that all 3 systems (will) consist of a constellation of satellites which can be used by a suitably equipped receiver to determine position	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
062 06 01 02	Operation		
	<i>NAVSTAR GPS</i>		
	LO State that there are currently two modes of operation, SPS (Standard Positioning Service) for civilian users, and PPS (Precise Positioning Service for authorised users)	x	x
	LO SPS was originally designed to provide civil users with a less accurate positioning capability than PPS	x	x
	LO Name the three segments as: – Space segment – Control segment – User segment	x	x
	<i>Space segment</i>		
	LO State that the space segment consists of a notional constellation of 24 operational satellites	x	x
	LO State that the satellites are orbiting the earth in orbits inclined 55° to the plane of the equator	x	
	LO State that the satellites are in a nearly circular orbit of the earth at an altitude of 20 200 km (10 900 NM)	x	
	LO State that the satellites are distributed in 6 orbital planes with at least 4 satellites in each	x	
	LO State that a satellite completes an orbit in approximately 12 hours	x	
	LO State that each satellite broadcasts ranging signals on two UHF frequencies. L1 1575.42 MHz and L2 1227.6 MHz	x	
	LO State that SPS is a positioning and timing service provided on frequency L1	x	
	LO State that PPS uses both frequencies L1 and L2	x	
	LO In 2005 the first replacement satellite was launched with a new military M code on the L1 frequency and a second signal for civilian use L2C on the L2 frequency	x	
	LO State that the ranging signal contains a (Coarse Acquisition) C/A code and a navigational data message	x	
	LO State that the navigation message contains: – Almanac data – Ephemeris	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> – Satellite clock correction parameters – UTC parameters – Ionospheric model – Satellite health data 		
LO	State that it takes 12½ minutes for a GPS receiver to receive all the data frames in the navigation message	x	x
LO	State that the almanac contains the orbital data about all the satellites in the GPS constellation	x	x
LO	State that the ephemeris contains data used to correct the orbital data of the satellites due to small disturbances	x	x
LO	State that the clock correction parameters are data for correction of the satellite time	x	x
LO	State that UTC parameters are factors determining the difference between GPS time and UTC	x	x
LO	State that an ionospheric model is currently used to calculate the time delay of the signal travelling through the ionosphere.	x	x
LO	State that the GPS health message is used to exclude unhealthy satellites from the position solution. Satellite health is determined by the validity of the navigation data	x	x
LO	State that GPS uses the WGS 84 model	x	x
LO	State that two codes are transmitted on the L1 frequency, namely a C/A code and a P (precision) code. The P code is not used for SPS	x	
LO	State that the C/A code is a pseudo random noise (PRN) code sequence, repeating every millisecond. Each C/A code is unique and provides the mechanism to identify each satellite	x	
LO	State that satellites broadcast the PRN codes with reference to the satellite vehicle time which are subsequently changed by the receiver to UTC	x	
LO	State that satellites are equipped with atomic clocks, which allow the system to keep very accurate time reference	x	x
	<i>Control Segment</i>		
LO	State that the control segment comprises: <ul style="list-style-type: none"> – A master control station – Ground antenna 	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— Monitoring stations		
LO	State that the master control station is responsible for all aspects of the constellation command and control	x	
LO	State that the main tasks of the control segment are: <ul style="list-style-type: none"> — Managing SPS performance — Navigation data upload — Monitoring satellites 	x	
	<i>User Segment</i>		
LO	State that GPS supplies three-dimensional position fixes and speed data, plus a precise time reference	x	x
LO	State that the GPS receiver used in aviation is a multi-channel type	x	x
LO	State that a GPS receiver is able to determine the distance to a satellite, by determining the difference between the time of transmission by satellite and the time of reception	x	x
LO	State that the initial distance calculated to the satellites is called pseudo range because the difference between the GPS receiver and the satellite time references initially creates an erroneous range	x	x
LO	State that each range defines a sphere with its centre at the satellite	x	x
LO	State that three satellites are needed to determine a two-dimensional position	x	x
LO	State that four spheres are needed to calculate a three dimensional position, hence four satellites are required	x	x
LO	State that the GPS receiver is able to synchronise to the correct time base when receiving four satellites	x	x
LO	State that the receiver is able to calculate aircraft groundspeed using the SV Doppler frequency shift and /or the change in receiver position over time	x	
	<i>NAVSTAR GPS Integrity</i>		
LO	Define RAIM (Receiver Autonomous Integrity Monitoring). A technique whereby a receiver processor determines the integrity of the navigation signals	x	x
LO	State that RAIM is achieved by consistency check among pseudo range measurements	x	x
LO	State that basic RAIM requires 5 satellites. A 6 th is for isolating a faulty satellite from the navigation solution	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that when a GPS receiver uses barometric altitude as an augmentation to RAIM, the number of satellites needed for the receiver to perform the RAIM function may be reduced by one	x	x
	<i>GLONASS</i>		
LO	List the three components of GLONASS: <ul style="list-style-type: none"> – Space segment, which contains the constellation of satellites – Control segment, which contains the ground based facilities – User segment, which contains the user equipment 	x	
LO	State the composition of the constellation in the Space segment: <ul style="list-style-type: none"> – 24 satellites in three orbital planes with 8 equally displaced by 45° of latitude – A near circular orbit at 19 100 km at an inclination of 64.8° to the equator – Each orbit is completed in 11 hours 15 minutes 	x	
LO	State that the control segment provides: <ul style="list-style-type: none"> – Monitoring of the constellation status – Correction to the orbital parameters – Navigation data uploading 	x	
LO	State that the user equipment consists of receivers and processors for the navigation signals for the calculation of the coordinates, velocity and time	x	
LO	State that the time reference is UTC	x	
LO	State that each satellite transmits navigation signals on two frequencies of L-band, L1 1.6 GHz and L2 1.2 GHz	x	
LO	State that L1 is a standard accuracy signal designed for civil users worldwide and L2 is a high accuracy signal modulated by a special code for authorised user only	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	State that the navigation message has a duration of 2 seconds and contains 'immediate' data which relates to the actual satellite transmitting the given navigation signal and 'non-immediate' data which relates to all other satellites within the constellation	x	
LO	State that 'immediate data' consists of: <ul style="list-style-type: none"> — Enumeration of the satellite time marks — Difference between on board time scale of the satellite and GLONASS time — Relative differences between carrier frequency of the satellite and its nominal value — Ephemeris parameters 	x	
LO	State that 'non-immediate' data consists of: <ul style="list-style-type: none"> — Data on the status of all satellites within the space segment — Coarse corrections to on board time scales of each satellite relative to GLONASS time — Orbital parameters of all satellites within the space segment — Correction to GLONASS time relative to UTC (must remain within 1 microsecond) 	x	
LO	State that Integrity monitoring includes checking the quality of the characteristics of the navigation signal and the data within the navigation message	x	
LO	State that Integrity Monitoring is implemented in 2 ways: <ul style="list-style-type: none"> — Continuous automatic operability monitoring of principal systems in each satellite. If a malfunction occurs an 'unhealthy' flag appears within the 'immediate data' of the navigation message 	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	— Special tracking stations within the ground-based control segment are used to monitor the space segment performance. If a malfunction occurs an 'unhealthy' flag appears within the 'immediate data of the navigation Message		
LO	State that agreements have been made between the appropriate agencies for the interoperability by any one approved user of NAVSTAR and GLONASS systems	X	
	<i>GALILEO</i>		
LO	State that the core of the Galileo constellation will consist of 30 satellites with nine plus a spare replacement in each of three planes in near circular orbit at an altitude of 23 222 km inclined at 56° to the plane of the equator	X	
LO	State that the signals will be transmitted in three frequency bands 1164– 1215 MHz, 1260– 1300 MHz and 1559– 1591 MHz (1559– 1591 MHz will be shared with GPS on a non-interference basis)	X	
LO	State that each orbit will take 14 hours	X	
LO	State that each satellite has three sections, Timing, Signal generation and Transmit	X	
LO	State that in the Timing section two clocks have been developed, a Rubidium Frequency Standard clock and a more precise Passive Hydrogen Maser clock	X	
LO	State the Signal generation contains the navigation signals	X	
LO	State that the navigation signals consist of a ranging code identifier and the navigation message	X	
LO	State that the navigation message basically contains information concerning the satellite orbit (ephemeris) and the clock references	X	
LO	State that the navigation message is 'up-converted' on four navigation signal carriers and the outputs are combined in a multiplexer before transmission in the Transmit section	X	
LO	State that the Navigation Antenna has been designed to minimise interference between satellites by having equal power level	X	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	propagation paths independent of elevation angle		
LO	State that the system is monitored in a similar way to both GPS NAVSTAR and GLONASS but also by a new method based on spread-spectrum signals	x	
LO	State that the tracking, telemetry and command operations are controlled by sophisticated data encryption and authentication procedures	x	
LO	GPS, EGNOS and GALILEO are compatible, will not interfere with each other, and the performance of the receiver will be enhanced by interoperability of the systems	x	
062 06 01 03	Errors and Factors affecting accuracy		
LO	List the most significant factors affecting accuracy: <ul style="list-style-type: none"> – Ionospheric propagation delay – Dilution of position – Satellite clock error – Satellite orbital variations – Multipath 	x	x
LO	State that ionospheric propagation delay (IPD) can almost be eliminated, by using two frequencies	x	
LO	State that in SPS receivers, IPD is currently corrected by using the ionospheric model from the navigation message but the error is only reduced by 50 %	x	
LO	State that ionospheric delay is the most significant error	x	
LO	State that dilution of position arises from the geometry and number of satellites in view. It is called Position Dilution of precision (PDOP)	x	
LO	State that errors in the satellite orbits are due to:	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> — Solar wind — Gravitation of the sun, moon and planets 		
LO	State that Multipath is when the signal arrives at the receiver via more than one path (the signal being reflected from surfaces near the receiver).	x	
062 06 02 00	Ground, Satellite and Airborne based augmentation systems		
	<i>Ground based augmentation systems</i>		
LO	Explain the principle of a GBAS: to measure on ground the signal errors transmitted by GNSS satellites and relay the measured errors to the user for correction	x	
LO	State that the ICAO GBAS standard is based on this technique through the use of a data link in the VHF band of ILS -VOR systems (108-118 MHz)	x	
LO	State that for a GBAS station the coverage is about 30 km	x	
LO	Explain that ICAO standards provide the possibility to interconnect GBAS stations to form a network broadcasting large-scale differential corrections. Such a system is identified as GRAS, (Ground Regional Augmentation System)	x	
LO	<p>Explain that GBAS ground subsystems provide two services: the precision approach service and the GBAS positioning service</p> <p>The precision approach service provides deviation guidance for Final Approach Segments, while the GBAS positioning service provides horizontal position information to support RNAV operations in terminal areas.</p>	x	
LO	Explain that one ground station can support all the aircraft subsystems within its coverage providing the aircraft with approach data, corrections and integrity information for GNSS satellites in view via a VHF data broadcast (VDB).	x	
LO	State that the minimum GBAS plan coverage is 15 NM from the landing threshold point within 35° apart the final approach path and 10° apart between 15 and 20 NM	x	
LO	State that GBAS based on GPS is sometimes called LAAS : Local Area Augmentation System	x	

