Draft amendments to Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Regulation (EU) No 1178/2011 and Regulation (EU) No 965/2012

RMT. 0190 / RMT.0587 / RMT.0678

Important note:

This file is published for information purposes only. No quality control has been performed yet. The draft AMC and GM contained in this file already contains some updates resulting from focused consultations with the EASA Advisory Bodies in June 2022 (workshop) and March 2023 (NPA 2023-104) However, not all inputs from these consultations are yet fully reflected. Significant updates will be subject to a re-consultation in the course of 2024.

The amendments are arranged as follows to show deleted, new, and unchanged:

— deleted text is ~~struck through~~;

— new text is highlighted in blue;

— an ellipsis '[…]' indicates that the rest of the text is unchanged.

Where necessary, the rationale is provided in a box below the amendment.

Draft amendments – Regulation (EU) No 1178/2011 and associated AMC & GM

COVER REGULATION

GM1 Article 2(8a) Definitions

Meaning of the term "single thrust control"

The SEP aeroplane class, as defined in Article 2(8a), includes aeroplanes whose single propulsion unit (propeller) is driven by more than one engine (e.g. a hybrid engine system, consisting of a piston and an electric engine). Despite such a "multi-engine" power plant system, such an aircraft can follow the single-engine aeroplane licensing framework, since malfunctions of one engine will lead to a (partial) loss of power but never to an asymmetric flight condition. However, one condition for such an aeroplane to be treated as a single-engine aeroplane in any case is that, from a pilot's perspective, there is no difference between operating a conventional single-engine power plant and an above-described multi-engine single-propeller power plant. In this context, the term "single thrust control" is meant to refer to engine controls of such an innovative power plant which are equivalent to the engine controls of a conventional single-engine power plant.

Rationale	*RMT.0678*
In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the term "single throttle control" in the introductory phrase of paragraph (8a) of Article 2 was changed into "single thrust control" (see above). In this context, this new GM is proposed to provide additional information regarding the intention and meaning of this term.	

ANNEX I (PART-FCL)

GM1 FCL.010 Definitions

[…]

~~EIR En route instrument rating~~

[…]

SEP in the context of aeroplanes: Single-Engine Single-Pilot aeroplane, as defined in Article 2(8a)

SEP in the context of helicopters: Single-Engine Piston

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 59.

AMC1 FCL.015 Application for and issue of licences, ratings and certificates

APPLICATION AND REPORT FORMS

[…]

(a) For skill tests, proficiency checks for the issue, revalidation or renewal of LAPL, ~~BPL, SPL,~~ PPL, CPL and IR in AMC1 to Appendix 7.

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 58.

GM1 FCL.020(a) Student pilot

USE OF SEP AEROPLANES WITH DIFFERENT ENGINE TYPES DURING A TRAINING COURSE

A student pilot who undergoes training in an SEP aeroplane with a particular engine type (as specified in Article 2(8a) of Commission Regulation (EU) No 1178/2011) should be authorised in accordance

with point FCL.020(a) to undertake the necessary solo flights in an SEP variant with another engine type only after he or she has acquired the competence to safely operate such SEP variants.

Rationale *RMT.0678*

See NPA 2020-14, page 22.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the phrase "an LAPL(A) or a PPL(A)" is deleted. Instead, the amended text in general refers to student pilots who undergo training in a SEP aeroplane, thereby addressing LAPL and PPL students as well as students undergoing integrated ATP training.

AMC1 FCL.025(a) Theoretical knowledge examinations for the issue of licences

ISSUANCE OF RECOMMENDATION FOR THEORETICAL KNOWLEDGE EXAMINATION

The ATO or DTO should issue the recommendation as per point FCL.025(a)(2) without undue delay, after applicants have finished the relevant part of the theoretical knowledge instruction to a satisfactory standard.

Rationale *RMT.0587*

Based on implementation issues reported by a Member State and related discussions in the EASA Advisory Bodies, this AMC is put in place to clarify that the responsible training organisation should issue the recommendations for theoretical knowledge examinations to the applicants without undue delay, to avoid that too much time passes between the completion of the related training and the start of the time frame within which applicants can attempt an examination.

GM1 FCL.025 Theoretical knowledge examinations for the issue of licences

TERMINOLOGY

[…]

(c) 'Examination paper': a set of questions, which, except for theoretical knowledge examinations for the basic instrument rating, covers one subject required by the licence level or rating, to be answered by a candidate for examination.

[…]

Rationale *RMT.0587*

The inserted text clarifies that one BIR examination paper is not exclusively related to one subject of the theoretical knowledge syllabus.

GM1 FCL.035(b)(6)(ii) Crediting of flight time and theoretical knowledge

CASES OF CREDITS FOR VFR COMMUNICATIONS OR IFR COMMUNICATIONS

Applicants can complete reduced training in the subject Communication in line with point FCL.035(b)(6)(ii), before completing the theoretical knowledge examinations in subject Communications, in the following cases:

(a) in the case of applicants who already passed an ECQB examination for the subject VFR Communication:

(1) applicants for a CPL who hold a CPL in another category of aircraft;

(2) applicants for an ATPL who hold a CPL in the same category of aircraft;

(3) applicants for an IR or BIR holding a CPL in the same category of aircraft;

(4) applicants for an IR(H) holding an ATPL(H)/VFR.

(b) in the case of holders of a PPL and an IR who apply for a CPL, an ATPL, or for an IR in another aircraft category, and who have passed the subject IFR communications but who have not passed an ECQB-based exam in the subject VFR communications.

Rationale *RMT.0587*

In the context of the proposed amendment for point FCL.035 (new paragraph (b)(6), see above), this GM is proposed to illustrate the scenarios where such "reduced" training in the subject Communications will be possible.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, as well as following a subsequent internal review:

- the text of that GM was slightly revised to better illustrate the different crediting scenarios (paragraphs (a) and (b));
- in paragraph (a)(3), the term "or BIR" was inserted, for consistency with the credits provided for in Part-FCL Appendix 1 paragraph 4.1;
- the text which is now displayed in the new paragraph (b), uses the term "IR" (instead of "instrument rating"), to clarify that the credits explained in this GM will not work for holders of a basic instrument rating (BIR), due to the reduced BIR training examination content and the

fact that also Part-FCL Appendix 1 does not offer any credits for BIR holders who apply for an IR, a CPL or an ATPL.

AMC1 FCL.050 Recording of flight time

GENERAL

[…]

(b) Logging of flight time:

(1) PIC flight time

[…]

(ii) the applicant for, or holder of, a pilot licence may log as PIC time all solo flight time, flight time as SPIC ~~and~~, flight time under supervision as well as flight time of successfully completed skill tests, proficiency checks and assessments of competence, provided that such SPIC time and flight time under supervision are countersigned by the instructor or examiner, as applicable;

[…]

(c) Format of the record

[…]

(3) For ~~sailplanes, balloons and~~ airships, a suitable format, which may be electronic, should be used. That format should contain the relevant items mentioned in (a) and additional information specific to the type of operation.

[…]

INSTRUCTIONS FOR USE

[…]

(i) Notes on recording of flight time:

[…]

(10) column 12: the 'remarks' column may be used to record details of the flight at the holder's discretion. The following entries, however, should always be made:

[…]

(iv) name and signature of the instructor if the flight is part of any of the following:
— an SEP aeroplane or TMG class rating or single-engine helicopter type rating revalidation;

— flying activity that serves an LAPL holder to keep recent experience;

(v) for ~~multi-pilot operations~~ skill tests and proficiency checks in single-pilot ~~helicopters~~ aircraft, the form of operation (single-pilot operation and/or multi-pilot operation), name and signature of the examiner conducting the skill test or proficiency check or operator proficiency check, and the name of the operator in the case of the operator proficiency check.

[…]

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 59.

In reaction to a comment received for NPA 2020-14:

- the phrase "or examiner, as applicable" was inserted in paragraph (b)(1)(ii), since the updated text of this paragraph now also refers to skill tests and proficiency checks;
- additional text was added in paragraph (i)(10)(iv) to also refer to flying activity performed by LAPL holders to comply with the applicable recency requirements. From a formal legal perspective, these flights are not related to the revalidation of a class rating.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, paragraph (b)(1)(ii) is further amended by inserting a reference to assessments of competence. Applicants for an instructor or examiner certificate may log the flight time of their successful assessment of competence as PIC time.

GM1 FCL.060(b)(1) Recent experience

AEROPLANES, HELICOPTERS, POWERED-LIFT~~,~~ AND AIRSHIPS ~~AND SAILPLANES~~

If a pilot or a PIC ~~is~~ operates~~ing~~ under the supervision of an instructor to comply with the required three take-offs, approaches and landings, no passengers ~~may~~should be on board.

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 58.

AMC1 FCL.060(b)(5) Recent experience

NON-COMPLEX HELICOPTERS

Grouping of non-complex helicopters with similar handling and operational characteristics:

[…]

(e) Group 5: all types listed in AMC1 FCL.740.H~~(a)(3)~~(b) and R 22 and R 44.

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 59.	

AMC1 FCL.115 LAPL(A) – Training course

FLIGHT INSTRUCTION FOR THE LAPL(A)

[…]

(c) Syllabus of flight instruction

[…]

(xiv) Exercise 11: Spin avoidance:

Note: The limitations of the training aircraft as set out in the AFM (manoeuvre limitations, mass and balance calculations) need to be carefully considered.

(A) safety checks;

(B) stalling and ~~recovery~~ approaching ~~at~~ the incipient spin stage (stall with asymmetric condition, with non-centred slip indicator ~~excessive~~ ~~wing drop, about 45°~~);

(C) instructor-induced distractions during the stall.

[…]

(xvii) Exercise 12/13: Emergencies:

(A) abandoned take-off;

(B) engine failure after take-off;

(C) rejected ~~mis~~landing and go-around;

(D) missed approach~~.~~;

(E) engine restart procedures (after simulated engine failure).

Note: ~~i~~In the interests of safety, it will be necessary for pilots trained on nose wheel aeroplanes or TMGs to undergo dual conversion training before flying tail wheel aeroplanes or TMGs, and vice versa.

(xviii) Exercise 14: First solo:

(A) instructor's briefing ~~including limitations~~;

(B) use of required equipment;

(C) observation of flight and ~~de-briefing~~debriefing by instructor.

Note: ~~d~~During flights immediately following the solo circuit, the consolidation of the following should be revised:

(~~A~~1) procedures for leaving and rejoining the circuit;

(~~B~~2) the local area, restrictions, map reading;

(~~C~~3) use of radio aids for homing;

(~~D~~4) turns using magnetic compass, compass errors.

Rationale *RMT.0678*

See NPA 2020-14, page 59.

For the NPA, many comments were received that did not support the idea to allow Exercise 11 to be replaced by a discussion with an instructor, arguing that spin avoidance training is a crucial part of initial pilot training which needs to be trained in the aircraft in any case. Also, DTOs and ATOs should in any case have at least one training aircraft in place which is suitable for carrying out such manoeuvres (see AMC1 ORA.ATO.135 paragraph (c)(2); AMC1 DTO.GEN.240 paragraph (c)(1)). Finally, it was stressed in a comment that all small aeroplanes are certified to complete at least manoeuvres at the incipient spin stage. EASA agrees with these comments and, after further internal review, decided to modify the wording for Exercise 11 as shown above for the following reasons:

- Following the comments received, Note 2 as presented in NPA 2020-14 is deleted.
- The revised text better reflects the main objective of Exercise 11 which is to train spin avoidance, not spin recovery.
- Consistency with new certification criteria is established, according to which it is difficult for new small training aeroplanes to unintentionally enter into the (incipient) spin stage (wing drop).

Additionally, based on a comment received, the term "mislanding" is Exercise 12/13 is replaced by the term "rejected landing" for clarity.

AMC2 FCL.115 LAPL(H) Training course

FLIGHT INSTRUCTION FOR THE LAPL(H)

[…]

(b) Flight instruction

(1) The LAPL(H) flight instruction syllabus should take into account the principles of threat and error management and also cover:

[…]

(vii) recognition of and recovery from the incipient vortex ring state ~~recognition and recovery~~;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

(viii) touchdown autorotations, simulated engine-off landings, practice forced landings. Simulated equipment malfunctions and emergency procedures relating to malfunctions of engines, controls, electrical and hydraulic circuits;

Note: Additional guidance on how to deliver training on autorotation and forced landings can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

(c) Syllabus of flight instruction

[…]

(2) […]

(xi) Exercise 7: Basic autorotation:

[…]

(F) awareness of increased risk of vortex condition during power recovery;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

(xxiii) Exercise 15: Hover OGE ~~and~~ – ~~v~~Vortex ring – unanticipated yaw (LTE):

[…]

(C) demonstration of incipient stage of vortex ring, recognition and recovery (from a safe altitude);

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

(D) Demonstration of unanticipated yaw which could lead to a perceived ~~l~~loss of tail rotor effectiveness (LTE).

[…]

(xxix) Exercise 21: Quick stops

[…]

(E) awareness of the danger of vortex ring;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

Rationale *RMT.0587, RMT.0678*

RMT.0587

During extensive discussions with the Advisory Bodies (R.COM) and competent authorities, it was decided to further clarify the considerations on Vortex Ring State (VRS) in AMC2 FCL.115 (LAPL(H) flight training syllabus), particularly in paragraph (b)(1)(vii) and in the relevant exercises listed in paragraph (c). A note with a reference to the Helicopter Flight Instructor Guide published by EASA (Together4Safety) was added. This Guide provides more detailed and practical information and on what is expected in terms of demonstration, instruction and training concerning the recognition and recovery from VRS. In addition, guidance is provided on how to raise the awareness on the risk to encounter VRS in those exercises where VRS is mentioned as a threat.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the note inserted in paragraph (b)(1)(vii) is also inserted in paragraph (b)(1)(viii).

RMT.0678

In reaction to a comment received for draft AMC1 FCL.740.H(a)(2)(ii)(B) (refresher training flight, further down in this document), title and text (paragraph (D)) of Exercise 15 were amended for clarification and consistency.

AMC1 FCL.115~~(c)~~(b) LAPL – Training course

[…]

Rationale	*RMT.0678*
After restructuring point FCL.115 with amending Regulation [enter reference], the reference to that point in the title of that AMC needs to be updated.	

