

# Annex II to ED Decision 2025/002/R

# 'AMC and GM to Part-FCL — Issue 1, Amendment 13'

The text of the amendment is arranged to show deleted, new and unchanged text as follows:

- deleted text is struck through;
- new or amended text is highlighted in blue;
- an ellipsis '[...]' indicates that the rest of the text is unchanged.

#### Note to the reader

In amended, and in particular in existing (that is, unchanged) text, 'Agency' is used interchangeably with 'EASA'. The interchangeable use of these two terms is more apparent in the consolidated versions. Therefore, please note that both terms refer to the 'European Union Aviation Safety Agency (EASA)'.



The Annex to Decision 2011/016/R of the Executive Director of the Agency of 15 December 2011 is amended as follows:

# 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(8c)

- SEP in the context of helicopters: Single-Engine Piston
- [...]

Rationale

See NPA 2020-14, page 59.

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

# APPLICATION AND REPORT FORMS

[...]

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

[...]

Rationale

RMT.0678

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(8c) 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.

Following 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.

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

## TERMINOLOGY

[...]

(c) 'Examination paper': a set of questions, which covers one subject or, in the case of examinations for the BIR, one module, required by the licence level or rating, to be answered by a candidate for examination.

[...]

## Rationale

RMT.0587

Text is added to address the fact that BIR examination papers do not reflect one subject but one of the BIR modules (which comprise elements from different subjects).

An earlier version of this draft amendment (as presented during the focused consultation workshop in June 2022) simply proposed to exclude the BIR examination from this GM. However, following an internal review in early 2023 (after the focused consultation workshop in June 2022), for clarity reasons the text was revised not to simply exclude the BIR examinations from the existing text but to explicitly refer to both 'subjects' and 'modules' for the BIR instead.

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

## ISSUANCE OF THE 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 with the EASA Advisory Bodies, this AMC is introduced 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.035(b)(6)(ii) Crediting of flight time and theoretical knowledge

## CASES OF CREDITS FOR VFR COMMUNICATIONS OR IFR COMMUNICATIONS

Applicants can complete training of reduced duration 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 have already passed an ECQB examination for the subject VFR communications:
  - (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 examination for the subject VFR communications.

#### Rationale

RMT.0587

In the context of the new point FCL.035(b)(6) (see Regulation (EU) 2024/2076), this GM is introduced to illustrate the scenarios where such training of 'reduced' duration 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 (points (a) and (b));
- in point (a)(3), the phrase '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 point (b) uses the term 'IR' (instead of 'instrument rating'), to clarify that holders of a basic instrument rating (BIR) cannot take advantage of the credits explained in this GM 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

- (a) The record of the flights flown should contain at least the following information:
  - [...]
  - (4) details on pilot function, namely PIC, including solo, SPIC and PICUS time, co-pilot, cruiserelief co-pilot, dual, FI or FE;

[...]

- (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 and tests, checks and assessments 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 is performed by an LAPL holder to comply with recency requirements;



- (v) for multi-pilot operations in cases where a skill test and proficiency check in singlepilot helicopters, aircraft is completed in either a combination of single-pilot and multi-pilot operation or solely in multi-pilot operation, information as follows:
  - (A) the form of operation, name and signature of the examiner conducting the skill test or proficiency check or operator proficiency check, and
  - (B) the name of the operator in the case of the operator proficiency check<mark>; and</mark>
  - (C) the form of operation as follows:
    - in the case of a combination of single-pilot operation and multi-pilot operation: 'SP/MP';
    - (2) in the case of solely multi-pilot operation: 'MP only'
- (vi) 'CRCP' when the pilot acted as cruise-relief co-pilot.

[...]

#### Rationale

RMT.0190, RMT.0678

See NPA 2020-14, page 59.

In reaction to a comment received on NPA 2014-25, point (a)(4) is amended and, in point (i)(10), a new point (vi) is inserted, to ensure that cruise-relief co-pilot flight time is recorded appropriately.