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
LO	Describe the characteristics of Local Area Augmentation System (LAAS) with respect to: differential corrections applied to a satellite signal by a ground-based reference station regional service providers to compute the integrity of the satellite signals over their region extra accuracy for extended coverage around airports, railways, seaports and urban areas as required by the user	x	
	<i>Satellite Based Augmentation Systems (SBAS)</i>		
LO	Explain the principle of a SBAS : to measure on the ground the signal errors transmitted by GNSS satellites and transmit differential corrections and integrity messages for navigation satellites	x	x
LO	State that the frequency band of the data link is identical to that of the GPS signals.	x	x
LO	Explain that the use of geostationary satellites enables messages to be broadcast over very wide areas	x	x
LO	Explain that pseudo-range measurements to these geostationary satellites can also be made, as if they were GPS satellites	x	x
LO	Stat that SBAS consists of 3 elements : — The ground infrastructure (monitoring and processing stations), — The SBAS satellites, — The SBAS airborne receivers.	x	x
LO	Explain that SBAS station network measures the pseudo-range between the ranging source and an SBAS receiver at the known locations and provides separate corrections for ranging source ephemeris errors, clock errors and ionospheric errors. The user applies corrections for tropospheric delay.	x	
LO	Explain that SBAS can provide approach and landing operations with Vertical guidance (APV) and precision approach service .	x	x
LO	Explain the difference between Coverage area and Service area	x	x
LO	State that Satellite Based Augmentation Systems include:	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR (A) A.2
	<ul style="list-style-type: none"> – EGNOS in Western Europe and the Mediterranean – WAAS in USA – MSAS in Japan – GAGAN in India 		
LO	Explain that SBAS systems regionally augment GPS and GLONASS by making them suitable for safety critical applications such as landing aircraft	x	
	<i>EGNOS</i>		
LO	State that (EGNOS) European Geostationary Navigation Overlay Service consists of 3 geostationary Inmarsat satellites which broadcast GPS look-alike signals	x	x
LO	State that EGNOS is designed to improve accuracy to 1–2 m horizontally and 3–5 m vertically	x	x
LO	Explain that integrity and safety are improved by alerting users within 6 seconds if a GPS malfunction occurs (up to 3 hrs GPS alone)	x	x
	<i>Airborne Based Augmentation Systems (ABAS)</i>		
LO	Explain the principle of ABAS : to use redundant elements within the GPS constellation (e.g. : multiplicity of distance measurements to various satellites) or the combination of GNSS measurements with those of other navigation sensors (such as inertial systems), to develop integrity control	x	x
LO	State that the type of ABAS using only GNSS information is RAIM (Receiver Autonomous Integrity Monitoring)	x	x
LO	State that a system using information from additional on-board sensors is named AAIM (Aircraft Autonomous Integrity Monitoring)	x	x
LO	Explain that the typical sensors used are barometric altimeter , clock and inertial navigation system	x	x
LO	Explain that unlike GBAS and SBAS , ABAS does not improve positioning accuracy	x	x