AMC1 FCL.115; FCL.120 LAPL training course and theoretical knowledge examination

SYLLABUS OF THEORETICAL KNOWLEDGE FOR THE LAPL

[…]

(b) ~~The following tables contain the syllabi for the courses of theoretical knowledge, as well as for the theoretical knowledge examinations for the LAPL(B) and LAPL(S).~~ The syllabi for the theoretical knowledge instruction and examination for the PPL(A) and the PPL(H) in AMC1 FCL.210; FCL.215 should be used for the LAPL(A) and the LAPL(H)~~,~~ respectively.

All subsequent text of this AMC, starting at 'I. COMMON SUBJECTS', is deleted.

[…]

~~AMC1 FCL.125; FCL.235~~

The entire AMC is deleted.

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

~~AMC2 FCL.125; FCL.235~~

The entire AMC is deleted.

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

AMC1 FCL.~~115~~110.A(c) LAPL(A) — ~~Training course~~Experience requirements and crediting

CREDITING~~: PRE-ENTRY FLIGHT TEST~~ FOR PRIOR EXPERIENCE AS PIC

The pre-entry flight ~~test~~ assessment referred to in point FCL.110.A(c)(1) should cover the total content of the syllabus of flight instruction for the issuance of the LAPL(A), in accordance with AMC1 FCL.115.

Rationale	*RMT.0678*
See NPA 2020-14, page 60.	

AMC1 FCL.135.A(b) LAPL(A) — Extension of privileges to another class or variant of aeroplane

DIFFERENCES TRAINING FOR VARIANTS WITHIN THE SEP AEROPLANE CLASS WITH AN ELECTRIC ENGINE SYSTEM

As regards variants within the SEP aeroplane class with electric engine, the differences training should follow the content of AMC1 FCL.710(a).

Rationale	*RMT.0678*
See NPA 2020-14, page 60.	

AMC1 FCL.140.A(a)(1)(ii)~~; FCL.140.H; FCL.140.S; FCL.140.B~~ LAPL(A) — Recency requirements

CONTENT OF THE REFRESHER TRAINING

(a) ~~Training flight items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate. For aeroplanes and helicopters, the~~ Before the flight training takes place, the instructor should hold a briefing with the candidate. That briefing should include a discussion on all of the following:

(1) TEM with special emphasis on decision-making when encountering adverse meteorological conditions or unintentional IMC~~,~~;

(2) ~~as well as on~~ navigation flight techniques~~capabilities.~~;

(3) exercises as specified in point (b), as applicable.

(b) Flight training items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate. In any case, the

instructor should select scenarios from the following list and include in the flight training the relevant recognition and recovery exercises:

(1) clean stall;

(2) approach to stall in descending turn with bank with approach configuration and power;

(3) approach to stall in landing configuration and power; and

(4) approach to stall, climbing turn with take-off flap and climb power

(5) simulated loss or partial loss of engine power during different phases of flight.

~~For sailplanes and balloons, the discussion should place special emphasis on principal occurrence categories of the activity that is covered by the licence.~~

Rationale *RMT.0678*

See NPA 2020-14, page 60.

In reaction to a comment received for NPA 2020-14, the following changes were made:

- In paragraph (a), the term "training flight" was replaced by the term "flight training", to provide more flexibility (refresher training may consist of more than one individual flight).
- in paragraph (a)(2), the term "navigation flight capabilities" was replaced by "navigation flight techniques" for clarity;
- In paragraph (b), in the introductory sentence, the phrase "recognition of" was added to clarify that the training shall address both the recognition and the recovery of the listed stall scenarios.
- In paragraph (b), an additional subparagraph (5) is added to include exercises on simulated loss of engine power.

After the focused consultation with the EASA Advisory Bodies (22 June 2022), the introductory sentence (second sentence) for the list in paragraph (b) was revised to clarify that the instructor can select exercises from that list, with no need to do all of these exercises within every refresher flight training.

AMC1 FCL.110.H(c) LAPL(H) — Experience requirements and crediting

CREDITING~~: PRE-ENTRY FLIGHT TEST~~ FOR PRIOR EXPERIENCE AS PIC

The pre-entry flight ~~test~~ assessment referred to in point FCL.110.H(b)(1) should cover the total content of the syllabus of flight instruction for the issuance of the LAPL(H), in accordance with AMC2 FCL.115.

Rationale *RMT.0678*

See NPA 2020-14, page 60.

AMC1 FCL.140.H~~(b)(1)~~(a)(2) LAPL(H) Recency requirements

[…]

Rationale	*RMT.0678*
After restructuring point FCL.115 with amending Regulation [enter reference], the reference to that point in the title of that AMC needs to be updated.	

GM1 FCL.140.H LAPL(H) – Recency requirements

SAFETY AWARENESS BRIEFING DURING REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that during the pre-flight briefing before refresher training or a proficiency check in accordance with point FCL.140.H with the pilot, the instructor or examiner, as applicable, includes elements to raise the pilot's safety awareness with regard to safely flying helicopters, as outlined in GM1 FCL.740.H.

Rationale	*RMT.0587*
This GM is inserted on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitate the inclusion of safety awareness items in briefings for checking and refresher training events. In order to avoid text duplication, reference is given to the new GM1 FCL.740.H.	

AMC1 FCL.140.H(a)(1)(ii) LAPL(H) — Recency requirements

CONTENT OF THE REFRESHER TRAINING

(a) Before the training takes place, the instructor should hold a briefing with the candidate. That briefing should include a discussion on all of the following:
  (1) TEM with special emphasis on decision-making when encountering adverse meteorological conditions or unintentional IMC;
  (2) navigation flight techniques;
  (3) exercises as specified in point (b), as applicable.

(b) Training items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate. In any case, the training flight items should include the following exercises from the LAPL(H) flight training syllabus (AMC2 FCL.115):
  (1) Exercise 15: Hover OGE – Vortex ring – unanticipated yaw (LTE);
  (2) Exercise 18: Practice forced landings;

(3) Exercise 26: Confined areas.

Rationale	*RMT.0678*

See NPA 2020-14, page 61.

In reaction to a comments received for NPA 2020-14, the text in paragraph (a) was changed in consistency with paragraph (a) of AMC1 FCL.140.A(a)(1)(ii) (see explanation above).

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022:

- the term "flight training" was reduced to "training" at the beginning of both paragraphs (a) and (b), to consider the option to complete the training in an FSTD;
- in the list at the end of paragraph (b), Exercise 7 (Basic autorotation) was replaced by Exercise 18 (Practice forced landings), for consistency with Part-FCL Appendix 9 Section C Exercise 2.6.1. (autorotative landings).

Finally, based on an internal review, the AMC was renamed into "AMC1 FCL.140.H(a)(1)(ii)" (NPA 2020-14: "AMC1 FCL.140.H(a)(2)"), due to the restructuring of point FCL.140.H.

~~AMC1 FCL.110.S LAPL(S) – Experience requirements and crediting~~

The entire AMC is deleted.

~~AMC1 FCL.110.S; FCL.210.S~~

The entire AMC is deleted.

~~AMC1 FCL.135.S; FCL.205.S(a)~~

The entire AMC is deleted.

~~AMC1 FCL.140.S(c)(1) LAPL(S) – Recency requirements~~

The entire AMC is deleted.

~~AMC1 FCL.110.B LAPL(B) – Experience requirements and crediting~~

The entire AMC is deleted.

~~AMC1 FCL.110.B; FCL.210.B~~

The entire AMC is deleted.

~~AMC1 FCL.130.B; FCL.220.B~~

The entire AMC is deleted.

~~AMC1 FCL.135.B; FCL.225.B~~

The entire AMC is deleted.

~~AMC2 FCL.135.B; FCL.225.B~~

The entire AMC is deleted.

~~AMC3 FCL.135.B; FCL.225.B~~

The entire AMC is deleted.

~~AMC1 FCL.140.B(b)(1) LAPL(B) – Recency requirements~~

The entire AMC is deleted.

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

AMC1 FCL.210 PPL(A) Training course

FLIGHT INSTRUCTION FOR THE PPL(A)

[…]

(c) Syllabus of flight instruction

[…]

(xiv) Exercise 11: Spin avoidance:

Note: The limitations of the training aircraft as set out in the AFM (manoeuvre limitations, mass and balance calculations) need to be carefully considered.

(A) safety checks;

(B) stalling and ~~recovery~~ approaching ~~at~~ the incipient spin stage (stall with asymmetric condition, with not-centred slip indicator ~~excessive wing drop, about 45°~~);

(C) instructor-induced distractions during the stall.

~~Note 1: at least two hours of stall awareness and spin avoidance flight training should be completed during the course.~~

~~Note 2: consideration of manoeuvre limitations and the need to refer to the aeroplane manual and mass and balance calculations.~~

[…]

(xvii) Exercise 12/13: Emergencies:

(A) abandoned take-off;

(B) engine failure after take-off;

(C) rejected ~~mis~~landing and go-around;

(D) missed approach~~.~~;

(E) engine restart procedures (after simulated engine failure).

Note: ~~i~~In the interests of safety, it will be necessary for pilots that are trained on nose-wheel aeroplanes or TMGs to undergo dual conversion training before flying tail-wheel aeroplanes or TMGs, and vice versa.

(xviii) Exercise 14: First solo:

(A) instructor's briefing~~,~~;

(B) use of required equipment;

(C) observation of flight and ~~de-briefing~~ debriefing by instructor;

Note: ~~d~~During flights immediately following the solo circuit consolidation, the following should be revised:

(~~B~~1) procedures for leaving and rejoining the circuit;

(~~C~~2) the local area, restrictions, map reading;

(~~D~~3) use of radio aids for homing;

(~~E~~4) turns using magnetic compass, compass errors.

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 61.

Additionally, the content of Exercise 11 is updated in consistency with Exercise 11 of AMC1 FCL.115 (LAPL(A) flight training syllabus; see explanations above).

Finally, based on a comment received, the term "mislanding" is Exercise 12/13 is replaced by the term "rejected landing" for clarity.

AMC2 FCL.210 PPL(H) Training course

FLIGHT INSTRUCTION FOR THE PPL(H)

[…]

(c) Flight instruction

(1) The PPL(H) flight instruction syllabus should take into account the principles of threat and error management and cover:

[…]

(vii) recognition of and recovery from the incipient vortex ring state ~~recognition and recovery~~;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

(viii) touchdown autorotations, simulated engine-off landings, practice forced landings. Simulated equipment malfunctions and emergency procedures relating to malfunctions of engines, controls, electrical and hydraulic circuits;

Note: Additional guidance on how to deliver training on autorotation and forced landings can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

(d) Syllabus of flight instruction

[…]

(2) […]

(xi) Exercise 10: Basic autorotation:

[…]

(F) awareness of increased risk of vortex condition during power recovery;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

(xxiii) Exercise 18: Hover OGE ~~and~~ – ~~v~~Vortex ring – unanticipated yaw (LTE):

[…]

(C) demonstration of incipient stage of vortex ring, recognition and recovery (from a safe altitude);

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

(D) Demonstration of unanticipated yaw which could lead to a perceived ~~L~~loss of tail rotor effectiveness (LTE).

[…]

(xxix) Exercise 24: Quick stops

[…]

(E) awareness of the danger of vortex ring;

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

[…]

Rationale *RMT.0587, RMT.0678*

RMT.0587

During extensive discussions with the Advisory Bodies (R.COM) and competent authorities, it was decided to further clarify the considerations on Vortex Ring State (VRS) in AMC2 FCL.210 (PPL(H) flight training syllabus), particularly in paragraph (c)(1)(vii) and in the relevant exercises listed in paragraph (d). A note with a reference to the Helicopter Flight Instructor Guide published by EASA (Together4Safety) was added. This Guide provides more detailed and practical information and on what is expected in terms of demonstration, instruction and training concerning the recognition and recovery from VRS. In addition, guidance is provided on how to raise the awareness on the risk to encounter VRS in those exercises where VRS is mentioned as a threat.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the note inserted in paragraph (c)(1)(vii) is also inserted in paragraph (b)(1)(viii).

RMT.0678

In reaction to a comment received for draft AMC1 FCL.740.H(a)(2)(ii)(B) (refresher training flight, further down in this document), title and text of Exercise 18 were amended for clarification and consistency.

~~AMC3 FCL.210; FCL.215 Training course and theoretical knowledge examination~~

The entire AMC is deleted.

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

GM1 FCL.205.A(a); FCL.205.H(a); FCL.305(a)(1); FCL.505(a)(1)

EXERCISING LAPL PRIVILEGES WHEN HOLDING A PPL, A CPL OR AN ATPL

(a) Part-FCL requirements stipulate that the privileges of a PPL, CPL or ATPL include LAPL privileges. LAPL privileges in this context mean the privileges to act as pilot in aircraft specified in point FCL.105.A(a) or point FCL.105.H(a), as applicable, and under the conditions specified in these points. It does however not mean that the holder of a PPL, CPL or ATPL can keep the relevant class or type ratings valid through complying with the LAPL recency requirements. Class or type ratings need to be kept valid in accordance with Subpart H of Part-FCL.

(b) As an example, when the holder of a PPL and a SEP aeroplane class rating temporarily loses his or her class 2 medical certificate but keeps an LAPL medical certificate, he or she is still holder of a PPL and of that SEP aeroplane class rating in terms of Part-FCL Subpart H. This pilot could still fly SEP aeroplanes under the conditions specified in point FCL.105.A(a), as long as the class rating is still valid. If the class rating is about to expire, it needs to be revalidated in accordance with point FCL.740.A. Only after the PPL is exchanged for an LAPL, that pilot will fall under Subpart B of Part-FCL and can maintain SEP aeroplane class privileges through compliance with LAPL(A) recency requirements.

(c) In line with the above explanations, a PPL(A) holder who temporarily only holds an LAPL medical certificate can revalidate class ratings that fall within the scope of the LAPL(A) (SEP aeroplane, TMG). However, it would not be possible for such a pilot to revalidate class ratings outside the scope of the LAPL. For example, if the pilot, on his or her PPL, also holds an MEP or SET class rating, he or she can revalidate (or renew) such a rating only after being issued with a class 2 medical certificate again.

Rationale	*RMT.0587*

Following discussions and conclusions in EASA Advisory Body meetings, this new GM is put in place in order to clarify what it means when Part-FCL allows holders of higher licences to exercise LAPL privileges.

Triggered by comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the GM is restructured for the purpose of adding additional text (paragraph (c)), to clarify which kind of ratings can be revalidated while holding a lower medical certificate.

GM1 FCL.210.A(a), as proposed with NPA 2020-14, is deleted (see Rationale for amendments to point FCL.210.A in Opinion No 05/2023).