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

- the phrase 'or examiner, as applicable' was added in point (b)(1)(ii), since the updated text of this paragraph now also refers to skill tests and proficiency checks;
- additional text was added in point (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 <u>rating</u>.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, point (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.

In reaction to a comment received on NPA 2023-104, point (i)(10)(v) is amended to be in line with the amendment to point FCL.725 where the new point (db) of that point requires logbook entries only in specific scenarios.

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

# AEROPLANES, HELICOPTERS, POWERED-LIFT<mark>, AND</mark> AIRSHIPS AND SAILPLANES

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



## Rationale

RMT.0678

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

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) simulated engine failure after take-off;
  - (C) rejected mislanding and go-around;



(D) missed approach-;

(E) simulated engine failure and restart procedures in-flight.

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-briefingdebriefing by instructor.
- Note: **dD**uring flights immediately following the solo circuit, the consolidation of the following should be revised:
  - (A1) procedures for leaving and rejoining the circuit;
  - (B2) the local area, restrictions, map reading;
  - (<del>C</del>) use of radio aids for homing;
  - (**D**4) turns using magnetic compass, compass errors.

[...]

## Rationale

RMT.0678

See NPA 2020-14, page 59.

Although the intended clarification related to engine-shut-down manoeuvres by TMG class rating holders was decided to be postponed to another RMT (see Opinion No 05/2023, Section 2.4.4, first bullet point on page 17), the proposal for adding, in Exercise 12/13, an additional training exercise on engine restart procedures in flight is kept. The wording is slightly updated to consistently reflect the simulated character of this exercise. Additionally, based on a comment received, for clarity the term 'mislanding' is Exercise 12/13 is replaced by the term 'rejected landing'.

For NPA 2020-14, 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 point (c)(2); AMC1 DTO.GEN.240 point (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).

# AMC2 FCL.115 LAPL<del>(H)</del> — 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;
    - (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;
    - [...]
- (c) Syllabus of flight instruction
  - [...]
  - (2) [...]
    - (xi) Exercise 7: Basic autorotation:
      - [...]
      - (F) awareness of increased risk of vortex condition during power recovery;
      - [...]

(xxiii) Exercise 15: Hover OGE and – vVortex ring – unanticipated yaw (LTE):

[...]

- (C) demonstration of incipient stage of vortex ring, recognition and recovery (from a safe altitude);
- (D) Demonstration of unanticipated yaw which could lead to a perceived Lloss of tail rotor effectiveness (LTE).

[...]

(xxix) Exercise 21: Quick stops



[...](E) awareness of the danger of vortex ring;[...]

## Rationale

RMT.0587, RMT.0678

## <u>RMT.0587</u>

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 point (b)(1)(vii) and in the relevant exercises listed in point (c).

## <u>RMT.0678</u>

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 (point (D)) of Exercise 15 were amended for clarification and consistency.

# AMC1 FCL.115(c) LAPL — Training course

## CHANGE OF TRAINING ORGANISATION

[...]

## Rationale

RMT.0678

After restructuring point FCL.115 with the amending Regulation (EU) 2024/2076, the reference to that point in the title of that AMC needs to be updated.

# AMC1 FCL.115; FCL.120 LAPL - Taraining 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

RMT.0678

See NPA 2020-14, page 58.

# AMC1 FCL.<mark>115</mark>110<mark>.A</mark>(c) LAPL(A) — <del>Training <mark>course</mark>Experience</del> requirements and crediting

# CREDITING<del>: PRE-ENTRY FLIGHT TEST</del> 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

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.



# GM1 FCL.140.A LAPL(A) — Recency requirements

# SAFETY AWARENESS BRIEFING BEFORE REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that the pre-flight briefing before refresher training or a proficiency check in accordance with point FCL.140.A with the pilot, the instructor or examiner, as applicable, includes elements to raise the pilot's safety awareness with regard to safely flying aeroplanes or TMGs (as applicable), as outlined in GM2 FCL.740.A.