AMC7 FCL.615

DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES

Subject IFR Communications (Competency-based modular course according to Appendix 6 A.2)

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
092 00 00 00	IFR COMMUNICATIONS		
092 01 00 00	DEFINITIONS		
092 01 01 00	Meanings and significance of associated terms		
LO	As for VFR plus terms used in conjunction with approach and holding procedures	x	x
092 01 02 00	Air Traffic Control abbreviations		
LO	As for VFR plus additional IFR related terms	x	x
092 01 03 00	Q-code groups commonly used in RTF air-ground communications		
LO	Define Q-code groups commonly used in RTF air to ground communications: - Pressure settings - Directions and bearings	x	x
LO	State the procedure for obtaining a bearing information in flight	x	x
092 01 04 00	Categories of messages		
LO	List the categories of messages in order of priority	x	x
LO	Identify the types of messages appropriate to each category	x	x
LO	List the priority of a message (given examples of messages to compare)	x	x
092 02 00 00	GENERAL OPERATING PROCEDURES		
092 02 01 00	Transmission of letters		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the phonetic alphabet used in radiotelephony	x	x
LO	Identify the occasions when words should be spelt	x	x
092 02 02 00	Transmission of numbers (including level information)		
LO	Describe the method of transmitting numbers - Pronunciation - Single digits, whole hundreds and whole thousands	x	x
092 02 03 00	Transmission of time		
LO	Describe the ways of transmitting time - Standard time reference (UTC) - Minutes, minutes and hours, when required	x	x
092 02 04 00	Transmission technique		
LO	Explain the techniques used for making good R/T transmissions	x	x
092 02 05 00	Standard words and phrases (relevant RTF phraseology included)		
LO	Define the meaning of standard words and phrases	x	x
LO	Use correct standard phraseology for each phase of IFR flight - Pushback - IFR departure - Airways clearances - Position reporting - Approach procedures - IFR arrivals	x	x
092 02 06 00	Radiotelephony call signs for aeronautical stations including use of abbreviated call signs		
LO	As for VFR	x	x
LO	Name the two parts of the call sign of an aeronautical station	x	x
LO	Identify the call sign suffixes for aeronautical stations	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Explain when the call sign may be abbreviated to the use of suffix only	x	x
092 02 07 00	Radiotelephony call signs for aircraft including use of abbreviated call signs		
LO	As for VFR	x	x
LO	Explain when the suffix 'HEAVY' should be used with an aircraft call sign	x	x
LO	Explain the use of the phrase 'Change your call sign to ...'	x	x
LO	Explain the use of of the phrase 'Revert to flight plan call sign'	x	x
092 02 08 00	Transfer of communication		
LO	Describe the procedure for transfer of communication - By ground station - By aircraft	x	x
092 02 09 00	Test procedures including readability scale; establishment of RTF communication		
LO	Explain how to test radio transmission and reception	x	x
LO	State the readability scale and explain its meaning	x	x
092 02 10 00	Read back and acknowledgement requirements		
LO	State the requirement to read back ATC route clearances	x	x
LO	State the requirement to read back clearances related to runway in use	x	x
LO	State the requirement to read back other clearances including conditional clearances	x	x
LO	State the requirement to read back data such as runway, SSR codes etc	x	x
092 02 11 00	Radar procedural phraseology		
LO	Use the correct phraseology for an aircraft receiving a radar service - Radar identification - Radar vectoring - Traffic information and avoidance - SSR procedures	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
092 02 12 00	Level changes and reports		
LO	Use the correct term to describe vertical position <ul style="list-style-type: none"> - In relation to flight level (standard pressure setting) - In relation to Altitude (metres/feet on QNH) - In relation to Height (metres/feet on QFE) 	x	x
092 03 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATION FAILURE		
LO	Describe the action to be taken in communication failure on a IFR flight	x	x
LO	Describe the action to be taken in case of communication failure on a IFR flight when flying in VMC and the flight will be terminated in VMC	x	x
LO	Describe the action to be taken in case of communication failure on a IFR flight when flying in IMC	x	x
092 04 00 00	DISTRESS AND URGENCY PROCEDURES		
092 04 01 00	PAN medical		
LO	Describe the type of flights to which PAN MEDICAL applies	x	x
LO	List the content of a PAN MEDICAL message in correct sequence	x	x
092 04 02 00	Distress (definition – frequencies – watch of distress frequencies – distress signal – distress message)		
LO	State the DISTRESS procedures	x	x
LO	Define DISTRESS	x	x
LO	Identify the frequencies that should be used by aircraft in DISTRESS	x	x
LO	Specify the emergency SSR codes that may be used by aircraft, and the meaning of the codes	x	x
LO	Describe the action to be taken by the station which receives a DISTRESS message	x	x
LO	Describe the action to be taken by all other stations when a DISTRESS procedure is in progress	x	x
LO	List the content of a DISTRESS message	x	x
092 04 03 00	Urgency (definition – frequencies – urgency signal – urgency message)		

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	State the URGENCY procedures	x	x
LO	Define URGENCY	x	x
LO	Identify the frequencies that should be used by aircraft in URGENCY	x	x
LO	Describe the action to be taken by the station which receives an URGENCY message	x	x
LO	Describe the action to be taken by all other stations when an DISTRESS procedure is in progress		
LO	List the content of an URGENCY signal/message in the correct sequence	x	x
092 05 00 00	RELEVANT WEATHER INFORMATION TERMS (IFR)		
092 05 01 00	Aerodrome weather		
LO	As for VFR plus the following	x	x
LO	Runway visual range	x	x
LO	Braking action (friction coefficient)	x	x
092 05 02 00	Weather broadcast		
LO	As for VFR plus the following	x	x
LO	Explain when aircraft routine meteorological observations should be made	x	x
LO	Explain when aircraft Special meteorological observations should be made	x	x
092 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES		
LO	Describe the radio frequency spectrum with particular reference to VHF	x	x
LO	State the names of the bands into which the radio frequency spectrum is divided	x	x
LO	Identify the frequency range of the VHF band	x	x
LO	Name the band normally used for Aeronautical Mobile Service voice communications	x	x
LO	State the frequency separation allocated between consecutive VHF frequencies	x	x
LO	Describe the propagation characteristics of radio transmissions in the VHF band	x	x

Syllabus reference	Syllabus details and associated Learning Objectives	IR A.1	IR(A) A.2
LO	Describe the factors which reduce the effective range and quality of radio transmissions	x	x
LO	State which of these factors apply to the VHF band	x	x
LO	Calculate the effective range of VHF transmissions assuming no attenuating factors	x	x
092 07 00 00	MORSE CODE		
LO	Identify radio navigation aids (VOR, DME, NDB, ILS) from their Morse code identifiers	x	x
LO	SELCAL, TCAS, ACARS phraseology and procedures	x	x

Subpart G – Instrument Rating – Section 1

2. A new GM1 FCL.615 is added:

GM1 FCL.615

DETAILED THEORETICAL KNOWLEDGE SYLLABUS AND LEARNING OBJECTIVES FOR THE ISSUE OF AN INSTRUMENT RATING

The detailed theoretical knowledge syllabus is combined with the Learning Objectives (LOs).