AMC1 FCL.210.A(b) PPL(A) – Experience requirements and crediting

PPL(A) TRAINING FOR APPLICANTS WHO HOLD AN LAPL(A) OR WHO HAVE UNDERGONE LAPL(A) TRAINING

Applicants for a PPL(A) who already hold an LAPL(A) and applicants who change their ongoing LAPL(A) training into PPL(A) training should receive training the content of which should be determined by the head of training of the DTO or the ATO where the applicant is undergoing PPL(A) training, after assessing the individual applicant's training needs. In any case, flight training should include the following exercises from the PPL(A) flight instruction syllabus (AMC1 FCL.210):

(a) Exercise 11 – Spin avoidance;

(b) Exercise 18a – Navigation;

(c) Exercise 18c – Radio navigation;

(d) Exercise 19 – Basic instrument flight.

Rationale *RMT.0678*

See also the amendments proposed to point FCL.210.A and the related Rationale.

Following comments received for NPA 2020-14, this new AMC is proposed to illustrate the necessary content of the LAPL → PPL bridge training as per point FCL.210.A(b). The list of exercises was established based on an analysis of the differences between the flight training syllabi for LAPL(A) (AMC1 FCL.115) and PPL(A) (AMC1 FCL.210).

AMC1 FCL.210.H(b) PPL(H) – Experience requirements and crediting

PPL(H) TRAINING FOR APPLICANTS WHO HOLD AN LAPL(H) OR WHO HAVE UNDERGONE LAPL(H) TRAINING

Applicants for a PPL(H) who already hold an LAPL(H) and applicants who change their ongoing LAPL(H) training into PPL(H) training should receive training the content of which should be determined by the head of training of the DTO or the ATO where the applicant is undergoing PPL(H) training, after assessing the individual applicant's training needs. In any case, flight training should include the following exercises from the PPL(H) flight instruction syllabus (AMC2 FCL.210):

(a) Exercise 25(c) – Radio navigation;

(b) Exercise 26 – Advanced take-off, landings and transitions;

(c) Exercise 30 – Basic instrument flight.

Rationale *RMT.0678*

See also the amendments proposed to point FCL.210.H and the related Rationale.

Following comments received for NPA 2020-14, this new AMC is proposed to illustrate the necessary content of the LAPL → PPL bridge training as per point FCL.210.H(b). The list of exercises was established based on an analysis of the differences between the flight training syllabi for LAPL(H) (AMC2 FCL.115) and PPL(H) (AMC2 FCL.210).

~~AMC1 FCL.205.S(b) SPL – Privileges and conditions~~

The entire AMC is deleted.

~~AMC1 FCL.205.B(b) BPL – Privileges and conditions~~

The entire AMC is deleted.

~~AMC1 FCL.225.B BPL – Extension of privileges to another balloon class or group~~

The entire AMC is deleted.

~~AMC1 FCL.230.B(c)(1) BPL – Recency Requirements~~

The entire AMC is deleted.

Rationale *RMT.0678*

See NPA 2020-14, page 58.

FCL.325.A CPL(A) – Specific ~~conditions~~ requirements for applicants who hold an MPL ~~holders~~

(a) ~~Before exercising the privileges of~~ Applicants for a CPL(A)~~, the~~ who hold~~er of~~ an MPL shall have completed in aeroplanes:

(~~a~~1) 70 hours of flight time:

(~~1~~i) as PIC; or

(~~2~~ii) made up of at least 10 hours as PIC and the additional flight time as PIC under supervision (PICUS).

Of these 70 hours, 20 shall be of VFR cross-country flight time as PIC, or cross-country flight time made up of at least 10 hours as PIC and 10 hours as PICUS. This shall include a VFR cross-country flight of at least 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be flown as PIC;

(~~b~~2) the elements of the CPL(A) modular course as specified in paragraphs 10(a) and 11 of Appendix 3, E to this Part; and

(~~c~~3) the CPL(A) skill test, in accordance with point FCL.320.

(b) When being issued with a CPL in accordance with paragraph (a), applicants shall:

(1) comply with the requirements of point FCL.405.A(c) in order to have the privileges of their IR(A) extended to single-pilot operations in aeroplanes; and

(2) have the privileges of their type ratings restricted to exercise the privileges of a co-pilot only. This restriction shall be removed when applicants complete a proficiency check for the relevant type in accordance with Appendix 9 to this Annex in the role of the PIC.

Rationale *RMT.0587*

During a discussion at an EASA Advisory Body meeting (Aircrew TeB meeting, 1 December 2021), Member States reported that the current regulatory option to include CPL privileges on an MPL is not appreciated by industry. Operators apparently prefer “full” CPLs over such “CPL endorsements” on an MPL. For this reason, it was concluded that the rule, instead of foreseeing such “CPL endorsements” on MPLs, should offer the possibility to replace an MPL with a CPL, once the applicable requirements are met. During the discussion, it was also highlighted that, when replacing an MPL by a CPL, it must be ensured that the MPL-related restrictions to IR(A) and type rating privileges are removed only after applicants demonstrate the required relevant PIC competence. Hence, point FCL.325.A and point FCL.405.A (see below) are amended accordingly.

AMC1 FCL.615(b) IR – Theoretical knowledge and flight instruction

[…]

(c) An applicant who has completed a modular IR(A) course according to Appendix 6 Section A and passed the IR(A) theoretical knowledge examination should be fully credited towards the requirements of theoretical knowledge instruction and examination for a competency-based IR(A) ~~or EIR~~ within the validity period of the examination. An applicant wishing to transfer to a competency-based IR(A) or BIR course during a modular IR(A) course should be credited towards the requirements of theoretical knowledge instruction and examination for a competency-based IR(A) or BIR for those subjects or theory items already completed.

Rationale	*RMT.0587*
Based on an internal review, this AMC is proposed to be amended, for removing an outdated reference to the no longer existing EIR.	

AMC1 FCL.615(a) IR – Theoretical knowledge and flight instruction

TRAINING ON PBN OPERATIONS AS PART OF IR TRAINING COURSES

GENERAL

(a) Since the Part-FCL instrument rating (IR) as per point FCL.605(a) includes privileges for PBN operations, the purpose of this AMC is to outline the training elements on PBN operations which should be part of IR training courses in accordance with point FCL.615.

(b) The training syllabi set out in this AMC should:

(1) include CRM training elements, where appropriate; and

(2) be reconsidered in accordance with technological and regulatory developments.

THEORETICAL TRAINING

(c) Theoretical knowledge regarding PBN

This part should include basic principles, different classifications, and description of structures as follows:

(1) difference between conventional, RNAV and RNP (specifications and requirement);

(2) factors used to define RNAV or RNP system performance requirements (accuracy, integrity, continuity and functionality);

(3) overview of PBN specifications (e.g. RNAV 10, RNAV 1, RNP 1) and specific approvals (RNP-AR, Point in Space);

(4) review of different existing approaches and 2D/3D concept;

(5) linear and angular lateral guidance;

(6) vertical guidance modes (RNP vs Advisory), associated limitations (AFM, temperature, QNH);

(7) information about Receiver Autonomous Integrity Monitoring (RAIM), Airborne Autonomous Integrity Monitoring (AAIM).

(d) Theoretical knowledge regarding requirements, procedures and equipment

(1) This part should, while following the syllabus as set out in point (2), include theoretical knowledge about:

(i) the operational procedures in accordance with Regulation (EU) No 965/2012 and national procedures, the manufacturer or the operator, as applicable; and

(ii) the review and study of existing means to manage the flight, including items such as charts, websites and apps.

(2) Syllabus:

(i) Operational and regulatory requirements:

(A) flight preparation:

(1) relevant navigation specification and system limitations (according to AFM);

(2) airport/operating site selection (Destination, alternate, minima);

(3) user waypoint management;

(4) flight plan filing;

(5) NOTAM;

(6) RAIM prediction;

(B) in-flight:

(1) restriction in manual mode;

(2) radar vector restrictions (direct to IF, direct to FAF, intersection final);

(3) monitoring and checking;

(4) related phraseology;

(ii) charting:

(A) representation of PBN-specific elements on routes, SID STAR, APCH (including steep angle), waypoints (fly-by and fly-over), constraint altitude/speed, navaid);

(B) merged intermediate fix (IF) and initial approach fix (IAF);

(C) waypoint naming concept;

(D) path terminator concept with a focus on course to fix (CF), track to fix (TF), radius to fix (RF);

(E) minima;

(iii) contingency procedures:

(A) go-around procedure management;

(B) degradation or loss of the ability to operate in RNP;

(C) related phraseology.

PRACTICAL TRAINING

(e) Ground practical training

(1) Ground practical training aims at a familiarisation with the aircraft on-board systems and should, while following the syllabus as set out in point (2), cover the following items:

(i) a theoretical overview of the on-board systems in a view of establishing links between the theory and the system to be used;

(ii) operating and setting a navigation system similar to the system on board of the aircraft to be operated; and

(iii) all functionalities provided by the navigation system likely to be used in conducting normal or abnormal procedures.

Note 1: For the purpose of ground practical training, the equipment used may be presented or managed on a computer system, on a simulation bench, on an FSTD - flight simulation training device or on an aircraft on the ground.

Note 2: The duration of this training depends on the complexity of the RNP system used and the recommendations of the manufacturer.

(2) Syllabus:

(i) aircraft on-board system:

(A) review of basic function (continuous indication of lateral deviation; distance/bearing to active waypoint, glideslope or time to active waypoint, navigation data storage);

(B) system limitations;

(C) failure indications and error messages;

(D) verification and sensor management;

(E) know-how:

(1) addressing discontinuities;

(2) set an 'offset flight path';

(3) select/delete satellite;

(4) manage the navigation database, retrieving a procedure from database;

(5) entering data such as wind, altitude/speed constraints, vertical profile/speed;

(6) tactically modifying the flight plan;

(ii) monitoring and checking (lateral and vertical) during 2D/3D approaches;

(iii) contingency procedures management including aircraft failures;

(iv) use of automation at different stage of the procedure.

(f) Practical training in the aircraft or FSTD

Flight training should:

(1) be conducted with a flight crew composition which complies with the applicable minimum flight crew composition requirements for conducting PBN operation as mentioned by the training manual and operations manual of the ATO; and

(2) include flight exercises that allow the applicant to do all of the following:

(i) applying the theoretical knowledge as specified in points (c), (d) and (e) in practice;

(ii) building competence in applying normal, abnormal and emergency procedures in PBN operation during both en-route and approach phases, including interruptions that are caused by the simulation of an abnormal situation (e.g. loss of RNP capacity or RAIM warning, if applicable).

Rationale	*RMT.0587*
Following discussions with the EASA Advisory Bodies, this new AMC is introduced to illustrate the part of an IR training course that addresses PBN operations. The draft is based on alternative means of compliance developed by a Member State.	

AMC1 FCL.615(b) IR – Theoretical knowledge and flight instruction

[…]

(c) An applicant who has completed a modular IR(A) course according to Appendix 6 Section A and passed the IR(A) theoretical knowledge examination should be fully credited towards the requirements of theoretical knowledge instruction and examination for a competency-based IR(A) or BIR~~EIR~~ within the validity period of the examination. An applicant wishing to transfer to a competency-based IR(A) or BIR course during a modular IR(A) course should be credited towards the requirements of theoretical knowledge instruction and examination for a competency-based IR(A) or BIR for those subjects or theory items already completed.

Rationale	*RMT.0587*
The AMC text still contains a reference to the EIR which, in that context, can be replaced by a reference to the BIR.	

GM1 FCL.700 Circumstances in which class or type ratings are required

[…]

(a) Class ratings (aeroplane): SP and SEP or MEP aeroplane (land or sea):

Manufacturer	Aeroplanes		Licence Endorsement
All manufacturers	SEP (land)	**(D)**	**SEP (land)**
	SEP (land) with variable pitch propellers		
	SEP (land) with retractable undercarriage		
	SEP (land) with turbocharged or ~~super charged~~ supercharged engines		
	SEP (land) with cabin pressurisation		
	SEP (land) with tail wheels		
	SEP (land) with EFIS		
	SEP (land) with SLPC		
	SEP (land) with electric engine		
	SEP (land) with multiple electric engines (Article 2(8a)(b)		
	SEP (land) with a hybrid engine (Article 2(8a)(c)		
	SEP (sea)	**(D)**	**SEP (sea)**
	SEP (sea) with variable pitch propellers		
	SEP (sea) with turbocharged or ~~super charged~~ supercharged engines		
	SEP (sea) with cabin pressurisation		
	SEP (sea) with EFIS		
	SEP (sea) with SLPC		

	SEP (sea) with electric engine		
	SEP (sea) with multiple electric engines (Article 2(8a)(b)		
	SEP (sea) with a hybrid engine (Article 2(8a)(c)		
All manufacturers	MEP (land)	**(D)**	**MEP (land)**
	MEP (sea)	**(D)**	**MEP (sea)**

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 61.

After the updates to Article 2 (definition of "SEP aeroplane" to include further innovative engine types), it is necessary to also update the list of variants for which differences training is needed accordingly.

GM1 FCL.710 Class and type ratings – variants

DIFFERENCES TRAINING AND FAMILIARISATION ~~TRAINING~~

[…]

(b) Familiarisation ~~training~~ requires the acquisition of additional knowledge.

Rationale *RMT.0587*

Following an internal review, GM1 FCL.710 is amended for the same reason AMC2 ORA.ATO.125 is amended and clarified: Familiarisation is not training but self-study.

AMC1 FCL.710(a) Class and type ratings — variants

DIFFERENCES TRAINING FOR VARIANTS WITHIN THE SEP AEROPLANE CLASS WITH AN ELECTRIC ENGINE SYSTEM

As regards electric engines, the differences training should, on the basis of the aircraft flight manual of the relevant aircraft, include at least all of the following:

(Note: The following list solely addresses the training needs with regard to electric engines and must not be understood as an exhaustive differences training syllabus.)

(a) Theoretical knowledge

(1) Aircraft general knowledge:

(i) electric engine;

(ii) high-voltage batteries, including their storage;

(iii) electric engine and battery indication and monitoring instruments;

(iv) electric engine and battery limitations;

(v) electric battery endurance;

(vi) electric battery life and effects of battery age on performance.