#### Rationale

RMT.0587

With RMT.0587, the new GM1 FCL.740.H is introduced on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitating 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 GM on safety awareness briefings is introduced also for training and checking in aeroplanes. In order to avoid text duplication, reference is given to the new GM2 FCL.740.A.

# AMC1 FCL.140.A; FCL.140.S; FCL.740.A(b)(1)(ii) Recency and revalidation requirements

All hours flown on aeroplanes or sailplanes that are subject to a decision as per Article 2(8) of the Basic Regulation or that are specified in Annex I to the Basic Regulation should count in full towards fulfilling the hourly requirements of points FCL.140.A, FCL.140.S, and FCL.740.A(b)(1)(ii) under the following conditions:

- (a) the aircraft matches the definition and criteria of the respective Part-FCL aircraft category, class, and type ratings; and
- (b) the aircraft that is used for training flights with an instructor is an Annex-Laircraft of type (a), (b), (c), or (d) that is subject to an authorisation specified in points ORA.ATO.135 or DTO.GEN.240.

#### Rationale

RMT.0587

Since the content of this AMC was elevated to implementing rule level (point FCL.035(a)(4), as introduced with Regulation (EU) 2020/2193), this AMC is redundant and can be deleted.

# AMC1 FCL.140.A<mark>(a)(1)(ii)</mark>; 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<sub>7</sub>;
  - (2) as well as on navigation flight techniquescapabilities.;
  - (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 the relevant recognition and recovery exercises in the flight training:
  - (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;
- (4) approach to stall, climbing turn with take-off flap and climb power; and
- (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 point (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 point (a)(2), the term 'navigation flight capabilities' was replaced by 'navigation flight techniques' for clarity.
- In point (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 point (b), an additional point (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 point (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.140.A(ba)(12) LAPL(A) - Recency requirements

The proficiency check should follow the content of the skill test that is set out in AMC1 FCL.125, point (e).

## Rationale

RMT.0587

After restructuring point FCL.140.A with amending Regulation (EU) 2019/1747, the reference to that point in the title of that AMC needs to be updated.

# AMC1 FCL.110.H(b) 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

See NPA 2020-14, page 60.

# AMC1 FCL.140.H(ba)(12) LAPL(H) - Recency requirements

The proficiency check should follow the content of the skill test that is set out in AMC2 FCL.125, point (e).

#### Rationale

RMT.0678

RMT.0678

After restructuring point FCL.140.H with amending Regulation (EU) 2024/2076, 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 BEFORE REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that 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 comment received for NPA 2020-14, the text in point (a) was changed in consistency with point (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 changed to 'training' at the beginning of both points (a) and (b), to provide the option to complete the training in an FSTD;
- in the list at the end of point (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 with Regulation (EU) 2024/2076.

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) simulated engine failure after take-off;
  - (C) rejected mislanding and go-around;
  - (D) missed approach-;
  - (E) simulated engine failure and restart procedures in-flight.
  - Note: *i*In the interests of safety, it will be necessary for pilots that are trained on nosewheel aeroplanes or TMGs to undergo dual conversion training before flying tailwheel aeroplanes or TMGs, and vice versa.
- (xviii) Exercise 14: First solo:
  - (A) instructor's briefing<sub>7</sub>;
  - (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:
      - (**B1**) procedures for leaving and rejoining the circuit;
      - $(\in 2)$  the local area, restrictions, map reading;



RMT.0678

- (-3) use of radio aids for homing;
- (E4) turns using magnetic compass, compass errors.

[...]

## Rationale

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).

For updates in Exercise 12/13, please refer to the rationale for AMC1 FCL.115.