The LOs refer to measurable statements of the skills and/or knowledge that a student should be able to demonstrate following a defined element of training. The LOs define the theoretical knowledge that a student should have assimilated on successful completion of an approved theoretical knowledge course and/or prior to undertaking the theoretical knowledge examinations.

The LOs are intended to be used by the training industry when developing Part-FCL theoretical knowledge courses. It should be noted, however, that the LOs do not provide a ready-made ground training syllabus for individual approved training organisations, and should not be seen by organisations as a substitute for thorough course-design.

For the preparation of theoretical knowledge courses for the issue of instrument ratings, the following information should be taken into account:

(a) Subject Air Law

- (1) Subject Air Law is primarily based on ICAO documentation but will also refer to the future European operational rules and the requirements dealing with pilot licensing.
- (2) National Law should not be taken into account but remains relevant during practical training and operational flying.
- (3) Abbreviations used are ICAO abbreviations listed in ICAO Doc 8400, Abbreviations and Codes.

- (4) Where an LO refers to a definition e.g. 'Define the following terms' or 'Define and understand' or 'Explain the definitions in ...', candidates are also expected to be able to recognise a given definition.

(b) Subject Flight Planning and Flight Monitoring

- (1) To fully appreciate and understand the subject Flight Planning and Flight Monitoring, the applicant will benefit from background knowledge in subjects Air Law, Aircraft General Knowledge, Mass & Balance, Performance, Meteorology, Navigation, Operational Procedures and Principles of Flight.
- (2) The reference to the relevant requirements of the Regulation on Air Operations is specifically mentioned in the LOs and should be used for reference as required.
- (3) The Jeppesen Student Pilots' Training Route Manual (SPTRM), otherwise known as the Training Route Manual (TRM), contains planning data plus Aerodrome and Approach charts that may be used in theoretical knowledge training courses.

Subpart G – Instrument Rating – Section 1

3. A new AMC1 to FCL.615 and FCL.825(d) is added:

AMC1 FCL.615(b) and FCL.825(d) Instrument Rating and En-route Instrument Rating

Theoretical knowledge syllabus for the IR following the competency-based modular course (Appendix 6 A.2) and the EIR

1. The following tables contain the detailed theoretical knowledge syllabus for the IR following the competency-based modular route (IR(A)) and the EIR.
2. Aspects related to non-technical skills shall be included in an integrated manner, taking into account the particular risks associated to the licence and the activity.

010 00 00 00	AIR LAW
010 04 00 00	PERSONNEL LICENSING
010 05 00 00	RULES OF THE AIR
010 06 00 00	PROCEDURES FOR AIR NAVIGATION SERVICES – AIRCRAFT OPERATIONS
010 07 00 00	AIR TRAFFIC SERVICES AND AIR TRAFFIC MANAGEMENT
010 08 00 00	AERONAUTICAL INFORMATION SERVICE
010 09 00 00	AERODROMES
022 00 00 00	AIRCRAFT GENERAL KNOWLEDGE – INSTRUMENTATION
022 02 00 00	MEASUREMENT OF AIR DATA PARAMETERS
022 04 00 00	GYROSCOPIC INSTRUMENTS

022 13 00 00	INTEGRATED INSTRUMENTS — ELECTRONIC DISPLAYS
033 00 00 00	FLIGHT PLANNING AND FLIGHT MONITORING
033 02 00 00	FLIGHT PLANNING FOR IFR FLIGHTS
033 03 00 00	FUEL PLANNING
033 04 00 00	PRE-FLIGHT PREPARATION
033 05 00 00	ICAO FLIGHT PLAN (ATS FLIGHT PLAN)
040 00 00 00	HUMAN PERFORMANCE
040 01 00 00	HUMAN FACTORS: BASIC CONCEPTS
040 02 00 00	BASIC AVIATION PHYSIOLOGY AND HEALTH MAINTENANCE
040 03 00 00	BASIC AVIATION PSYCHOLOGY
050 00 00 00	METEOROLOGY
050 01 00 00	THE ATMOSPHERE
050 02 00 00	WIND
050 03 00 00	THERMODYNAMICS
050 04 00 00	CLOUDS AND FOG
050 05 00 00	PRECIPITATION
050 06 00 00	AIR MASSES AND FRONTS
050 07 00 00	PRESSURE SYSTEMS
050 08 00 00	CLIMATOLOGY
050 09 00 00	FLIGHT HAZARDS
050 10 00 00	METEOROLOGICAL INFORMATION
062 00 00 00	RADIO NAVIGATION
062 02 00 00	RADIO AIDS
062 03 00 00	RADAR
062 05 00 00	AREA NAVIGATION SYSTEMS, RNAV/FMS
092 00 00 00	IFR COMMUNICATIONS
092 01 00 00	DEFINITIONS
092 02 00 00	GENERAL OPERATING PROCEDURES
092 03 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATION FAILURE
092 04 00 00	DISTRESS AND URGENCY PROCEDURES
092 05 00 00	RELEVANT WEATHER INFORMATION TERMS (IFR)
092 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES
092 07 00 00	MORSE CODE

Subpart H — Class and type ratings — Section 2

4. AMC1 FCL.720.A (b)(2)(i) is amended as follows:

'AMC1 to FCL.720.A (b)(2)(i)

Additional theoretical knowledge for a class or type rating for high performance single-pilot aeroplanes

1. A number of aeroplanes certificated for single pilot operation have similar performances, systems and navigation capabilities to those more usually associated with multi-pilot types of aeroplanes, and regularly operate within the same airspace. The level of knowledge required to operate safely in this environment is not part of, or not included to the necessary depth of knowledge in the training syllabi for the PPL, CPL or IR(A) but these licence holders may fly as pilot-in-command of such aeroplanes. The additional theoretical knowledge required to operate such aeroplanes safely is obtained by completion of a course at an approved training organisation.
2. The aim of the theoretical knowledge course is to provide the applicant with sufficient knowledge of those aspects of the operation of aeroplanes capable of operating at high speeds and altitudes, and the aircraft systems necessary for such operation.