(2) Operational procedures:

(i) electric engine and battery pre-flight inspection;

(ii) charging of the battery;

(iii) charging errors;

(iv) long-term battery storage procedures and limitations;

(v) in-flight engine/energy monitoring and management;

(vi) go-around with minimum energy;

(vii) emergency procedures:

(A) engine/battery fire on the ground and in the air;

(B) engine/battery overheat;

(C) partial and complete loss of engine power (CLOP);

(D) loss of cooling function;

(E) failure/loss of engine/battery instruments;

(F) in-flight engine restart procedure.

(3) Flight planning:

(i) energy consumption for all phases of the flight;

(ii) mission and contingency planning;

(iii) minimum reserve energy planning.

(b) Flight instruction:

The dual flight instruction should include the practical exercise or, in the case of emergency procedures, a simulation of all the elements listed in point (a).

Rationale	*RMT.0678*
See NPA 2020-14, page 61. In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022:	

- paragraph (a)(1)(v) and (vi) were inserted to address additional training items related to battery endurance and battery life;
- paragraph (a)(2)(vii)(C) was revised to also address the partial loss of power.

AMC1 FCL.725(a) Requirements for the issue of class and type ratings

SYLLABUS OF THE THEORETICAL KNOWLEDGE FOR CLASS ~~OR~~AND TYPE RATINGS

I. TMGs, SE AND ME AEROPLANES

(a) Detailed listing for ~~aeroplane~~ aircraft structure and equipment (as applicable), normal operation of systems and malfunctions:

(1) dimensions: minimum required runway width for 180 ° turn.

(2) engine, including auxiliary power unit:

(i) type of engine or engines;

(ii) in general, function of the following systems or components:

(A) engine;

(B) auxiliary power unit;

(C) oil system;

(D) storage and distribution system for fuel/energy ~~system~~;

(E) ignition system;

(F) starting system;

(G) engine/battery cooling system;

(~~G~~H) fire-warning and fire-extinguishing system;

(~~H~~I) generators and generator drives;

(~~I~~J) power indication;

(~~J~~K) reverse thrust;

(~~K~~L) water injection.

(iii) for ~~on piston or turbine~~ propeller engines, the functioning of the following systems ~~additionally~~:

(A) propeller system;

(B) feathering system.

(iv) engine/battery controls (including starter), engine instruments and indications in the cockpit, their function, interrelation and interpretation;

(v) engine operation, including APU, during engine start, start and engine malfunctions, procedures for normal operation in the correct sequence.

(3) fuel/energy system:

(i) location of the fuel tanks, fuel pumps, fuel lines to the engines, tank capacities, valves and measuring;

(ia) location of the batteries and integration into the aircraft systems;

(ii) location of the following systems:

(A) filtering;

(B) heating;

(C) fuelling and defueling/charging;

(D) dumping;

(E) venting~~.~~;

(F) cooling.

(iii) in the cockpit:

(A) ~~the~~ monitors and indicators of the fuel/energy system;

(B) quantity and flow indication, and interpretation.

(iv) procedures:

(A) fuelling/charging procedures, including distribution of fuel/energy into the various tanks/batteries;

(B) fuel supply, fuel temperature control, and fuel dumping.

(4) pressurisation and air conditioning:

(i) components of the system and protection devices;

(ii) cockpit monitors and indicators;

(iii) interpretation ~~about~~of the operational condition;

(iv) normal operation of the system during start, cruise, approach and landing, air-conditioning airflow and temperature control.

(5) ice and rain protection, windshield wipers and rain-repellent system:

(i) ice-protected components of the ~~aeroplane~~ aircraft including engines, heat sources, controls and indications;

(ii) operation of the anti-icing or de-icing system during take-off, climb, cruise and descent, conditions that ~~requiring~~ require the use of the protection systems;

(iii) controls and indications of the windshield wipers and rain-repellent system~~s~~ operation.

(6) hydraulic system:

(i) components of the hydraulic system(s), quantities and system pressure, hydraulically actuated components associated to the respective hydraulic system;

(ii) controls, monitors and indicators in the cockpit, function and interrelation and interpretation of indications.

(7) landing gear:

(i) main components of the:

(A) main landing gear;

(B) nose landing gear;

(C) gear steering;

(D) wheel brake system, including anti-skid.

(ii) gear retraction and extension (including changes in trim and drag caused by gear operation);

(iii) required tyre pressure, or location of the relevant placard;

(iv) controls and indicators including warning indicators in the cockpit in relation to the retraction or extension condition of the landing gear and brakes;

(v) components of the emergency extension system.

(8) flight controls and high-lift devices:

(i) (A) aileron system;

(B) elevator system;

(C) rudder system;

(D) trim system;

(E) spoiler system;

(F) lift devices;

(G) stall warning system;

(H) take-off configuration warning system~~.~~;

(I) energy recuperation function.

(ii) components of the flight control system, including their functioning (from the cockpit controls to the flight control or surfaces);

(iii) controls, monitors and indicators, including warning indicators of the systems mentioned under (8)(i), interrelation and dependencies.

(9) electrical power supply:

(i) number, power, voltage, frequency and location of the main power system (AC or DC), auxiliary power system location and external power system;

(ii) location of the controls, monitors and indicators in the cockpit;

(iii) flight instruments, communication and navigation systems, main and ~~back-up~~ backup power sources;

(iv) location of vital circuit breakers;

(v) generator / voltage level convertor operation and monitoring procedures of the electrical power supply.

(10) flight instruments, communication, radar and navigation equipment, autoflight and flight data recorders:

(i) visible antennae;

(ii) controls and instruments of the following equipment in the cockpit during normal operation:

(A) flight instruments;

(B) flight management systems;

(C) radar equipment, including radio altimeter;

(D) communication and navigation systems;

(E) autopilot;

(F) flight data recorder, cockpit voice recorder and ~~data link~~ data link communication recording function;

(G) TAWS;

(H) collision avoidance system;

(I) warning systems; and

(J) weather radar system, best practices for its optimum use, interpretation of displayed information.

(11) cockpit, cabin and cargo compartment:

(i) operation of the exterior, cockpit, cabin and cargo compartment lighting and the emergency lighting;

(ii) operation of the cabin and cargo doors, stairs, windows and emergency exits;

(iii) main components of the oxygen system and their location, oxygen masks and operation of the oxygen systems for the crew and passengers, required amount of oxygen by means of a table or diagram.

(12) emergency equipment operation and correct application of the following emergency equipment in the ~~aeroplane~~ aircraft:

(i) ~~portable~~handheld fire extinguisher;

(ii) first-aid kits;

(iii) portable oxygen equipment;

(iv) emergency ropes;

(v) ~~life-jacket~~life jackets;

(vi) life rafts;

(vii) emergency transmitters;

(viii) crash axes;

(ix) megaphones;

(x) emergency signals.

(13) pneumatic system:

(i) components of the pneumatic system, pressure source and actuated components;

(ii) controls, monitors and indicators in the cockpit and function of the pneumatic system;

(iii) vacuum system.

(b) Limitations:

(1) general limitations:

(i) certification of the ~~aeroplane~~ aircraft, category of operation, noise certification and maximum and minimum performance data for all flight profiles, conditions and aircraft systems:

(A) maximum tail and crosswind~~-~~ components at take-off and landing;

(B) maximum speeds for flap extension v_{fo};

(C) at various flap settings v_{fe};

(D) for landing gear operation v_{lo}, M_{lo};

(E) for extended landing gear v_{le}, M_{le};

(F) for maximum rudder deflection v_a, M_a;

(G) for tyres;

(H) one propeller feathered.

(ii) (A) minimum control air speed ~~air~~ v_{mca};

(B) minimum control ground speed ~~ground~~ v_{mcg};

(C) stall speed under various conditions v_{so}, v_{s1};

(D) maximum speed v_{ne}, M_{ne};

(E) maximum speed for normal operation v_{mo}, M_{mo};

(F) altitude and temperature limitations;

(G) stick shaker activation.

(iii) (A) maximum airport pressure altitude, runway slope;

(B) maximum taxi mass;

(C) maximum take-off mass;

(D) maximum lift-off mass;

(E) maximum landing mass;

(F) maximum zero fuel mass;

(G) maximum dumping speed v_{dco}, M_{dco}, v_{dce}, M_{dce};

(H) maximum load factor during operation;

(I) ~~certificated~~certified range of centre of gravity.

(2) engine limitations (as applicable):

(i) operating data of the engines:

(A) time limits and maximum temperatures;

(B) minimum RPMs and temperatures;

(C) time limits and maximum values for take-off and go-around on pressure altitude or flight altitude and temperature for:

(1) maximum torque and/or;

(~~D~~2) maximum power ~~for take-off and go-around on pressure altitude or flight altitude and temperature~~;

(~~E~~D) piston engines: certified range of mixture;

(~~F~~E) minimum and maximum oil temperature and pressure;

(~~G~~F) maximum starter time and required cooling;

(~~H~~G) time between two start attempts for engines and auxiliary power unit;

(~~I~~H) for propeller: maximum RPMs of the propeller for triggering ~~of~~the automatic feathering device.

(ii) certified oil grades.

(3) systems' limitations (as applicable):

(i) operating data of the following systems:

(A) pressurisation, air conditioning maximum pressures;

(B) electrical power supply, maximum load of main power system (AC or DC);

(C) maximum time of battery power supply ~~by battery~~ in case of emergency;

(D) ~~m~~Mach trim system and yaw damper speed limits;

(E) autopilot limitations of various modes;

(F) ice protection;

(G) speed and temperature limits of window heat;

(H) temperature limits of engine and wing anti-ice;

(I) maximum value of power recuperation.

(ii) fuel system: certified fuel specifications, minimum and maximum fuel pressures and fuel temperature ~~of the fuel~~;

(iii) energy system:

(A) minimum and maximum state of charge of the battery;

(B) effects of temperature on the battery and battery operating temperatures;

(C) minimum and maximum battery pack voltage;

(D) minimum state of battery health;

(E) maximum system power output with one or more batteries inoperative;

(F) maximum charging power.

(4) minimum equipment list.

(c) Performance, flight planning and monitoring (as applicable):

(1) performance calculation about speeds, gradients, masses in all conditions for take-off, en-route, approach and landing according to the documentation available (for example for take-off v_1, v_{mbe}, v_r, v_{lof}, v_2, take-off distance, maximum take-off mass and the required stop distance) on the following factors:

(i) accelerate or stop distance;

(ii) take-off run and distance available (TORA, TODA);

(iii) ground temperature, pressure altitude, slope, wind;

(iv) maximum load and maximum mass (for example, ZFM);

(v) minimum climb gradient after engine failure or battery malfunction;

(vi) influence of snow, slush, moisture and standing water on the runway;

(vii) possible single or dual engine failure during cruise flight;

(viii) use of anti-icing systems;

(ix) failure of the water injection system or the anti-skid system;

(x) speeds at reduced thrust, v_1, $v1_{red}$, v_{mbe}, v_{mu}, v_r, v_{lof}, v_2;

(xi) safe approach speed v_{ref}, on v_{mca} and turbulent conditions;

(xii) effects of excessive approach speed and abnormal glideslope on the landing distance;

(xiii) minimum climb gradient during approach and landing;

(xiv) limiting values for a go-around with minimum fuel/energy;

(xv) maximum allowable landing mass and ~~the~~ landing distance for the destination and alternate aerodrome on the following factors:

(A) ~~available~~ landing distance available;

(B) ground temperature, pressure altitude, runway slope and wind;

(C) fuel/energy consumption to destination or alternate aerodrome;

(D) influence of moisture ~~on the runway~~, snow, slush and standing water on the runway;

(E) failure of the water injection system or the anti-skid system;

(F) influence of thrust reverser and spoilers.

(2) flight planning for normal and abnormal conditions:

(i) optimum or maximum flight level;

(ii) minimum required flight altitude;

(iii) drift-down procedure after ~~an~~ engine failure during cruise flight;

(iv) power setting of the engines during climb, cruise and holding under various circumstances, as well as the most economic cruising flight level;

(v) calculation of a short-range or long-range flight plan;

(vi) optimum and maximum flight level and power setting of the engines after engine failure;

(vii) effects of battery ageing on available energy and power.

(3) flight monitoring.

(d) Load and balance and servicing (as applicable):

(1) load and balance:

(i) load and trim sheet on the maximum masses for take-off and landing;

(ii) centre-of-gravity limits;

(iii) influence of fuel consumption on the centre of gravity;

(iv) lashing points, load clamping, maximum ground load.

(2) servicing on ground, servicing connections for:

(i) fuel/energy;

(ii) oil;

(iii) water;

(iv) hydraulic;

(v) oxygen;

(vi) nitrogen;

(vii) conditioned air;

(viii) electric power;

(ix) starter air;

(x) ~~toilet~~lavatory, galley and safety regulations.

(e) Emergency procedures (as applicable):

(1) recognition of the situation as well as immediate memory actions in the correct sequence, and for those conditions that are recognised as emergencies by the manufacturer and the competent authority for certification:

(i) engine failure / battery malfunction during take-off before and after v_1, as well as in flight;

(ii) malfunction~~s~~ of the propeller system;

(iii) engine/battery overheat, engine/battery fire on ground and ~~in-flight~~in flight;

(iv) wheel-well fire;

(v) electrical smoke or fire;

(vi) rapid decompression and emergency descent;

(vii) air-conditioning overheat, anti-ice system overheat;

(viii) fuel pump / battery cooling system failure;

(ix) fuel freezing overheat;

(x) electric power failure;

(xi) equipment cooling failure;

(xii) flight instrument failure;

(xiii) partial or total hydraulic failure;

(xiv) failures at the lift devices and flight controls including boosters;

(xv) cargo compartment smoke or fire.

(2) actions according to the approved checklist for abnormal and emergency procedures ~~checklist~~:

(i) engine restart ~~in flight~~in flight;

(ii) landing gear emergency extension;

(iii) application of the emergency brake system;

(iv) emergency extension of lift devices;

(v) fuel dumping;

(vi) emergency descent.

(f) Special requirements for glass cockpit ~~aeroplanes~~ aircraft with EFIS additional learning objectives:

(1) general rules for ~~of aeroplanes~~ aircraft computer hardware and software design;

(2) logic of all flight crew information and alerting systems and their limitations;

(3) interaction of the different ~~aeroplane~~ aircraft computer systems, their limitations, the possibilities of computer fault recognition, and the actions to be performed on computer failures;

(4) normal procedures including all flight crew coordination duties;

(5) ~~aeroplane~~ aircraft operation with different computer degradations (basic flying).

(g) Flight management systems.

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 61.