# AMC2 FCL.210 PPL(H) Training course

# FLIGHT INSTRUCTION FOR THE PPL(H)

- (c) **Flight instruction** 
  - The PPL(H) flight instruction syllabus should take into account the principles of threat and (1) error management and cover:
    - [...]
    - (vii) recognition of and recovery from the incipient vortex ring state recognition and recovery;
    - (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;
    - [...]
- Syllabus of flight instruction (d)
  - [...]
  - (2) [...]
    - Exercise 10: Basic autorotation: (xi)
      - [...]
      - (F) awareness of increased risk of vortex condition during power recovery;
      - [...]
    - (xxiii) Exercise 18: Hover OGE and vVortex ring unanticipated yaw (LTE):
      - [...]
      - (C) demonstration of incipient stage of vortex ring, recognition and recovery (from a safe altitude);



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

# [...]

(xxix) Exercise 24: Quick stops

- (E) awareness of the danger of vortex ring;
- [...]

[...]

# 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 point (c)(1)(vii) and in the relevant exercises listed in point (d).

## <u>RMT.0678</u>

In reaction to a comment received for the draft AMC1 FCL.740.H(a)(2)(ii)(B) (refresher training flight, further down in this document), the 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) Privileges and conditions

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

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 introduced in order to clarify the intention of Part-FCL requirements that allow 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 (point (c)), to clarify which kind of ratings can be revalidated while holding a lower medical certificate.

# 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 undergoes 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 made to point FCL.210.A and the related rationale.

Following comments received for NPA 2020-14, this new AMC is introduced to illustrate the necessary content of the LAPL  $\rightarrow$  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 undergoes 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 made to point FCL.210.H and the related rationale.

Following comments received for NPA 2020-14, this new AMC is introduced to illustrate the necessary content of the LAPL  $\rightarrow$  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.

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

# TRAINING ON PBN OPERATIONS AS PART OF IR TRAINING COURSES

## GENERAL

- (a) Since in accordance with point FCL.605(a) the privileges of an instrument rating (IR) include privileges to fly aircraft in 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) when applied, consider technological and regulatory developments.

# THEORETICAL TRAINING

(c) Theoretical knowledge instruction 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);
- 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;
- vertical guidance modes (RNP v advisory), associated limitations (AFM, temperature, QNH) and procedures (correct barometric altimeter setting);
- (7) information about receiver autonomous integrity monitoring (RAIM), airborne autonomous integrity monitoring (AAIM).
- (d) Theoretical knowledge instruction regarding requirements, procedures and equipment
  - (1) This part should, while following the syllabus as set out in point (2), include theoretical knowledge instruction about:
    - (i) the operational procedures in accordance with Regulation (EU) No 965/2012, national procedures, and manufacturer or operator procedures, 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:
    - relevant navigation specification and system limitations (according to the 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 familiarisation with the aircraft on-board systems and should, while following the syllabus as set out in point (2), cover the following items:
    - a theoretical overview of the on-board systems with a view to 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 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 functions (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 the database;
    - 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 stages 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) apply the theoretical knowledge as specified in points (c), (d) and (e) in practice;
  - (ii) build 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 text is based on alternative means of compliance developed by a Member State.

Following an internal review prior to the publication of this ED Decision, in point (c)(6) the phrase 'and procedures (correct barometric altimeter setting)' is added, to stress the necessity for this training element to address the safety issue of incorrect altimeter setting.

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

[...]

(c) An applicant who has completed a modular IR(A) course in accordance with 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 amended to remove an outdated reference to the no longer existing EIR.

# 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 turbo <mark>charged</mark> or <del>super charged</del>		
	supercharged engines		
	SEP (land) with cabin pressurisation		
	SEP (land) with tail wheels		
	SEP (land) with EFIS		
	SEP (land) with SLPC		
	SEP (land) with an electric engine		
	SEP (land) with multiple electric engines (Article 2(8c)(b)		
	SEP (land) with a hybrid engine (Article 2(8c)(c)		
	SEP (sea)	(D)	SEP (sea)
	SEP (sea) with variable pitch propellers		
	SEP (sea) with turbo <mark>charged</mark> or <del>super charged</del>		
	supercharged engines		
	SEP (sea) with cabin pressurisation		
	SEP (sea) with EFIS		
	SEP (sea) with SLPC		
	SEP (sea) with an electric engine		
	SEP (sea) with multiple electric engines (Article 2(8c)(b)		
	SEP (sea) with a hybrid engine (Article 2(8c)(c)		
All manufacturers	MEP (land)	(D)	MEP (land)
	MEP (sea)	(D)	MEP (sea)

# [...]

## Rationale

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.