COURSE SYLLABUS

3. The course will be divided in a VFR and an IFR part and should cover at least the following items of the aeroplane syllabus to the ATPL(A) level:

Subject Ref.:	Syllabus Content:
	VFR Operation
021 00 00 00	AIRFRAME AND SYSTEMS, ELECTRICS, POWERPLANT
021 02 02 01	Alternating current — general
to	Generators
021 02 02 03	AC power distribution
021 01 08 03	Pressurisation (Air driven systems — piston engines)
021 01 09 04	Pressurisation (Air driven systems — turbojet and turbo propeller)
021 03 01 06	Engine performance — piston engines
021 03 01 07	Power augmentation (turbo/supercharging)
021 03 01 08	Fuel
021 03 01 09	Mixture
021 03 02 00	Turbine engines
to	
021 03 04 09	
021 04 05 00	Aircraft oxygen equipment

032 02 00 00	PERFORMANCE CLASS B — ME AEROPLANES
032 02 01 00 to 032 02 04 01	Performance of multi-engine aeroplanes not certificated under JAR/FAR 25 — Entire subject
040 02 00 00	HUMAN PERFORMANCE
040 02 01 00 to 040 02 01 03	Basic human physiology and High altitude environment
050 00 00 00	METEOROLOGY — WINDS AND FLIGHT HAZARDS
050 02 07 00 to 050 02 08 01	Jet streams CAT Standing waves
050 09 01 00 to 050 09 04 05	Flight hazards Icing and turbulence Thunderstorms
062 02 00 00	BASIC RADAR PRINCIPLES
062 02 01 00 to 062 02 05 00	Basic radar principles Airborne radar SSR
081 00 00 00	PRINCIPLES OF FLIGHT — AEROPLANES
081 02 01 00 to 081 02 03 02	Transonic aerodynamics — Entire subject Mach number/shockwaves buffet margin/aerodynamic ceiling
	IFR Operation
010 06 07 00	Simultaneous Operation on parallel or near-parallel instrument Runways
010 06 08 00	Secondary surveillance radar (transponder) operating procedures
010 09 08 02	Radio altimeter operating areas
022 02 02 02	Design and operation

022 03 04 00	Flux valve
022 12 00 00	ALERTING SYSTEMS, PROXIMITY SYSTEMS
022 12 07 00	Altitude alert system
022 12 08 00	Radio-altimeter
022 12 10 00	ACAS/TCAS principles and operation
022 13 03 01	Electronic Flight Instrument System (EFIS) — Design, operation
050 02 06 03	Clear Air turbulence (CAT): Description, cause and location
050 10 02 03	Upper air charts
062 02 05 04	ILS — Errors and accuracy
062 02 06 00	MLS
062 02 06 01	Principles
to	Presentation and Interpretation/Coverage and range
062 02 06 04	Error and accuracy

4. Demonstration of acquisition of this knowledge is undertaken by passing an examination set by an approved training organisation. Successfully passing this examination, results in the issue of a certificate indicating that the course and examination have been completed.
5. The certificate represents a 'once only' qualification and satisfies the requirement for the addition of all future high performance aeroplanes to the holder's licence. The certificate is valid indefinitely and is to be submitted with the application for the first HPA type or class rating.
6. A pass in any theoretical knowledge subjects as part of the HPA course will not be credited against meeting future theoretical examination requirements for issue of a CPL(A), IR(A) or ATPL(A).
7. The holder of an IR(A) who completed a competency-based modular course in accordance with Appendix 6 A.2 should only be credited towards the requirements for theoretical knowledge instruction and examination for an IR in another category of aircraft when having successfully passed the IFR part of the HPA TK examination.

Subpart I — Additional Ratings

5. A new AMC1 FCL.825 and GM1 FCL.825 are added:

AMC1 FCL.825 En-Route Instrument Rating

CONDITIONS FOR THE EXERCISE OF THE PRIVILEGES OF AN EN-ROUTE INSTRUMENT RATING (EIR)

In order to comply with FCL.825 (a)(2), the holder of an EIR should not commence or continue a flight during which it is intended to exercise the privileges of the rating unless the forecast for the destination or alternate aerodrome one hour before and one hour after the planned time of arrival indicates VMC. If the required meteorological data are not available for the destination aerodrome, the flight should be planned to a nearby aerodrome for which such meteorological information is available. An IFR/VFR transition point should be used in order to enable the pilot to conclude the flight under VFR to the intended destination. For this purpose, when filing a flight plan in accordance with operational rules, the holder of an EIR should include IFR/VFR transition points.

GM1 FCL.825 En-Route Instrument Rating

GENERAL

Since the privileges of the EIR are only to be exercised in the en-route phase of flight, the holder of an EIR should:

1. at no time accept an IFR clearance to fly a departure, arrival or approach procedure;
2. declare an emergency to ATC if unable to complete a flight within the limitations of their rating.

6. A new AMC1 FCL.825(c) is added:

AMC1 FCL.825(c) En-Route Instrument Rating

FLIGHT INSTRUCTION

(a) FLIGHT INSTRUCTION

The flight instruction for the EIR within an ATO should comprise the following flying exercises:

- (1) pre-flight procedures for IFR flights, including the use of the flight manual, meteorological information, appropriate air traffic service documents, filing of an IFR flight plan, including VFR/IFR transitions and diversions;
- (2) use of appropriate IFR and VFR charts;
- (3) basic instrument flight by sole reference to instruments:
 - horizontal flight,

- climbing,
- descending,
- turns in level flight, climbing, descending;

- (4) steep turns and recovery from unusual attitudes on full and limited panel;
- (5) normal flight on limited panel;
- (6) instrument pattern;
- (7) procedures and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least:

- transition from visual to instrument flight after departure,
- en-route IFR procedures,
- en-route holding procedures,
- transition from instrument flight en-route to visual before reaching the Minimum Sector Altitude (MSA);

- (8) radio navigation (GPS/VOR);
- (9) use of advanced equipment such as autopilot, flight director, stormscope, de-icing equipment, EFIS or radar, as available;
- (10) emergency procedures covering the deterioration of meteorological conditions;
- (11) at least two IFR approaches in the context of an emergency situation;
- (12) use of RT techniques in order to gain a competence to a high standard;
- (13) if required, operation of a multi-engine aeroplane during the above range of exercises to include engine failures and cruise flight with one engine simulated inoperative;
- (14) the flight instruction should also include at least two flights in controlled airspace under IFR with a high density of traffic and VFR arrivals and departures from aerodromes with a mixture of instrument and visual traffic.