In reaction to comments received for NPA 2020-14:

- in paragraph (b)(1)(iii)(F) of Section I the word “maximum” was added for clarity and consistency;
- in paragraph (c)(2)(vii), the text was amended to refer to “available energy and power” instead of referring solely to “power”;
- in paragraphs (d)(2)(ix) and (x), the wording was improved.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the phrase “as applicable” is deleted in the title of Section I paragraph (a)(3), since that term is already part of the introductory phrase in point Section I paragraph (a).

AMC2 FCL.725(a) Requirements for the issue of class and type ratings

TRAINING COURSE

FLIGHT INSTRUCTION FOR TYPE RATINGS: HELICOPTERS

[…]

(d) Additional types

[…]

(1)	(2)	(3)
Helicopter types	***Minimum training time***	***Minimum training time in the helicopter, when also using FSTDs other than FFS***
SEP(H) to SEP(H) within AMC1 FCL.740.H~~(a)(3)~~(b)	2 hrs	1 hr
SEP(H) to SEP(H) not included in AMC1 FCL.740.H~~(a)(3)~~(b)	5 hrs	2 hrs

[…]

Rationale *RMT.0587, RMT.0678*

RMT.0587 (Follow-up information for re-consultation in 2023)

The proposed updates to the tables in paragraphs (b) through (d), as presented during the focused consultation with the EASA Advisory Bodies in June 2022, were already included in ED Decision 2020/014/R; applicable from 30 October 2022. Hence, these updates are no longer included in this proposal.

RMT.0678

As regards corrections to references to AMC to point FCL.740.H in the second and third row of the table in paragraph (d), see NPA 2020-14, page 61.

GM1 FCL.725(d); (da) ~~(4)(ii)(B)(2)~~ Requirements for the issue of class and type ratings

MULTI-PILOT OPERATION IN SINGLE-PILOT AEROPLANES OR HELICOPTERS IN ACCORDANCE WITH ANNEX III (PART-ORO) TO REGULATION (EU) No 965/2012

Point FCL.725(d)(1)(iii)(B)~~(4)(ii)(B)(2)~~ and (da)(3) require pilots to exercise their type or class rating privileges for multi-pilot operation in single-pilot aeroplanes or helicopters only in accordance with the requirements of Part-ORO, to ensure that pilots conduct multi-pilot operation in single-pilot aircraft only in accordance with approved operational procedures of an operator that is subject to Part-ORO. ~~Multi-pilot operations in single-pilot helicopters cannot be carried out under Part-NCO. The~~

~~regulatory framework of Part-ORO applies in any case of commercial operations or operation of complex single-pilot helicopters under Regulation (EU) No 965/2012.~~ As a consequence, ~~This means that~~ an ATO that provides training for multi-pilot operation in single-pilot aeroplanes or helicopters will need to base that training on the operational procedures of the operator for which the pilot is flying. That ATO will either be an operator itself or will have an arrangement with an operator on behalf of which the training will be carried out.

Rationale	*RMT.0587*
Following the comprehensive revision of FCL.725(d) and the introduction of the new paragraph (da), this GM is revised to address multi-pilot operation in both single-pilot aeroplanes and helicopters in a more general way. Additionally, the references to point FCL.725.	

AMC1 FCL.720.A(a~~b~~)(2)(ii)(A) Experience requirements and prerequisites for the issue of class or type ratings – aeroplanes

ADDITIONAL THEORETICAL KNOWLEDGE FOR A CLASS OR TYPE RATING FOR HIGH PERFORMANCE SP

[…]

(g) The applicant who has completed a competency-based modular IR(A) course according to Appendix 6 Aa or, before 8 September 2021, an EIR course according to point FCL.825 needs to complete both VFR and IFR parts of this course.

[…]

Rationale	*RMT.0587*
After the major restructuring of point FCL.720.A with amending Regulation (EU) 2018/1974, it is necessary to update the references to that point in this AMC. Additionally, the deletion of the EIR with amending Regulation (EU) 2020/359 with effect from 8 September 2021 needs to be reflected, when referring to the EIR.	

AMC2 FCL.720.A(a~~b~~)(2)(ii)(A) Experience requirements and prerequisites for the issue of class or type ratings – aeroplanes

ADDITIONAL THEORETICAL KNOWLEDGE FOR A CLASS OR TYPE RATING FOR HIGH PERFORMANCE SP

An applicant for an additional class or type rating for a single-pilot aeroplane classified as a high performance aeroplane (HPA), who:

[…]

(b) has completed a competency-based modular IR(A) course according to Appendix 6 Aa or, before 8 September 2021, an EIR course according to point FCL.825; and

(c) does not fulfil the requirements of points (B) or (C) of point FCL.720.A ~~(a~~b)(2)(ii) ~~or (iii)~~; should pass the theoretical knowledge instruction and examination for the VFR and IFR parts of the course required in accordance with point FCL.720.A.(a~~b~~)(2)(ii)(A).

Rationale	*RMT.0587*
After the major restructuring of point FCL.720.A with amending Regulation (EU) 2018/1974, it is necessary to update the references to that point in this AMC. Additionally, the deletion of the EIR with amending Regulation (EU) 2020/359 with effect from 8 September 2021 needs to be reflected, when referring to the EIR.	

AMC1 FCL.720.A (c)(4)(ii) Experience requirements and prerequisites for the issue of class or type ratings — aeroplanes

TRAINING ON TAKE-OFF, LANDING, AND GO-AROUND MANOEUVRES

The ATO where the pilot is undergoing the training in accordance with point FCL.720.A (c)(4)(ii) should determine the number of take-off, landing and go-around manoeuvres, which should in any case comply with paragraph (k) of AMC2 ORA.ATO.125.

Rationale	*RMT.0190*
See NPA 2014-25, page 13. Based on comments received, the RMT.0190 Review group decided to further clarify the amount of training on take-off, landing and go-around manoeuvres the applicant has to complete, in order to lift the CRCP restriction. While paragraph (k) of AMC2 ORA.ATO.125 should serve as a minimum, the particular amount of training should be determined by the responsible ATO.	

AMC1 FCL.740.A(b)(1)(ii)(C) Revalidation of class and type ratings

CONTENT OF THE REFRESHER TRAINING

(a) ~~Training flight items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate.~~ Before the training takes place, ~~The briefing~~ the instructor should hold a briefing with the candidate. That briefing should include a discussion on all of the following:

(1) TEM with special emphasis on decision-making when encountering adverse meteorological conditions or unintentional IMC~~,~~;

(2) ~~as well as on~~ navigation flight techniques~~capabilities.~~;

(3) recovery strategies for different stall scenarios.

(b) Flight training items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate. In any case, the flight training items should include exercises related to the recognition of and the recovery from the following scenarios:

(1) simulated loss or partial loss of engine power during different phases of flight;

(2) selection of different stall scenarios (as specified in Exercise 2.3 of the table in point (5) of Section B of Appendix 9).

Rationale	*RMT.0678*
See NPA 2020-14, page 62. Additional text changes were applied in consistency with changes to AMC1 FCL.140.A(a)(1)(ii), in reactions to comments received for NPA 2020-14 (see above the explanations provided for the amendments to that AMC). Additionally, in paragraph (a)(2), the term “navigation flight capabilities” was replaced by “navigation flight techniques” for clarity. After the focused consultation with the EASA Advisory Bodies (22 June 2022), the introductory sentence (second sentence) for the list in paragraph (b) and paragraph (b) were slightly revised to clarify that the instructor can select different stall scenarios and related exercises, with no need to do all of these stall exercises within every refresher flight training.	

GM2 FCL.740.A Revalidation of type ratings - aeroplanes

SAFETY AWARENESS BRIEFING DURING REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that during the pre-flight briefing before refresher training or a proficiency check in accordance with point FCL.740.H with the pilot, the instructor or examiner, as applicable, includes elements to raise the pilot’s safety awareness with regard to safely flying aeroplanes. This part of the briefing (safety awareness briefing) should have a duration of at least 15 minutes to allow discussions on several safety issues, referring to accidents and incidents in general or risks specifically related to the type of flights usually undertaken by the pilot. Threat and error management (TEM) should be promoted as an effective mitigation, including the illustration of the practical application of TEM using real-life examples. There is no restriction on the subjects that could be covered. It may range from weather-related issues to personal or passenger induced pressure. The material that can be used to

support this briefing could come from accident & incident reports, mandatory or voluntary safety reporting, safety campaigns of different sources as well as from personal experience.

Rationale	*RMT.0587*
With RMT.0587, a new GM1 FCL.740.H is inserted on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitate the inclusion of safety awareness items in briefings for checking and refresher training events. In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, such a GM on safety awareness briefings is inserted also for aeroplanes.	

GM1 FCL.740.H Revalidation of type ratings - helicopters

SAFETY AWARENESS BRIEFING DURING REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that during the pre-flight briefing before refresher training or a proficiency check in accordance with point FCL.740.H with the pilot, the instructor or examiner, as applicable, includes elements to raise the pilot's safety awareness with regard to safely flying helicopters. This part of the briefing (safety awareness briefing) should have a duration of at least 15 minutes to allow discussions on several safety issues, referring to accidents and incidents in general or risks specifically related to the type of flights usually undertaken by the pilot. Threat and error management (TEM) should be promoted as an effective mitigation, including the illustration of the practical application of TEM using real-life examples. There is no restriction on the subjects that could be covered. It may range from weather-related issues to personal or passenger induced pressure. The material that can be used to support this briefing could come from accident & incident reports, mandatory or voluntary safety reporting, safety campaigns of different sources as well as from personal experience.

Rationale	*RMT.0587*
This GM is inserted on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitate the inclusion of safety awareness items in briefings for checking and refresher training events.	

AMC1 FCL.740.H(a)(2)(ii)(B) Revalidation of type ratings — helicopters

CONTENT OF THE REFRESHER TRAINING — SINGLE-ENGINE HELICOPTERS UP TO A MAXIMUM TAKE-OFF MASS OF 3175 KG

(a) Before the training takes place, the instructor should hold a briefing with the candidate. That briefing should include a discussion on all of the following:
(1) TEM with special emphasis on decision-making when encountering adverse meteorological conditions or unintentional IMC;
(2) navigation flight techniques;
(3) exercises as specified in point (b), as applicable.

(b) Training items should be based on the exercise items of the proficiency check, as deemed relevant by the instructor, and depending on the experience of the candidate. In any case, the training flight items should include the following exercises from the PPL(H) flight training syllabus (AMC2 FCL.210):
(1) Exercise 18: Hover OGE – Vortex ring – unanticipated yaw (LTE);
(2) Exercise 21: Practice forced landings;
(3) Exercise 29: Confined areas.

Rationale *RMT.0678*

See NPA 2020-14, page 62.

In reaction to comments received for NPA 2020-14:

- the title of this AMC was changed to include SET helicopters up to a maximum MTOM of 3175 kg (consistency with amendments to point FCL.740.H);
- the text in paragraph (a) was changed in consistency with paragraph (a) of AMC1 FCL.140.A(a)(1)(ii) (see explanation above);
- in paragraph (a)(2), the term “navigation flight capabilities” was replaced by “navigation flight techniques” for clarity.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022:

- the term “flight training” was reduced to “training” at the beginning of both paragraphs (a) and (b), to consider the option to complete the training in an FSTD;
- in the list at the end of paragraph (b), Exercise 10 (Basic autorotation) was replaced by Exercise 21 (Practice forced landings), for consistency with Part-FCL Appendix 9 Section C Exercise 2.6.1. (autorotative landings).

AMC1 FCL.740.H~~(a)(3)~~(b) Revalidation of type ratings — helicopters

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 62.

AMC1 FCL.800 Aerobatic rating

THEORETICAL KNOWLEDGE AND FLYING TRAINING

[…]

(c) Theoretical knowledge

The theoretical knowledge syllabus should cover the revision or explanation of:

[…]

(3) limitations applicable to the specific aircraft category (and type):

(i) air speed limitations (aeroplane~~,~~ or TMG ~~and sailplane~~, as applicable);

[…]

(d) Flying training

[…]

(1) confidence manoeuvres and recoveries

[…]

(iv) engine restart in-flight (in case of unintentional engine stop during an aerobatic manoeuvre ~~if applicable~~);

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 62.	

AMC1 FCL.810(a) Night rating

(a) The aim of the course is to qualify applicants for or holders of Part-FCL licences with privileges to fly aeroplanes or TMGs to exercise their privileges at night.

[…]

(d) Flying training

The exercises of the night rating flight training syllabus should be repeated as necessary until the student pilot ~~achieves a safe and competent standard~~ has developed the necessary competence to safely operate the aircraft under visual flight rules at night.

(1) The flight training required by point FCL.810(a)(1)(ii) should follow the syllabus set out in point (4) below ~~In all cases, exercises 4 to 7 of the night rating flight syllabus should be completed in an aeroplane or TMG~~.

(2) Additional training may be completed in an FSTD(A), in order to allow for more efficient training in the aircraft. ~~For exercises 1 to 3, up to 50 % of the required flight training may be completed in an FSTD(A). However, each item of exercises 1 to 3 should be completed in an aeroplane or TMG in flight.~~

[…]

(4) Night rating flight training syllabus ~~The flying exercises should comprise~~:

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 63.

Additionally, based on an internal review, paragraph (a) is amended to refer also to applicants for a Part-FCL licence, in the context of the amendments proposed for point FCL.210.A (integration of the 5-hour night rating training course into the 45-hour PPL(A) training course).

GM1 FCL.810 Night rating

SOLO FLIGHTS DURING NIGHT RATING TRAINING COURSES

Solo flights, as required by point FCL.810, should take place only under the conditions established by the ATO or the DTO to ensure the safe conduct of these flights, considering, for example:

(a) the rapid change of weather;

(b) the reduced usability of the aerodrome;

(c) the need for diversion to an alternate aerodrome;

(d) other exceptional conditions.

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 63.

~~AMC1 FCL.830 Sailplane Cloud Flying Rating~~

The entire AMC is deleted.

~~AMC2 FCL.830 Sailplane Cloud Flying Rating~~

The entire AMC is deleted.

Rationale	*RMT.0678*
See NPA 2020-14, page 63.	

AMC1 FCL.835 Basic instrument rating

BASIC INSTRUMENT RATING (BIR) COMPETENCIES

[…]

(d) Content of the training

(1) Module 1: Pre-flight operations and general handling

[…]

KNOWLEDGE	(A) Part-NCO (non-commercial air operations) (B) Pilot operating manual (POM) or flight manual chapters dedicated to: (~~15~~1) limitations; (~~16~~2) performance calculations in general; (~~17~~3) performance calculations and associated procedures when specific conditions exist.