RMT.0678



# 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 AFM 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:
  - 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:

- point (a)(1)(v) and (vi) were introduced to address additional training items related to battery endurance and battery life;
- point (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;
- (GH) fire-warning and fire-extinguishing system;
- (HI) generators and generator drives;
- (**+J**) power indication;
- (JK) reverse thrust;
- (KL) 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<mark>/energy</mark> 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 systems operation.
- (6) hydraulic system:
  - 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:
  - 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 backup 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 jacketlife jackets;
  - (vi) life rafts;
  - (vii) emergency transmitters;
  - (viii) crash axes;
  - (ix) megaphones;
  - (x) emergency signals.
- (13) pneumatic system:
  - 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<sub>fo</sub>;
- (C) at various flap settings v<sub>fe</sub>;
- (D) for landing gear operation  $v_{lo}$ ,  $M_{lo}$ ;
- (E) for extended landing gear v<sub>le</sub>, M<sub>le</sub>;
- (F) for maximum rudder deflection v<sub>a</sub>, M<sub>a</sub>;
- (G) for tyres;
- (H) one propeller feathered.
- (ii) (A) minimum control air speed-air v<sub>mca</sub>;
  - (B) minimum control ground speed-ground v<sub>mcg</sub>;
  - (C) stall speed under various conditions v<sub>so</sub>, v<sub>s1</sub>;
  - (D) maximum speed v<sub>ne</sub>, M<sub>ne</sub>;
  - (E) maximum speed for normal operation v<sub>mo</sub>, M<sub>mo</sub>;
  - (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;
  - $(G) \qquad maximum \ dumping \ speed \ v_{dco}, \ M_{dco}, \ v_{dce}, \ M_{dce};$
  - (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
      - (D2) maximum power<u>for take-off</u> and go-around on pressure altitude or flight altitude and temperature;



- (ED) piston engines: certified range of mixture;
- (FE) minimum and maximum oil temperature and pressure;
- (GF) maximum starter time and required cooling;
- (HG) time between two start attempts for engines and auxiliary power unit;
- (IH) 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) mMach 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 takeoff, en-route, approach and landing according to the documentation available (for example for take-off v<sub>1</sub>, v<sub>mbe</sub>, v<sub>r</sub>, v<sub>lof</sub>, v<sub>2</sub>, 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<mark>/energy</mark>;
    - (ii) oil;
    - (iii) water;
    - (iv) hydraulic;
    - (v) oxygen;
    - (vi) nitrogen;
    - (vii) conditioned air;
    - (viii) electric power;
    - (ix) start<mark>er</mark> 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<sub>1</sub>, as well as in flight;
    - (ii) malfunction<del>s</del> of the propeller system;
    - (iii) engine/battery overheat, engine/battery fire on ground and in-flightin 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-flightin 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;
  - 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

See NPA 2020-14, page 61.

In reaction to comments received for NPA 2020-14:

- in point (b)(1)(iii)(F) of Section I the word 'maximum' was added for clarity and consistency;
- in point (c)(2)(vii), the text was amended to refer to 'available energy and power' instead of referring solely to 'power';

RMT.0678



in points (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

[...]

(c) Initial issue

The flight instruction (excluding skill test) should comprise training time as specified in column 2 in the table below unless otherwise foreseen in the operational suitability data established in accordance with Annex I (Part 21) to Commission Regulation (EU) No 748/2012 (OSD). If, in accordance with Appendix 9 to Part-FCL Section A paragraph 1<sup>c</sup> third subparagraph, training is conducted in a combination of FSTDs (other than FFS) and the helicopter, the in-aircraft training time will depend on the specificities of the FSTD used. In such a case, in-aircraft training time should comprise, as a minimum, the training time given in column 3 of the table below unless otherwise foreseen in the OSD.