7. A new AMC1 FCL.825(c)(2)(iv)(v) is added:

AMC1 FCL.825(c)(2)(iv)(v) En-Route Instrument Rating

PRE-ENTRY ASSESSMENT AND TRAINING RECORD

(a) GENERAL

In accordance with FCL.825(c)(ii) instrument flight instruction provided outside an ATO by an instructor having the privilege to provide training for the IR or EIR may be credited for the single engine or multi-engine EIR.

(b) PRE-ENTRY ASSESSMENT

The assessment to establish the amount of training to be credited and to identify the training needs should be based on the EIR training syllabus established in AMC2 FCL.825(c).

(c) TRAINING RECORD

Before initiating the assessment the applicant should provide a training record containing the details of the previous flight training provided by the IRI(A) or the FI(A). This training record should at least specify the aircraft type and registration used for the training, the number of flights and the total amount of instrument instruction time. It should also specify all the exercises completed during the training by using the syllabus contained in AMC2 FCL.825(c) and should be signed by the instructor(s) having provided the training.

The instructor having provided the training should keep the training records containing all the details of the flight training given for a period of at least 3 years after the completion of the training.

8. A new AMC1 FCL.825(c)(2)(ii) is added:

AMC1 FCL.825(c)(2)(ii) En-Route Instrument Rating

TRAINING AIRCRAFT

The aircraft used for the instrument flight training provided by an IRI(A) or FI(A) should be:

- (a) fitted with primary flight controls that are instantly accessible by both the student and the instructor (for example dual flight controls or a centre control stick). Swing-over flight controls should not be used; and
- (b) suitably equipped to simulate instrument meteorological conditions (IMC) and for the instrument flight training required.

9. A new AMC1 FCL.825(d) is added:

AMC1 FCL.825(d) En-Route Instrument Rating

THEORETICAL KNOWLEDGE INSTRUCTION AND EXAMINATION

(a) GENERAL

The theoretical knowledge instruction and examination should be the same as for the instrument rating following the competency-based modular course according to Appendix 6 A.2.

(b) THEORETICAL KNOWLEDGE

The applicant should complete an approved IR(A)/EIR Theoretical Knowledge (TK) course of at least 80 hours. The approved IR(A)/EIR TK course may contain computer-based training, e-learning elements, interactive video, slide/tape presentation, learning carrels and other media as approved by the authority, in suitable proportions. Approved distance learning (correspondence) courses may also be offered as part of the course. The minimum amount of classroom teaching, as required by ORA.ATO.305 has to be provided.

(c) THEORETICAL KNOWLEDGE EXAMINATION

The number of questions per subject, the distribution of questions and the time allocated to each subject is detailed in AMC2 ARA.FCL.300.

10. A new AMC1 FCL.825(e) is added:

AMC1 FCL.825(e) En-Route Instrument Rating

SKILL TEST/PROFICIENCY CHECK FOR THE ISSUE, REVALIDATION, OR RENEWAL OF AN EN-ROUTE INSTRUMENT RATING (EIR)

1. An applicant for an En-route Instrument Rating (EIR) should have received instrument flight instruction on the same type or class of aeroplane to be used in the test/check.
2. An applicant should pass all the relevant sections of the skill test/proficiency check. If any item in a section is failed, that section is failed. Failure in more than one section will require the applicant to take the entire test again. An applicant failing only one section should only repeat the failed section. Failure in any section of the retest, including those sections that have been passed on a previous attempt, requires the applicant to take the entire test again. All sections of the skill test should be completed within 6 months. Failure to achieve a pass in all sections of the test in two attempts requires further training.
3. Further training may be required following a failed skill test. There is no limit to the number of skill tests that may be attempted.

CONDUCT OF THE TEST

4. The test is intended to simulate a practical flight. The route to be flown shall be chosen by the examiner. An essential element is the ability of the applicant to plan and conduct the flight from routine briefing material. The applicant should undertake the flight planning and should ensure that all equipment and documentation for the execution of the flight are on board. The duration of the flight should be at least 60 minutes.
5. Should the applicant choose to terminate a skill test/proficiency check for reasons considered inadequate by the flight examiner, the applicant should retake the entire skill

test/proficiency check. If the test is terminated for reasons considered adequate by the examiner, only those sections not completed should be tested in a further flight.

6. At the discretion of the examiner any manoeuvre or procedure of the test may be repeated once by the applicant. The examiner may stop the test at any stage if it is considered that the applicant's demonstration of flying skill requires a complete retest.

7. An applicant should fly the aeroplane from a position where the pilot-in-command functions can be performed and to carry out the test as if there is no other crew member. Responsibility for the flight should be allocated in accordance with national regulations.

8. Minimum descent heights/altitudes and the transition points should be determined by the applicant and agreed by the examiner.

9. An applicant for an EIR should indicate to the examiner the checks and duties carried out, including the identification of radio facilities. The checks should be completed in accordance with the authorised checklist for the aeroplane on which the test is being taken. During pre-flight preparation for the test the applicant should determine power settings and speeds. Performance data for take-off, approach and landing should be calculated by the applicant in compliance with the operations manual or flight manual for the aeroplane used.

FLIGHT TEST TOLERANCES

10. The applicant should demonstrate the ability to:

3.1. – operate the aeroplane within its limitations;

3.2. – complete all manoeuvres with smoothness and accuracy;

3.3. – exercise good judgment and airmanship;

3.4. – apply aeronautical knowledge; and

3.5. – maintain control of the aeroplane at all times in such a manner that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

11. The following limits should apply, corrected to make allowance for turbulent conditions and the handling qualities and performance of the aeroplane used

Height

Generally ± 100 feet

Tracking

on radio aids $\pm 10^\circ$

Heading

all engines operating $\pm 10^\circ$

with simulated engine failure $\pm 15^\circ$

Speed

all engines operating +10 knots/-5 knots

with simulated engine failure +15 knots/-5 knots

CONTENT OF THE SKILL TEST/PROFICIENCY CHECK

SECTION 1

PRE-FLIGHT OPERATIONS AND DEPARTURE	
<i>Use of checklist, airmanship, anti/de-icing procedures, etc., apply in all sections.</i>	
a	Use of flight manual (or equivalent) especially a/c performance calculation, mass and balance
b	Use of Air Traffic Services document, weather document
c	Preparation of ATC flight plan, IFR flight plan/log
d	Pre-flight inspection
e	Weather Minima
f	Taxiing
g	Pre-take-off briefing. Take-off
h	ATC liaison: compliance, R/T procedures
SECTION 2 GENERAL HANDLING	
a	Control of the aeroplane by reference solely to instruments, including: level flight at various speeds, trim
b	Climbing and descending turns with sustained Rate 1 turn
c	Recoveries from unusual attitudes, including sustained 45° bank turns and steep descending turns
d	Recovery from approach to stall in level flight, climbing/descending turns and in landing configuration
e	Limited panel, stabilised climb or descent at Rate 1 turn onto given headings, recovery from unusual attitudes
SECTION 3 EN-ROUTE IFR PROCEDURES	
a	Transition to instrument flight
b	Tracking, including interception, e.g. NDB, VOR, RNAV
c	Use of radio aids
d	Level flight, control of heading, altitude and airspeed, power setting, trim technique
e	Altimeter settings
f	Timing and revision of ETAs (En-route hold — if required)
g	Monitoring of flight progress, flight log, fuel usage, systems management