[…]

Rationale	*RMT.0587*
With this amendment, an editorial error made with the initial publication of this AMC with ED Decision 2018/018/R is corrected. The listing points in the table row 'Knowledge' need to restart with '1' instead of continuing the numbering sequence from the preceding table row.	

[…]

GM1 FCL.900 Instructor certificates

GENERAL

(a) Nine instructor categories are recognised:

(1) FI certificate: aeroplane (FI(A)), helicopter (FI(H)), and airship (FI(As)), ~~sailplane (FI(S)) and balloon (FI(B))~~;

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

AMC1 FCL.935 Assessment of competence

GENERAL

[…]

(d) During the assessment of competence, the applicant occupies the seat that is normally occupied by the instructor (instructor~~s~~ seat if in an FSTD, or pilot seat if in an aircraft)~~, except in the case of balloons~~. The examiner, another instructor or, for MPA in an FFS, a real crew member under instruction, functions as the 'student'. The applicant is required to explain the relevant exercises and to demonstrate their conduct to the 'student', where appropriate. ~~Thereafter~~Following that, the 'student' executes the same manoeuvres (if the 'student' is the examiner or another instructor, this can include typical mistakes ~~of~~ inexperienced students make). The applicant is expected to correct the mistakes orally or, if necessary, by intervening physically.

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

AMC5 FCL.935 Assessment of competence

REPORT FORMS FOR THE INSTRUCTROR CERTIFICATES

(a) Assessment of competence form for the FI, IRI and CRI certificates:

[…]

1	**Applicant's personal particulars:**

[…]

3	**Pre-course flight experience**			
Total flying hours	PIC ~~SEP or TMG hours~~ hours in instructor training course aircraft	~~SEP~~ Hours in instructor training course aircraft in the preceding 6 months	Instrument flight instruction	Cross-country hours

[…]

Points (b) and (c) of this AMC are deleted.

[…]

Rationale	*RMT.0678*
See NPA 2020-14, pages 58 and 63.	

GM1 FCL.905.FI(h)(3) FI – privileges and conditions

CONSEQUENCES OF AN INTERVENTION BY AN INSTRUCTOR QUALIFIED IN ACCORDANCE WITH POINT FCL.905.FI(h)(3) DURING AN SPIC TRAINING FLIGHT

Point FCL.905.FI(h) sets out the conditions for FI certificates to include privileges for providing instruction towards an IR. Compared to the regular case (paragraph (h)(4), requiring 200 hours of IFR experience), paragraph (h)(3) allows holders of an FI certificate with reduced IFR experience (50 hours) to already provide elements of IR instruction at an ATO (FSTD instruction, supervision of SPIC training flights). If, during such an SPIC training flight, an instructor qualified in accordance with point FCL.905.FI(h)(3) however needs to intervene for safety reasons, the instructor needs to either take over controls and end that flight as PIC or, if possible, continue with VFR instruction, since such an instructor is not entitled to provide IFR instruction in an aeroplane in flight.

Rationale	*RMT.0678*
Based on a comment received for draft GM1 ORA.ATO.110(d) (as presented in NPA 2020-14), this additional GM was developed to illustrate the legal consequences of an intervention by the instructor qualified in accordance with point FCL.905.FI(h)(3) during an SPIC training flight.	

~~AMC2 FCL.930.FI FI – Training course~~

The entire AMC is deleted.

[…]

AMC1 FCL.940.FI; FCL.940.IRI Revalidation and renewal

After the heading 'FI CERTIFICATE: REVALIDATION AND RENEWAL FORM', the following points are deleted:

(D) SAILPLANE INSTRUCTIONAL FLYING EXPERIENCE

(E) BALLOONS

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

AMC1 FCL.930.TRI TRI – Training course

TRI TRAINING COURSE — AEROPLANES

[…]

(b) Content

[…]

(3) Part 3 — Flight instruction

~~[…]~~

~~(iv) Long briefings on SP MET aeroplanes~~

Note: Hereunder are listed the subjects of the long briefings for the SP MET aeroplanes. Those long briefings should be adapted, if applicable, to the type of aeroplane for which the privileges are sought.

Long briefings provide an essential link between academic principles and air exercises. They introduce aeronautical theory and the practical application of aeronautical principles to the student.

The instructor should ensure that the candidate instructor is able to teach long briefings with regard to all the following subjects:

[…]

~~(v) Specific trainings: LIFUS training and landing training~~

~~The applicant for a TRI(A) certificate should receive instruction in an FSTD in accordance with point FCL.930.TRI(aa)(4).~~

~~(A) LIFUS training: content~~

~~[...]~~

~~(b) Post-T~~training ~~flying tasks~~ in ~~an~~ aeroplane ~~(in flight)~~

~~Upon completion of the FSTD~~ This training ~~in accordance with paragraph (a), the candidate instructor should complete~~ consist of at least one route sector ~~where he or she the candidate instructor:~~

~~[...]~~

~~Upon completion of the above-mentioned training tasks under supervision, the candidate instructor should complete a route sector in the role of a TRI under the supervision and to the satisfaction of a TRI(A) who is nominated for that purpose by the ATO.~~

~~(B) Landing training: content~~

~~[...]~~

~~(b) Post-T~~training ~~flying under supervision~~ in an aeroplane

~~(1) Upon completion of the FSTD training in accordance with paragraph (a), the applicant should perform role-play flying for landing training under the supervision and to the satisfaction of a TRI(A) who is nominated for that purpose by the ATO. The training should cover at least the following elements:~~

~~[...]~~

Rationale *RMT.0587*

Based on input from Member States:

- paragraph (b)(3)(iv) of this AMC is amended in order to clarify that the existing long briefing syllabus is focusing on MET aeroplanes (“example syllabus”) and should be adapted for the particular training course / training aircraft, as applicable;
- in paragraph (b)(3)(v) of this AMC, text was amended to provide clarifications and to ensure consistency with point FCL.930.TRI, particularly paragraph (a)(4)(ii) thereof (mandate to complete the training in FSTDs): The additional flying under supervision in an aeroplane, as per paragraphs (b)(3)(v)(A)(b) and (b)(3)(v)(B)(b) should take place after the actual (FSTD) training, hence not being in conflict with the mandate to conduct the training itself in FSTDs. Also, in the sentence following the headline in point (b)(3)(v), the reference to point FCL.930.TRI is updated.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022:

- in the title of paragraph (b)(3)(v)(A)(b), the term “flying under supervision” was replaced by the more neutral term “ flying tasks”, since the not all of the subsequently listed tasks are events where the candidate is the supervised person;
- in paragraph (b)(3)(v)(A)(b) the phrase “in the role of a TRI” is inserted, to clarify that the applicant has to conduct this flight in the role of a TRI and not of a pilot.

AMC2 FCL.930.TRI TRI Training course

[…]

Part 3

[…]

FSTD TRAINING

(j) […]

(ja) In general, TRI training is designed to develop the competencies of a pilot to become an instructor. From this perspective, the training may be provided in several arrangements:

— the candidate instructor is seating in either pilot seat;
— the candidate instructor is seating at the IOS; or
— the candidate instructor is observing (seating as an observer).

The combination of the above-mentioned training arrangements and the allocation of time to each one of them depends on an analysis of several elements, including but not limited to the following:

— previous experience and curriculum of each candidate (e.g. previous instructor experience, experience on aeroplane type, total flight experience, etc.) in isolation and as part of the course group(s);
— specific requirements for aeroplane type and related training exercises;
— overall maturity and experience of the ATO in providing TRI training courses; and
— type, fidelity level, and reliability of the available devices.

Subject to particular training arrangements that are determined by the ATO and approved by the competent authority, a TRI may instruct in parallel two TRI candidate instructors under the following scenarios:

— one candidate is sitting at the controls (supported by a suitable pilot), while the second candidate is sitting at the IOS; this scenario may be used for demonstration of flight manoeuvres or engine out exercises; or
— both candidates receive instruction (general introduction and handling) at the IOS.

In this way, both candidates can independently develop specific competencies.

Additional TRI candidate instructors may be present as observers during such an instruction given in parallel, with no credit of hours for their TRI training.

For an initial TRI training course, such ‘in parallel’ instruction should be given only for a reasonable part of the overall TRI training course duration. For a TRI type extension, the amount of hours required forsuch an instruction may be increased.

In any case, the way of instruction largely depends on the experience of the TRI trainer in the various training arrangements and on the general experience of the candidate instructor.

HELICOPTER TRAINING

[…]

~~(l) Upon successful completion of the training above, the applicant should receive sufficient training in an helicopter in-flight under the supervision of a TRI(H) to a level where the applicant is able to conduct the critical items of the type rating course to a safe standard. Of the minimum course requirements of 5 hours flight training for a SP helicopter or 10 hours for a MP helicopter, up to 3 hours of this may be conducted in an FSTD.~~

[…]

SPECIFIC TRAINING: LANDING TRAINING

[To be developed and re-consulted with ABs before publishing the ED Decision]

Rationale *RMT.0587*

Inspired by an AltMoC notification received, the arrangement for optional in-parallel instruction of two student TRIs by one TRI tutor (as introduced in AMC1 FCL.930.TRI paragraph (b)(3)(ii)(F) for TRI(A) training) is also inserted in AMC2 FCL.930.TRI for TRI(H) training (new paragraph (ja)).

Additionally, paragraph (l) of Part 3 of AMC2 FCL.930.TRI is deleted, since the general mandate to partially complete in-aircraft training is in contradiction with point FCL.930.TRI(a) which was amended for consistency with Section A point 1 of Appendix 9 to Part-FCL.

AMC1 FCL.930.CRI CRI ~~T~~training course

[…]

Part 3

[…]

Exercise ~~5~~6: UPRT

[…]

Rationale *RMT.0678*

See NPA 2020-14, page 63.

AMC1 FCL.1015 Examiner standardisation

GENERAL

(a) The competent authority ~~may~~should provide the course itself or through an arrangement with an ATO ~~or, in the case of examiners for sailplanes and balloons, with a DTO~~.

This arrangement should clearly state that the ATO ~~or the DTO is acting~~ acts under the management system of the competent authority.

[…]

(c) The competent authority~~,~~ or the ATO ~~or the DTO~~ should determine any further training required before presenting the candidate for the examiner assessment of competence.

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

GM1 FCL.1015 Examiner standardisation

(a) An examiner should plan per day not more than:

[…]

(2) four tests or checks relating to the LAPL~~, SPL or BPL~~;

[…]

(b) An examiner should plan at least 2 hours for a LAPL, ~~SPL or BPL,~~ 3 hours for a PPL, CPL, IR or class rating test or checks, and at least 4 hours for instructor certificates, MPL, ATPL or MP type rating tests or checks, including preflight briefing and preparation, conduct of the test, check or assessment of competence, debriefing, evaluation of the applicant and documentation.

(c) For the conduct of the test, check or assessment of competence, without additional activities specified in point (b), the following values may be used as guidance:

(1) 45 minutes for ~~a LAPL(B) or BPL and~~ SP class ratings VFR only;

~~(2) 60 minutes for an extension of commercial privileges for the BPL ;~~

(2~~3~~) 90 minutes for LAPL(A) or LAPL(H), PPL(A) or PPL(H) and CPL(A) or CPL(H), including navigation section;

(3~~4~~) 60 minutes for a PPL(As) and CPL(As);

(4~~5~~) 60 minutes for IR, ~~EIR~~ BIR, instructor certificates, and SP type or class ratings; and

(5~~6~~) 120 minutes for MPL, ATPL and MP type ratings.

~~(d) For the LAPL(S) and SPL test or check flight the flight time must be sufficient to allow that all the items in each test or check section can be fully completed. If not all the items can be completed in one flight, additional flights have to be done.~~

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

~~GM1 FCL.1015(a); FCL.1025(b)(2)~~

The entire GM is deleted.

[…]

Rationale	*RMT.0678*
For this deletion, the rationale No 1 on page 58 of NPA 2020-14 applies.	

AMC1 FCL.1030(b)(3) Conduct of skill tests, proficiency checks and assessments of competence

OBLIGATIONS FOR EXAMINERS' APPLICATION AND REPORT FORMS

Common application and report forms for examiners can be found:

(a) For skill tests or proficiency checks for the issue, revalidation or renewal of LAPL, ~~BPL, SPL,~~ PPL, CPL and IR, in AMC1 to Appendix 7;

[…]

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

GM1 FCL.1010.SFE(a)(1)(i) SFE - Prerequisites

PREREQUISITE FOR AN SFE(A) TO HOLD A TYPE RATING

Point FCL.1010.SFE(a)(1)(i) requires an applicant for an SFE(A) certificate to hold or have held a type rating. This general reference to 'a type rating' allows pilots to seek SFE privileges for a type that they do not or did not fly during their active career. Still, the intention of this requirement is that, even if that type rating referred to in point FCL.1010.SFE(a)(1)(i) is not related to the type for which SFE privileges are sought, it should at least be related to an aeroplane type with similar type of propulsion (including number of engines) and MTOM.

Rationale	*RMT.0587*

During discussions in EASA Advisory Body meetings, it was concluded that additional guidance material should be put in place to explain the intention behind the amendment of point FCL.1010.SFE(a)(1)(i) with Regulation (EU) 2019/1747.

AMC1 Appendix 1 Crediting of theoretical knowledge

CROSS-CREDITS FOR THE SUBJECT AREA 100 KSA

(a) Applicants who already hold another licence for the issuance of which they already completed the relevant Area 100 KSA may receive credits for the Area 100 KSA foreseen for the licence sought.

(b) In order to receive such credits for Area 100 KSA for the licence sought, applicants specified in paragraph (a) should do all of the following:

(1) undergo a pre-entry assessment at an ATO, as regards Area 100 KSA, in order to determine areas where applicants require bridge instruction and assessment(s);

(2) complete bridge instruction and assessment(s) in Area 100 KSA, as determined by the ATO on the basis of the assessment specified in paragraph (b)(1).

(c) The ATO should record credits granted in line with this AMC in the applicants' training records and may decide that applicants do not need to demonstrate, during the licence training course, those knowledge, skills and attitudes which they already demonstrated during the pre-entry assessment in accordance with paragraph (b)(1).