The minimum training time given in column 2 may include the time of the take-off and landing training referred to in Appendix 9 to Part-FCL Section A paragraph 1a.

[...]

(d) Additional types

The flight instruction (excluding the skill test) should comprise training time as specified in column 2 in the table below unless otherwise foreseen in the OSD. If, in accordance with Appendix 9 to Part-FCL Section A paragraph 1<sup>°</sup> third subparagraph, training is conducted in a combination of FSTDs (other than FFS) and the helicopter, the in-aircraft training time will depend on the specificities of the FSTD used. In such a case, in-aircraft training time should comprise, as a minimum, the time given in column 3 of the table below unless otherwise foreseen in the OSD.

The minimum training time given in column 2 may include the time of the take-off and landing training referred to in Appendix 9 to Part-FCL Section A paragraph 1a.

(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 <del>(a)(3)</del> (b)	2 hrs	1 hr



SEP(H) to SEP(H) not included in AMC1 FCL.740.H <del>(a)(3)</del> (b)	5 hrs	2 hrs
[]		
<ul> <li>Extend privileges on the same type rating:</li> <li>from SPH to MPH (except for initial MP issue), or</li> <li>from MPH to SPH operated in single-pilot operation</li> </ul>	2 hrs	n/a

[...]

Rationale	RMT.0587, RMT.0678

## <u>RMT.0587</u>

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, which has been applicable since 30 October 2022. Hence, these updates are no longer included in this proposal.

However, in addition to those updates and based on discussions and conclusions during Advisory Body meetings:

- in the introductory text in points (c) and (d), the existing reference to Appendix 9 to Part-FCL is updated, and a sentence is added to clarify that the overall minimum training time may include both the FSTS phase and the take-off and landing training as per Appendix 9 (as concluded during the Aircrew TeB meeting on 24 June 2024);
- the table in point (d) is further amended to clarify that no additional training is needed in cases where pilots already hold an MPH type rating and wish to additionally obtain, for the same type, an SPH type rating with MPO privileges only. Only in cases where they extend their privileges from an MPH type rating to an SPH type rating (operated in SPO), the 2 hours of training are necessary.

## <u>RMT.0678</u>

As regards corrections to references to AMC to point FCL.740.H in the second and third row of the table in point (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

Points FCL.725(d)(1)(iii)(B)(4)(ii)(B)(2) and FCL.725(d)(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 point FCL.725(d) and the introduction of the new point (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 are updated.

## AMC1 FCL.740(b) Validity and renewal of class and type ratings

- [...]
- (c) With the exception of refresher training for ratings for aircraft referred to in point FCL.740(b)(21)(i), refresher training should include theoretical knowledge instruction, as necessary, such as for type-specific system failures in complex aircraft. The performance of the applicant should be reviewed during the training and additional instruction should be provided to the applicant, where necessary, to reach the standard required for the proficiency check.
- [...]
- (e) Taking into account the factors listed in (a) above, the ATO, the DTO or the instructor, as applicable, may also decide that the applicant already possesses the required level of proficiency and that no refresher training is necessary. In such a case, the certificate or other documental evidence referred to in (ed) above should contain a respective statement including sufficient reasoning.

### Rationale

RMT.0587

Based on input received by a Member State, two references in that AMC need to be corrected.

In point (c), the reference to point FCL.740 needs to be corrected, since the intention was to exempt smaller aircraft (as per the 'DTO scope', as listed in point FCL.740(b)(1)(ii)) from more detailed arrangements for refresher training. Apart from that, there exists no point FCL.740(b)(2)(i).

In point (e), reference is made to 'documental evidence' which is described in point (d), not (c).



## AMC1 FCL.720.A(a)(2)(i)(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 in accordance with according to Appendix 6 Aa or, before 8 September 2021, an EIR course in accordance with 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(ab)(2)(i)(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 highperformance aeroplane (HPA), who:

[...]