h	Simulated emergency situation(s)
i	Ice protection procedures, simulated if necessary
j	Simulated diversion to alternate aerodrome
k	Transition to visual flight
l	ATC liaison and compliance, R/T procedures
SECTION 4	
	intentionally blank
SECTION 5	
a	Setting and checking of navigational aids, identification of facilities
b	Arrival procedures, altimeter settings
c	Approach and landing briefing, including descent/approach/landing checks
d	Visual landing
e	ATC liaison: compliance, R/T procedures
SECTION 6 (multi-engine aeroplanes only) Flight with one engine inoperative	
a	Simulated engine failure during en-route phase of flight
b	ATC liaison: compliance, R/T procedures

11. A new AMC1 FCL.830 is added:

AMC1 FCL.830 Sailplane Cloud Flying Rating

Theoretical knowledge instruction and flight instruction

1. THEORETICAL KNOWLEDGE INSTRUCTION

The theoretical knowledge syllabus should cover the revision and/or explanation of:

1.1. Human Factors and Body Limitations

- basic aviation physiology in regards cloud flying aspects
- basic aviation psychology
- spatial disorientation

1.2. Principles of Flight

- stability
- control
- limitations (load factor and manoeuvres)

1.3. Aircraft Instrumentation

- sensors and instruments
- measurement of air data parameters
- gyroscopic instruments

1.4. Navigation

- use of GPS
- use of charts
- dead reckoning navigation (DR)
- air traffic regulations — airspace structure
- aeronautical information service
- Member State regulations regarding cloud flying

1.5. Communications

- VHF communications
- relevant weather information terms

1.6. Hazards and Emergency Procedures

- Icing

- Cloud escape procedures

- Anti-collision instruments/avionics

2. FLIGHT INSTRUCTION

2.1. The exercises of the sailplane cloud flight instruction syllabus should be repeated as necessary until the student achieves a safe and competent standard and should comprise at least the following practical training items, flown solely by reference to instruments:

- straight flight
- turning
- achieving and maintaining heading
- return to straight flight from steeper angle of bank
- position fixing using GPS and aeronautical charts
- position estimating using DR
- basic cloud escape manoeuvre/unusual attitude
- advanced cloud escape manoeuvre on nominated heading

2.2. A maximum amount of 1 hour of the required flight training may be conducted in a TMG. During these flights only exercises under simulated IMC should be conducted. However, at least one hour cloud flying training must be flown in a sailplane or powered sailplane (excluding TMG).

12. A new AMC2 FCL.830 is added:

AMC2 FCL.830 Sailplane Cloud Flying Rating

SKILL TEST AND PROFICIENCY CHECK

The skill test for the issue of the cloud flying rating or the proficiency check for fulfilling the requirements in FCL.830 (b)(3) and (e)(1) should be conducted in either a sailplane or a powered sailplane (including TMG if the test or check will be flown under simulated IMC only) and should contain the following elements:

1. ORAL EXAMINATION

This part should be done before the flight and should cover all the relevant parts of the theoretical knowledge syllabus. At least one question for each of the following sections should be asked:

- Human performance and body limitations
- Principles of flight
- Aircraft instrumentation for cloud flying
- Navigation
- Communications
- Hazards and emergency procedures

If the oral examination reveals a lack in theoretical knowledge, the flight test should not be done and the skill test is failed.

2. PRACTICAL SKILL TEST

During the practical skill test, the following limits should apply with appropriate allowance for turbulent conditions and the handling qualities and performance of the sailplane used. Artificial horizon or turn and slip instruments should be used as appropriate:

	Artificial Horizon	Turn & Slip
Straight flight	Heading $\pm 10^\circ$ IAS ± 10 kts	Heading $\pm 20^\circ$ IAS ± 15 kts
Turning	Angle of bank $\pm 15^\circ$ IAS ± 10 kts	Small deviations in rate of turn with a maximum deviation between $\frac{1}{2}$ & full scale IAS ± 15 ts
Position fixing given: GPS displaying range and bearing to a point	± 2 NM	± 3 NM

During the practical skill test, the following exercises should be successfully completed by the applicant, flown solely by reference to instruments and taking into account the limits above:

- straight flight
- turning
- achieving and maintaining heading
- return to straight flight from steeper angle of bank
- position fixing using GPS and aeronautical charts
- position estimating using DR
- basic cloud escape manoeuvre/unusual attitude
- advanced cloud escape manoeuvre on nominated heading

Appendix 6 Modular training courses for the IR

13. Amend AMC1 to Appendix 6 as follows:

AMC ~~No 1 to~~ Appendix 6

A.1. Modular training course for IR

1. The theoretical knowledge instruction may be given at an approved training organisation conducting theoretical knowledge instruction only, in which case the Head of Training of that organisation should supervise that part of the course.

2. The 150 hours of theoretical knowledge instruction can include classroom work, inter-active video, slide/tape presentation, learning carrels, computer-based training, and other media as approved by the authority, in suitable proportions. Approved distance learning (correspondence) courses may also be offered as part of the course.

14. A new AMC2 to Appendix 6 is added:

AMC2 Appendix 6

A.2. Competency-based training modular course for IR(A)

(a) THEORETICAL KNOWLEDGE INSTRUCTION

- (1) The theoretical knowledge instruction may be given at an approved training organisation conducting theoretical knowledge instruction only, in which case the Head of Training of that organisation should supervise that part of the course.
- (2) The required 80 hours of theoretical knowledge instruction for the IR following the competency-based route may contain computer-based training, e-learning elements, interactive video, slide/tape presentation, learning carrels and other media as approved by the authority, in suitable proportions. Approved distance learning (correspondence) courses may also be offered as part of the course. The minimum amount of classroom teaching has to be provided as required by ORA.ATO.305.

(b) THEORETICAL KNOWLEDGE EXAMINATION

The applicant for the IR following the competency-based training route should pass an examination to demonstrate a level of theoretical knowledge appropriate to the privileges granted in the subjects further detailed in FCL.615(b). The number of questions per subject, the distribution of questions and the time allocated to each subject is detailed in AMC2 ARA.FCL.300.

15. A new GM1 to Appendix 6 is added:

GM1 Appendix 6 (6)(c)

A.2. Competency-based training modular course for IR(A)

PRIOR EXPERIENCE OF FLIGHT TIME BY REFERENCE TO INSTRUMENTS

To be taken into account and credited as prior experience of instrument flight time as PIC on aeroplanes only instrument flight time completed under the following criteria should be credited by the ATO.