(d) Before recommending applicants for theoretical knowledge examinations in accordance with point FCL.025(a)(2), the ATO should ensure that applicants' instruction and assessments in total (credits and bridge instructions and assessments) have covered all aspects of Area 100 KSA for the licence sought. In the case of applicants for an ATPL theoretical knowledge examination holding a CPL in the same aircraft category, the ATO should specifically ensure that all aspects of Area 100 KSA related to multi-pilot operations have been covered.

Rationale *RMT.0587*

Based on a request from Member States to clarify possible cross-credits for the subject Area 100 KSA ins specific scenarios and a subsequent discussion with the EASA Advisory Bodies (Aircrew TeB, January 2021), this new AMC is proposed to illustrate possibilities for granting cross-credits for that subject, if licence holders have already completed Area 100 KSA and, subsequently, apply for the issuance of another licence for which Area 100 KSA is required as well.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, in paragraph (d), the start of the second sentence was revised to correctly refer to "applicants for an ATPL *theoretical knowledge examination*".

AMC5 to Appendix 6 Modular training courses for the IR

[…]

A rating giving privileges to fly under IFR and in IMC referred to in paragraphs (6)(a)(i)(B) and (6)(b)(i)(B) may be any of the following:

(a) an BIR~~EIR~~ rating issued by a competent authority of a Member State; or

[…]

Rationale	*RMT.0587*
The AMC text still contains a reference to the EIR which, in that context, can be replaced by a reference to the BIR.	

AMC1 to Appendix 7 IR skill test

LAPL, ~~BPL, SPL,~~ PPL, CPL, IR SKILL TEST AND PROFICIENCY CHECK APPLICATION AND REPORT FORM

APPLICATION AND REPORT FORM **LAPL~~, BPL, SPL~~, PPL, CPL, IR SKILL TEST AND PROFICIENCY CHECK**			
Applicant's last name(s):			
Applicant's first name(s):		LAPL: A☐ H☐ ~~B☐ S☐.~~	
Signature of applicant:		~~BPL: ☐ SPL:☐~~	
Type of licence*:		PPL: A☐ H☐ As ☐	
Licence number*:		CPL: A☐ H☐ As ☐	
State:		IR: A ☐ H☐ As ☐	
1	**Details of the flight**		
~~Group,~~ eClass, type of aircraft:		Registration:	
Aerodrome or site:	Take-off time:	Landing time:	Flight time:

			Total flight time:
2	**Result of the test**		
Skill test details:			
Pass ☐	Fail ☐	Partial pass ☐	
3	**Remarks**		
Location and date:			
Examiner's certificate number *:		Type and number of licence:	
Signature of examiner:		Name(s) in capital letters:	

** if applicable*

Rationale	*RMT.0678*
See NPA 2020-14, page 58.	

GM1 Appendix 9 Section A point 1

FRAMEWORK FOR THE MANDATORY USE OF A FULL-FLIGHT SIMULATOR IN CASE OF SINGLE-PILOT AEROPLANES AND HELICOPTERS

(a) Partial availability of FFS and additional in-aircraft training

Appendix 9, Section A, point 1 requires training to be conducted in a full-flight simulator (FFS), if available, and in the case of single-pilot aeroplanes (SPAs) and helicopters, accessible. In that context, an FFS can be deemed 'available' only to the extent to which that FFS can, based on its capabilities, serve as training platform for class rating or type rating training. For example, if the

FFSs that exist for a particular type of aircraft can only serve as a training platform for 80 % of the type rating training syllabus (e.g. in the case of helicopters, near-ground manoeuvres cannot be simulated appropriately), that FFS is 'available' only to 80 % of the training syllabus. For the remaining 20 % of the training syllabus, an FFS is not deemed available; therefore, additional training in a combination of an FSTD and the aircraft is necessary to cover the remaining 20 % of the training syllabus (as per Appendix 9, Section A, point 1, fourth point, point (b)).

(b) In-aircraft training arrangements in older operational suitability data (OSD) for flight crew

The framework and conditions for the mandatory use of FFSs and other flight simulation training devices (FSTDs) in training, skill tests, and proficiency checks for class ratings and type ratings were introduced into Part-FCL, Appendix 9, Section A, point 1 through Regulation (EU) 2018/1974 and became applicable as from 20 December 2019. From that day, training, skill tests, and proficiency checks for class ratings and type ratings for SPAs and helicopters need to be conducted in FFSs, or in other FSTDs in combination with in-aircraft training, in accordance with the currently applicable Part-FCL, Appendix 9, Section A, point 1. Completing training courses solely in the aircraft is only possible in the case of SPAs or helicopters for which no FSTD exists.

Training considerations (not mandatory training elements) in OSD for flight crew which was established prior to 20 December 2019 may refer to in-aircraft training although an FFS exists for the respective type of aircraft. Today, those OSD for flight crew need to be understood in the light of the requirements of the currently applicable Part-FCL, Appendix 9, Section A, point 1, as those requirements do not allow OSD to determine alternative training platform arrangements (OSD cannot overrule Part-FCL, Appendix 9 as regards the requirements of that Appendix for the use of FSTDs). This means that the in-aircraft training content that is referred to in training considerations for flight crew in such older OSD after 20 December 2019, needs to be delivered in an FFS in accordance with Part-FCL, Appendix 9, Section A, point 1, and considering the content of point (a) of this GM.

Rationale *RMT.0587*

After repeated requests from industry on how to interpret Part-FCL, Appendix 9, Section A, point 1 in specific cases, EASA proposes to introduce this new GM for clarification.

Firstly, Part-FCL, Appendix 9 must not be interpreted as requiring the completion of type rating training exclusively on available and accessible FFSs, when for particular reasons, those FFSs cannot serve as a training platform for all required training exercises. In that context, FFSs must be understood to be only 'partially available and accessible', with consequences as explained in the GM.

Secondly, considerations in older OSD reports with regard to the training platform to be used cannot bypass the principles that are set out in Part-FCL, Appendix 9, Section A, point 1 and must be reinterpreted to be in line with those principles.

GM1 Appendix 9 Section B point (5)(l); Section B point (6)(j) Training, skill test and proficiency check for the MPL, and the ATPL, and for type and class ratings, and proficiency checks for the BIR and the IR

PBN PRIVILEGES WITHOUT RNP APCH PRIVILEGES

(a) RNP APCH means PBN procedures for final approaches until touchdown. PBN privileges without RNP APCH therefore include all of the following:

(1) standard instrument departures (SIDs);

(2) standard arrivals (STARs);

(3) en-route flight.

(b) The exclusion of RNP APCH privileges can be documented through an appropriate remark (e.g. 'No RNP APCH') on the licence (instrument rating).

Rationale *RMT.0587*

With amending Regulation (EU) 2020/359, Appendix 9 of Part-FCL was amended to allow holders of instrument ratings (IR) to revalidate their rating only with partial PBN privileges (without RNP APCH privileges). Subsequently, after discussions with the EASA Advisory Bodies had revealed the need for guidance material on how to endorse the related restriction, this new GM explains in detail the meaning of PBN privileges which do not include RNP APCH privileges and how to document the revalidation of IR without RNP APCH privileges.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, a reference to Article 4a and the option to record the exclusion of RNP APCH privileges in the logbook is removed. Limitations in terms of this GM should be endorsed in the licence.

ANNEX VI (PART-ARA)

AMC1 ARA.FCL.200(a)(2)

A template for the ICAO attachment is provided by EASA on the EASA website under [REFERENCE TO THE WEBSITE]

~~The format of the ICAO attachment in electronic or paper format is the following:~~

~~EASA~~
European Union Aviation Safety Agency

~~EUROPEAN UNION~~ ~~ICAO attachment to automatically validate licences~~ ~~(Issue 1)~~ ~~issued in accordance with Annex VII to Commission Regulation (EU) No 1178/2011~~
~~1. The licence is automatically validated by all the ICAO States listed in point (2) under an agreement registered with ICAO. The ICAO Registration Number is: XXXX.~~
~~2. The ICAO Contracting States that automatically validate this licence are:~~ ~~[Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom.]*~~ ~~* Please select the applicable ICAO Contracting States~~
~~European Aviation Safety Agency~~ ~~Date of issue: _____~~

Rationale *RMT.0587*

The template as set out with the initial version of this AMC is outdated – an updated version is available at the EASA website. Consequently, this AMC is proposed to be updated to simply refer to that publication on the EASA website (that template will be kept up to date).

GM1 ARA.FCL.200 Procedure for issue, revalidation or renewal of a licence, rating or certificate

LICENCE ENDORSEMENTS

(a) General

This GM provides guidance on how to make endorsements in pilot licences, in accordance with the applicable requirements of Annex I (Part-FCL) and following the licence format set out in Appendix I to Annex VI (Part-ARA).

(b) Endorsement for licence privileges

For endorsing extra privileges of the holder of a PPL(A) on an MPL in accordance with point FCL.405.A(b)(1) of Part-FCL, the phrase "PPL(A) privileges included", followed by the date of endorsement of these PPL(A) privileges, should be endorsed in Section XIII ("Remarks") as shown below:

XIII	**Remarks:** PPL(A) privileges included (date of endorsement: DD.MM.YYYY)

(c) Endorsement for class and type rating privileges

Class and type ratings should be endorsed as set out in the EASA class and type rating endorsement lists, as published on the EASA website. Remarks and restrictions to class and type ratings (relevant line in SECTION XII, page 4 of the licence format) should be endorsed as follows:

Table 1 - Aeroplanes		
Reference	*Requirement*	*Endorsement*
FCL.725(d)(2) Part-FCL Appendix 9, B(5)(j) and (6)(h)	Restriction to multi-pilot operation in a single-pilot aeroplane	MPO only
FCL.720.A(c)	Cruise relief co-pilot restriction	CRCP only
FCL.720.A(d)	OSD restriction to flights with instructor	With instructor only

Table 2 - Helicopters

Reference	*Requirement*	*Endorsement*
FCL.725(d)(2)	Restriction to multi-pilot operation in a single-pilot helicopter	MPO only
FCL.720.H(b)	Co-pilot restriction for graduates from integrated training with less than 70 hours of PIC experience	Co-pilot only

Rationale *RMT.0587*

During several discussions in past EASA Advisory Body meetings, Member States called for guidance material on how to endorse specific privileges and/or limitations on Part-FCL licences, in the context of various requirements of Part-FCL. In this context, this new GM is proposed, addressing some of the most-frequent discussed cases of licence endorsements. The intention is to complete this GM over time with more and more guidance for specific cases, where such need for additional guidance will be identified.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, and as a consequence of the major redrafting of point FCL.725 and Part-FCL Appendix 9 in the context of licensing arrangements for single-pilot and multi-pilot operation (SPO and MPO) in single-pilot aircraft, the GM is significantly redrafted. Since the new content of point FCL.725(d) and (da) as well as Part-FCL Appendix 9 in most cases no longer foresee a licence endorsement for SPO or MPO privileges, the related lines in the draft GM could be removed. For consistency with the aforementioned amendments, the updated draft remains with information on how to endorse the necessary restriction to MPO, in cases where a type rating is initially obtained in MPO only.

AMC1 ARA.FCL.300(b) Examination procedures

THEORETICAL KNOWLEDGE EXAMINATIONS FOR PROFESSIONAL LICENCES AND INSTRUMENT RATINGS

[…]

Subject 070 – OPERATIONAL PROCEDURES										
Theoretical knowledge examinations										
Exam lengths, total number of questions, and distribution of questions										
	ATPL(A)	CPL(A)	ATPL(H)/IR	ATPL(H)	CPL(H)	IR(A) and IR(H)	CB-IR(A)	BIR M01	BIR M02	BIR M03

Time allowed (hours)	1:15	1:00	1:15	1:00	~~0:45~~ 1:00	XX	XX	XX	XX	XX
[…]										

Rationale	*RMT.0587*
With this amendment, an editorial error in ED Decision 2020/018/R is corrected. The exam duration for both ATPL(H) VFR and CPL(H) should be 1 hour, since the exam structure is the same.	

GM1 ARA.FCL.300(b) Examination procedures

MODULAR BIR EXAM STRUCTURES FOR APPLICANTS WITH CREDITS BASED ON CPL THEORETICAL KNOWLEDGE EXAMINATIONS

[To be developed and re-consulted with ABs before publishing the ED Decision]

Rationale	*RMT.0587*
To be developed.	

ANNEX VII (PART-ORA)

AMC~~1~~2 ORA.GEN.200(a)(5)

COMPLEX ORGANISATIONS – ORGANISATION'S SAFETY MANAGEMETN MANUAL

[…]

Rationale *RMT.0587*

Based on a Member State's input, it was detected that there are two AMCs that have the reference "AMC1 ORA.GEN.200(a)(5)". The latter one, placed after GM1 ORA.GEN.200(a)(5) and addressing a complex organisation's safety management manual, needs to be renamed to "AMC2 ORA.GEN.200(a)(5)".

GM1 ORA.ATO.110(d) Personnel requirements

(a) Before allowing an FI that is experienced as specified in point FCL.905.FI(h)(3) to supervise SPIC flights during an IR training course, the ATO should consider at least the following factors:
(1) the experience of the FI;
(2) the experience of the student pilot;
(3) the nature and complexity of the SPIC flight to be performed;
(4) the complexity and characteristics of the training aircraft; and
(5) the prevailing weather conditions.

(b) The ATO should identify the hazards related to the SPIC supervision and apply appropriate mitigation measures to reduce the associated risks.

Rationale *RMT.0678*

See NPA 2020-14, page 63.

After a further internal review, the phrase "or FSTD" in paragraph (a)(4) is deleted, since SPIC flights are not conducted in FSTDs.

AMC2 ORA.ATO.125 Type rating training programme

[…]

(b) Variants

(1) Familiarisation ~~training~~: Where an aeroplane type rating also includes variants of the same aircraft type requiring familiarisation ~~training~~, the additional familiarisation elements ~~training~~ may be included in the theoretical knowledge training of the initial type rating course. ~~Flight training should be conducted on a single variant within the type.~~

[…]

Rationale *RMT.0587*

Based on input received from a Member State, the text of paragraph (b)(1) of AMC2 ORA.ATO.125 is updated for the following reasons:

- Familiarisation is not training but self-study, hence the text is revised to no longer refer to "familiarisation training".
- Since familiarisation solely consists of self-study, it cannot include flight training. Hence, the second sentence in paragraph (b)(1) does not make sense and is removed.

AMC1 ORA.ATO.135 Training aircraft and FSTDs

[…]

(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 basic instrument rating (BIR) ~~en-route instrument rating (EIR)~~, an adequate number of IFRcertificated aircraft should be available;

[…]

Rationale *RMT.0587*

The AMC text still contains a reference to the EIR which, in that context, can be replaced by a reference to the BIR.