- (b) has completed a competency-based modular IR(A) course according to in accordance with Appendix 6 Aa or, before 8 September 2021, an EIR course in accordance with according to point FCL.825; and
- (c) does not fulfil the requirements of points (B) or (C) of point FCL.720.A-(ab)(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.(ab)(2)(i)(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 point (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 that the applicant has to complete, in order to lift the CRCP restriction. While point (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 — aeroplanes

### 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<sub>7</sub>;
  - (2) as well as on navigation flight techniquescapabilities.;
  - (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 reaction to comments received for NPA 2020-14 (see above the explanations provided for the amendments to that AMC). Additionally, in point (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 point (b) and the text of point (2) of that list 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 BEFORE REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that the pre-flight briefing before refresher training or a proficiency check in accordance with point FCL.740.A 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 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. They 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, the new GM1 FCL.740.H is introduced on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitating 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 GM on safety awareness briefings is introduced also for training and checking in aeroplanes.

## GM1 FCL.740.H Revalidation of type ratings — helicopters

## SAFETY AWARENESS BRIEFING BEFORE REFRESHER TRAINING OR PROFICIENCY CHECKS

It is recommended that 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 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. They 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 introduced on the basis of recommendations received from the EASA Rotorcraft Safety Roadmap, with a view to facilitating 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 3 175 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 point (a) was changed in consistency with point (a) of AMC1 FCL.140.A(a)(1)(ii) (see explanation above);
- in point (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 changed to 'training' at the beginning of both points (a) and (b),
   to provide the option to complete the training in an FSTD;
- in the list at the end of point (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<del>(a)(3)</del>(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<mark>, or</mark> TMG<del> and sailplane</del>, as applicable);

[...]

(d) Flying training

[...]

The exercises of the aerobatic flying training syllabus should be repeated as necessary until the applicant achieves a safe and competent standard. Having completed At the end of the flight training, the student pilot should be able to perform an aerobatic solo-flight containing a sequence of aerobatic manoeuvres. The dual training and the supervised solo training flights



should be tailored to the category of aircraft and limited to the permitted manoeuvres of that type of aircraft. The exercises should comprise at least the following practical training items:

- (1) confidence manoeuvres and recoveries
  - [...]
  - (iv) engine restart in-flight (in case of unintentional engine stop during an aerobatic manoeuvre if applicable);
- [...]

#### Rationale

RMT.0587; RMT.0678

#### <u>RMT.0678</u>

For the amendments to points (c)(3) and (d)(1)(iv), see NPA 2020-14, page 62.

#### <u>RMT.0587</u>

Based on input received from a Member State during the Aircrew TeB meeting on 1 February 2023, the introductory phrase of point (d) is amended. In the current AMC text, the completion of a solo aerobatic flight is apparently expected after the completion of the aerobatic training syllabus for the student pilot to demonstrate their ability to perform aerobatic flights (in the absence of a dedicated aerobatic training. However, point FCL.800 itself does not require at all solo flights to be part of aerobatic training. Since AMC cannot set out additional requirements (in this case, for solo flights), the AMC text needs to be clarified. The revised text continues to refer to the need for student pilots to demonstrate their ability to perform aerobatic flights at the end (as part) of the training. At the same time, the text no longer refers to 'solo' flights. The information contained in that AMC consequentially applies to any aerobatic training flight — dual flights (as required by point FCL.800) and, if the ATO or DTO voluntarily includes them into their programme, solo flights.

## 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

See NPA 2020-14, page 63.

RMT.0678



## 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

See NPA 2020-14, page 63.

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

## 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

RMT.0678

See NPA 2020-14, page 63.



## AMC1 FCL.835 Basic instrument rating (BIR)

## **BASIC INSTRUMENT RATING (BIR) COMPETENCIES**

[...]