- (a) The instrument flight time should have been completed:

(1) under a rating providing the privileges to fly under IFR and in IMC issued by a competent authority of a Member State; or

(2) under a national instrument rating issued by a Member State completed before Part-FCL entered into force; or

(3) under a valid IR(A) issued in compliance with the requirements of Annex 1 to the Chicago Convention by a third country.

(b) A maximum of 15 hours dual flight training time should be credited towards the 25 hours of dual training required.

16. A new GM2 to Appendix 6 is added:

GM2 Appendix 6 (6)(a)(i)(b)(i)

A.2. Competency-based training modular course for IR(A)

PRE-ENTRY ASSESSMENT AND TRAINING RECORD

(a) GENERAL

In accordance with Appendix 6 (a)i) and (b)(i) instrument flight instruction provided outside an ATO by an instructor having the privilege to provide training for the IR may be credited for the competency-based modular IR.

(b) PRE-ENTRY ASSESSMENT

The assessment to establish the amount of training to be credited and to identify the training needs should be based on the training syllabus established in Appendix 6.

(c) TRAINING RECORD

Before initiating the assessment the applicant should provide a training record containing the details of the previous flight training provided by the IRI(A) or the FI(A). This training record should at least specify the aircraft type and registration used for the training, the number of flights and the total amount of instrument instruction time. It should also specify all the exercises completed during the training by using the syllabus contained in Appendix 6 and should be signed by the instructor(s) having provided the training.

The instructor having provided the training should keep the training records containing all the details of the flight training given for a period of at least 3 years after the completion of the training.

17. A new AMC3 to Appendix 6 is added:

AMC3 to Appendix 6 A.2. Competency-based training modular course for IR(A)

TRAINING AIRCRAFT

The aircraft used for the instrument flight training provided by an IRI(A) or FI(A) should be:

- (c) fitted with primary flight controls that are instantly accessible by both the student and the instructor (for example dual flight controls or a centre control stick). Swing-over flight controls should not be used; and
- (d) suitably equipped to simulate instrument meteorological conditions (IMC) and for the instrument flight training required.

Draft Decision of the Executive Director of the European Aviation Safety Agency amending Decision 2012/006/R of the Executive Director of the Agency of 19 April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

'Acceptable means of compliance and Guidance Material to Part-ARA'

1. A new AMC2 to ARA.FCL.300(b) is added:

AMC2 ARA.FCL.300(b) Examination procedures

THEORETICAL KNOWLEDGE EXAMINATIONS FOR THE EN-ROUTE INSTRUMENT RATING (EIR) AND THE INSTRUMENT RATING (IR)

The following tables contain the number of questions, the distribution of questions related to the different syllabus topics and the time allowed for the theoretical knowledge examination. The table on the right contains the necessary details for the theoretical examination of applicants for the En-route Instrument Rating (EIR) and the IR(A) based on the competency-based modular course according to Appendix 6 A.2. The table on the left contains the same details for the IR(A) and (H) examination according to Appendix 6 A.1.

Subject: 010 — AIR LAW		
Theoretical knowledge examination		
Exam length and total questions		
	IR (A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	0:45	0:30
Distribution of questions with regard to the topics of the syllabus		
010 01	xx	xx
010 02	xx	xx
010 03	xx	xx
010 04	01	01
010 05	08	05

010 06	07	06
010 07	05	03
010 08	02	01
010 09	06	02
010 10	xx	xx
010 11	xx	xx
010 12	xx	xx
010 13	xx	xx
Total questions	33	18

Subject: 022 — AIRCRAFT GENERAL KNOWLEDGE — INSTRUMENTATION		
Theoretical knowledge examination		
Exam length and total questions		
	IR(A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	0:30	0:20
Distribution of questions with regard to the topics of the syllabus		
022 01	xx	xx
022 02	06	05
022 03	04	xx
022 04	04	04
022 05	xx	xx
022 06	xx	xx
022 07	xx	xx
022 08	xx	xx
022 09	xx	xx
022 10	xx	xx

022 11	xx	xx
022 12	03	xx
022 13	03	03
022 14	xx	xx
022 15	xx	xx
Total questions	20	12

Subject: 033 — FLIGHT PERFORMANCE AND PLANNING — FLIGHT PLANNING AND MONITORING		
Theoretical knowledge examination		
Exam length and total questions		
	IR(A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	1:30	0:40
Distribution of questions with regard to the topics of the syllabus		
033 01	xx	xx
033 02	10	10
033 03	05	4
033 04	08	7
033 05	05	5
033 06	05	xx
Total questions	33	26

Subject: 040 HUMAN PERFORMANCE		
Theoretical knowledge examination		
Exam length and total questions		
	IR(A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.

Time allowed	0:45	0:20
Distribution of questions with regard to the topics of the syllabus		
040 01	01	01
040 02	26	07
040 03	09	04
Total questions	36	12

Subject: 050 METEOROLOGY		
Theoretical knowledge examination		
Exam length and total questions		
	IR(A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	1:30	0:50
Distribution of questions with regard to the topics of the syllabus		
050 01	09	05
050 02	06	03
050 03	04	01
050 04	06	05
050 05	03	03
050 06	07	05
050 07	02	xx
050 08	03	01
050 09	09	07
050 10	14	05
Total questions	63	35

Subject: 062 — RADIO NAVIGATION

Theoretical knowledge examination		
Exam length and total questions		
	IR(A) & (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	1:00	0:40
Distribution of questions with regard to the topics of the syllabus		
062 01	02	xx
062 02	23	15
062 03	05	03
062 04	xx	xx
062 05	10	05
062 06	04	01
Total questions	44	24

Subject: 092 IFR COMMUNICATION		
Theoretical knowledge examination		
Exam length and total questions		
	IR(A)& (H) Appendix 6 A.1.	EIR & IR(A) Appendix 6 A.2.
Time allowed	0:30	0:30
Distribution of questions with regard to the topics of the syllabus		
092 01	05	05
092 02	11	10
092 03	02	02
092 04	02	02
092 05	02	02
092 06	02	02

092 07	xx	xx
Total questions	24	23

Draft Decision of the Executive Director of the European Safety Agency amending Decision No 2012/007/R of the Executive Director of the Agency of 19th April 2012 on Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council.

'Acceptable means of compliance and Guidance Material to Part-ORA'

1. AMC1 to ORA.ATO.135 is amended:

AMC1 ORA.ATO.135 Training aircraft and FSTD

ALL ATOs, EXCEPT THOSE PROVIDING FLIGHT TEST TRAINING

(a) ...

(c) The fleet should include, as appropriate to the courses of training:

(1) aircraft suitably equipped to simulate instrument meteorological conditions (IMC) and for the instrument flight training required. For flight training and testing for the instrument rating and the en-route instrument rating, an adequate number of IFR-certificated aircraft should be available;

(2) ...'