AMC1 ORA.ATO.210 Personnel requirements

[…]

(c) In the case of an ATO offering integrated courses, the head of training (HT), the chief flying instructor (CFI) and the chief theoretical-knowledge instructor (CTKI) should be employed full-time or part-time, depending upon the scope of training offered. The three positions of HT, CFI, and CTKI should not be combined but should be filled by three persons.

(d) In all other ~~the~~ cases ~~of an ATO offering only one of the following:~~

~~(1) modular courses,~~

~~(2) type rating courses, and~~

~~(3) theoretical knowledge instruction~~,

the positions of HT, CFI and CTKI may be combined and filled by one or two persons with extensive experience in the training conducted by the training organisation, full-time or part-time, depending upon the scope of training offered, provided that the organisation has demonstrated to the competent authority the adequacy of such personnel set-up for its organisation (point ORA.GEN.200(b)).

Rationale *RMT.0587*

Recurring queries EASA received from Member States showed interpretation and implementation issues with regard to paragraph (d) of AMC1 ORA.ATO.210. The list in that paragraph is ambiguous (with the term “one of the following” in the introductory phrase and the word “and” at the end of paragraph (d)(2)), contains general terms which can be interpreted differently (“modular courses”), and does not address cases where ATOs provide training courses which are not listed (e.g. class rating training, instructor training).

After reviewing the case, EASA concluded that the best option would be to revise that AMC to no longer include such an ambiguous list and to leave more flexibility to the competent authorities, when approving ATOs. In any case, point ORA.GEN.200(b) applies, requiring ATOs to set up a management system with appropriate staffing, as required to perform all intended activities in a safe manner. In this context, it is up to an ATO to demonstrate to the competent authority that safe and rule-compliant training can be ensures with a particular personnel setting.

For this reason, the AMC text is proposed to be revised. The proposal was already presented to the Aircrew TeB during a meeting on 1 February 2023. During that meeting, many Aircrew TeB members showed support for such a revision of paragraph (d) of that AMC. Based on one comment received during that Aircrew TeB meeting, also paragraph (c) is revised to better clarify that, in the case of integrated courses, indeed three individual persons are required to fill the three positions of HT, CFI, and CTKI.

AMC1 ORA.ATO.230(b) Training manual and operations manual

[…]

(d) Personnel training

(5) internal ATO proficiency checks;

[…]

Rationale	*RMT.0587*
On request by Member States, the text in paragraph (d)(5) is amended to clarify that proficiency checks in terms of this AMC mean internal ATO proficiency checks (checks to verify that training personnel is proficient with regard to all internal ATO standards, processes and procedures) but do not mean the proficiency checks for revalidation or renewal of pilot ratings.	

AMC1 ORA.ATO.300 General

[…]

(b) […]

(6) measurement criteria to determine whether a student has satisfactorily completed the appropriate elements of the course to a standard that, in the judgement of the HT, or CTKI ~~CGI~~, will enable them to be entered for the Part-FCL theoretical examinations with a good prospect of success;

Rationale	*RMT.0587*
Based on input from a stakeholder, it is proposed to replace the term "CGI" with the term "CTKI". The term CGI refers to "Chief Ground Instructor", as used in JAR-FCL. In Part-FCL, the term Chief Theoretical Knowledge Instructor (CTKI) is used.	

AMC1 ORA.FSTD.225(b)~~(4)~~ Duration and continued validity

ASSIGNED PERSON(S)

(a) The assigned person(s) should have experience in FSTDs and in training. The person(s) may have FSTD experience or training experience with an education in FSTD evaluation procedures only, provided the other element of expertise is available within the organisation and a procedure for undertaking the annual review and reporting to the competent authority is documented within the compliance monitoring function.

(b) The assigned person(s) should inform the authority of the schedule of the evaluations and QTG checks.

(c) The organisation should maintain the list of persons qualified to perform the task.

[…]

Rationale	*RMT.0587 (ex RMT.0196)*
Based on feedback from industry, this AMC provides clarifications related to the assigned person in terms of point ORA.FSTD.225(b).	

GM1 ORA.FSTD.225 Duration and continued validity

QUALIFICATION OF ASSIGNED PERSON(S)

(a) Recommended qualification experience of the assigned person(s):

(1) good knowledge of regulatory requirements in the areas relevant for organisations, operating FSTD and the qualification of FSTD;

(2) experience in compliance monitoring systems and in evaluation of the respective type of FSTD; and

(3) ability and the technical background to understand and analyse objective test results;

(4) holding or having held an instructor certificate with privileges to instruct in FSTD;

(5) involvement in at least one recurrent evaluation carried out by the competent authority within the past 36 months.

(b) To conduct the evaluation of FSTD, the assigned person(s) should be assisted by a support pilot who is type rated on the aircraft simulated and using regularly FSTD to deliver training.

[…]

Rationale	*RMT.0587 (ex RMT.0196)*
Additional guidance is proposed on the competence and the qualification of the assigned person(s) who are tasked to conduct relevant evaluations in support of possible delegations of recurrent evaluations in accordance with points ORA.FSTD.225(b) and ARA.FSTD.120(c). In addition, it is recommended that the assigned person(s) is/are supported by a pilot who is type-rated on the aircraft which is represented by the relevant FSTD.	

ANNEX VIII (PART-DTO)

AMC1 DTO.GEN.210(a)(1)(ii) Personnel requirements

[…]

(b) The safety policy should additionally include the procedures required for occurrence reporting pursuant to Regulation (EU) No 376/2014 (cf. GM1 DTO.GEN.210(a)(1)(i)).

Rationale	*RMT.0587*
An incomplete reference has to be clarified.	

GM1 DTO.GEN.210(a)(2) Personnel requirements

[…]

'Sufficient experience', as per AMC~~2~~1 DTO.GEN.210(a)(~~1~~2) paragraph (a)(1), means that the HT should have gained the required experience as an instructor in order to have the capacity to administer the particular training activity of the DTO in question. The following factors should be taken into consideration for determining the experience required:

Rationale	*RMT.0587*
A wrong reference has to be corrected.	

GM1 DTO.GEN.210(c) Personnel requirements

[…]

If that person, within the last ~~5~~3 years preceding their nomination as representative or HT, in a declaration in accordance with Part-DTO:

[…]

Rationale	*RMT.0587*

Point DTO.GEN.210(c) reads that enforcement measures against a person in accordance with Part-ARA within the preceding three years shall be deemed as an objective indication that this person cannot be trusted to take the post of a DTO representative or head of training. However, the associated GM, when listing examples for such enforcement measures, refers to the "last 5 years". This inconsistency has to be corrected.

AMC1 DTO.GEN.270(a) Annual internal review and annual activity report

ANNUAL INTERNAL REVIEW

The annual internal review should consist of a comprehensive assessment whether the DTO effectively carries out the tasks and responsibilities pursuant to point DTO.GEN.210. Specific emphasis should be given to the following:

[…]

(h) assessment of the safety policy including its means and methods as defined in AMC1 DTO.GEN.210(a)(1)(ii) for its adequacy and currency;

[...]

Rationale *RMT.0587*

An internal review revealed the need to clarify this incomplete reference to another AMC.

Draft amendments – Regulation (EU) No 965/2012 and associated AMC & GM

ANNEX III (PART-ORO)

GM1 ORO.FC.100(c) Composition of flight crew

LICENCE AND RATINGS IN ACCORDANCE WITH COMMISSION REGULATION (EU) No 1178/2011

When determining the composition of the crew, and monitoring whether the flight crew holds the appropriate licence and ratings, the operator needs to take into account any limitations prescribed in Regulation (EU) No 1178/2011 applicable to the flight crew members such as, but not limited to, recent experience, privileges for single-pilot and/or multi-pilot operations in single-pilot aircraft, and operational multi-pilot limitation.

Rationale *RMT.0587*

In the context of the proposed amendments to point FCL.725 and Appendix 9 (licence endorsements for the form of operation in single-pilot aircraft), this GM is amended to further clarify an operator's responsibilities. Particularly, an operator can assign flight duties involving a particular form of operation (single-pilot or multi-pilot operation in a single-pilot aircraft) to a particular pilot only if that pilot possesses the privileges for that form of operation, in accordance with Part-FCL.

AMC3 ORO.GEN.110(f)[1] Operator responsibilities

PROCEDURES FOR THE RELIEF OF FLIGHT CREW MEMBERS IN CAT OPERATIONS

If operating with augmented flight crew, the operator procedures should address all of the following:

(a) the responsibilities and command chain in the flight crew compartment during the absence of the commander;

(b) the assignment of flight crew member stations or seats to relieving crew members, accounting for different phases of flight, including any possible emergency scenarios and controlled rest periods. The operator should consider all possible crew compositions such as multiple captains operating together, instructors during line training, and possible consequences following an incapacitation. The operator should establish the minimum flight level or altitude below which crew members may not vacate their assigned station for the purpose of transferring duties to another crew member; and

[1] AMC2 ORO.GEN.110(f) introduced with ED Decision 2022/005/R.

(c) any handover and related briefing between flight crew members, should cover essential information on command delegation and associated task sharing. The briefing should focus on continuity of the flight.

Rationale *RMT.0190*

See NPA 2014-25.

The RMT.0190 Review group identified the need for additional AMC to illustrate how a proper hand-over of the aircraft should be conducted when crews are changing in flight. This is consistent with the approach that was taken with EASA RMT.0573 where EASA developed AMC for the hand-over of operational control personnel (AMC2 ORO.GEN.110(f)).

GM3 ORO.GEN.110(f) Operator responsibilities

BRIEFING BETWEEN RELIEVING FLIGHT CREW MEMBERS

A typical briefing between relieving crew members includes:

(1) technical status of aeroplane, including remaining fuel;

(2) en route and destination weather;

(3) alternate airports;

(4) contingency scenarios; and

(5) cabin status.

Rationale *RMT.0190*

See NPA 2014-25.

The GM to provide additional recommendations in the context of AMC3 ORO.GEN.110(f) – see the Rationale for that AMC. This GM was developed with a group of airlines that have extensive experience in long haul flight operations.

For the focused consultation with the EASA Advisory Bodies (20 June 2022), this draft GM was presented as GM2 ORO.FC.120(f). Based on an internal review, it is renamed into GM3 ORO.FC.110(f), since a GM2 ORO.FC.120(f) was already inserted with ED Decision 2022/014/R.

Based on a comment received during the above-mentioned focused consultation, in paragraph (c) in the phrase "… briefing between relieving flight crew members…" the word "relieving" was deleted to clarify that not only the crew members swapping positions are involved but also any other affected crew members.

AMC1 ORO.FC.230 Recurrent training and checking

RECURRENT TRAINING SYLLABUS

(a) Recurrent training

[…]

(4) Aircraft/FSTD training

[…]

(ii) Helicopters

[…]

(B) The recurrent training should include the following additional items, which should be completed in an FSTD:

— settling with power and vortex ring;

— unanticipated yaw (loss of tail rotor effectiveness).

Note: Additional guidance on how to deliver training on the recognition of and recovery from the incipient vortex ring state can be found in the EASA Together4Safety Helicopter Flight Instructor Guide.

Rationale *RMT.0587*

During extensive discussions with the Advisory Bodies (R.COM) and competent authorities, it was decided to further clarify the considerations on Vortex Ring State (VRS) in this AMC. A note with a reference to the Helicopter Flight Instructor Guide published by EASA (Together4Safety) was added. This Guide provides more detailed and practical information and on what is expected in terms of demonstration, instruction and training concerning the recognition and recovery from VRS. In addition, guidance is provided on how to raise the awareness on the risk to encounter VRS in those exercises where VRS is mentioned as a threat.

AMC1 ORO.FC.A.201(a)(2)(ii) In-flight relief of flight crew members

INITIAL CRM TRAINING FOR THE PILOT RELIEVING THE COMMANDER

The initial CRM training for the pilot relieving the commander should include the CRM training elements specified in paragraph (g) of AMC1 ORO.FC.115, Command course.

Rationale *RMT.0190*

See NPA 2014-25.

The driver of this provisions is the necessary safety improvements consequential to the accident of Air France 447 (see the Final Report: https://bea.aero/docspa/2009/f-cp090601.en/pdf/f-cp090601.en.pdf, Chapter 4 Subchapter 4.3, Recommendation 4.3.5).

GM1 ORO.FC.A.201(a)(2)(ii) and (iii) In-flight relief of flight crew members

LEADERSHIP AND DECISION-MAKING SKILLS OF THE PILOT RELIEVING THE COMMANDER

It is recommended that, to enhance the leadership and decision-making skills of the pilot relieving the commander, an operator may include in its training programme training exercises related to issues identified by the operator's safety risk management. Examples for such exercises are the initiation of emergency descent, engine failure in the cruise, smoke control and/or removal, unreliable airspeed indication, total loss of electrical power supply or upset prevention and recovery training.

Rationale *RMT.0190*

See NPA 2014-25.

The GM gives additional guidance on the training for pilots who relieve the commander in flight and is to be seen in the context of AMC1 ORO.FC.A.201(a)(2)(ii). Please refer to the Rationale for that AMC.

During the focused consultation meeting with the EASA Advisory Bodies (20 June 2022), the introductory part of the second sentence of this GM was changed to clarify that the listed exercises solely constitute examples while it will be entirely up to the operator to design the training, based on its safety risk assessment.

GM1 ORO.FC.A.201(b)(2)(iii) Operator responsibilities

TRAINING AND CHECKING OF CRUISE RELIEF CO-PILOTS

(a) Training

The training of a cruise relief co-pilot is the same as the training for co-pilots in accordance with point ORO.FC.230, including take-off and landing exercises in both the PF and PM role.

(b) Checking

(1) As the cruise relief co-pilot may not exercise functions at the control of the aircraft during the take-off, there is no need to check for those manoeuvres neither in the PF nor in the PM role.

(2) However, in unforeseen circumstances, the cruise relief co-pilot may need to exercise functions at the control of the aircraft during landing; thus, a check of the landing manoeuvres at least in the role of the PM is necessary.

Rationale	*RMT.0190*
See NPA 2014-25. The RMT.0190 Review group concluded that a new GM was necessary to ensure a proper understanding of point ORO.FC.A.201(b)(2), as proposed to be amended. Please also refer to the Rationale provided with the draft amendments to point ORO.FC.A.201(b)(2).	

--- End ---
(finally…)