(d) Content of the training

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

Г				1	
L	•	•	•	1	

	(A)	Part-NCO (non-commercial air operations)					
В	(B)	Pilot operating manual (POM) or flight manual chapters dedicated to:					
LED		( <del>15</del> 1) limitations;					
KNOWLEDGE		( <del>16</del> 2) performance calculations in general;					
KN		(173) 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

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.

<sup>(</sup>a) Nine instructor categories are recognised:



RMT.0678

## 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 (instructors 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. ThereafterFollowing 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

See NPA 2020-14, page 58.

## AMC5 FCL.935 Assessment of competence

## REPORT FORMS FOR THE INSTRUCTOR 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 <u>SEP or TMG hours</u> hours in instructor training course aircraft	SEPHoursininstructortrainingcourseaircraftinthepreceding6months	Instrument flight instruction	Cross-country hours	

[...]

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

[...]



Rationale

AMC and GM to Part-FCL Issue 1, Amendment 13

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 (point (h)(4), requiring 200 hours of IFR experience), point (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 however, during such an SPIC training flight, an instructor qualified in accordance with point FCL.905.FI(h)(3), 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 the 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(a**b**)(4).

(A) LIFUS training: content

[...]

(b) Consolidation of FSTD <sup>‡</sup>training in an aeroplane (in flight)

Upon completion of the FSTD This training in accordance with point (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) **Consolidation of FSTD Tt**raining in an aeroplane
- (1) Upon completion of the FSTD training in accordance with point (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:

[...]

Ratio	nale RMT.0587
Base	d on input from Member States:
_	point (b)(3)(iv) of this AMC is amended in order to clarify that the existing long briefing syllabus focuses on MET aeroplanes ('example syllabus') and should be adapted to the particular training course / training aircraft, as applicable;
_	in point (b)(3)(v) of this AMC, the text was amended to provide clarifications and to ensure consistency with point FCL.930.TRI (as updated to clarify the legal basis for in-aircraft consolidation of FSTD training). Also, in the sentence following the headline in point (b)(3)(v), the reference to point FCL.930.TRI is updated.
	action to comments received during the focused consultation with the EASA Advisory Bodies in 2022:
_	in the title of point (b)(3)(v)(A)(b), the term 'flying under supervision' was replaced by the more neutral term ' flying tasks', since not all of the subsequently listed tasks are events where the candidate is the supervised person;
_	in point (b)(3)(v)(A)(b) the phrase 'in the role of a TRI' is introduced, 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 number of hours required for such 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

- [...]
- (I) 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.

## TRAINING WHERE NO FSTD EXISTS

(m) [...]

## SPECIFIC TRAINING: LANDING TRAINING

- If applicants for, or holders of, a TRI(H) certificate wish to include privileges for landing training in their certificate, the specific training for that purpose should include at least all the following:
  - (1) Considerations of threats related to:
    - (i) taxi, take-off, approach and landing;
    - (ii) operating at low altitude;
    - (iii) general aviation (GA) traffic;



- (iv) increased fuel consumption;
- (v) bird strikes;
- (vi) aspects of performance and associated risks.
- (2) FSTD training:
  - (i) taxiing on the ground and in the air;
  - (ii) aircraft handling manoeuvres in hover;
  - (ii) take-off, including different take-off profiles, as applicable;
  - (iii) traffic pattern;
  - (iv) approach, go-around and landing, including different approach and landing profiles, as applicable;
  - (v) engine failure during take-off and landing, including different take-off and landing profiles, as applicable;
  - (vi) engine inoperative during hover, take-off, approach and landing;
  - (vii) slope landing;
  - (vii) take-off, approach and go-around with one engine inoperative (multi-engine helicopters only);
  - (viii) any further exercises, if specified in the applicable OSD.
- (3) Consolidation of FSTD training in a helicopter

After completion of the specific training in the FSTD, applicants should demonstrate their ability to conduct landing training in accordance with the above syllabus as TRIs during role-play flying in the aircraft under the supervision and to the satisfaction of a TRI(H) who is nominated for that purpose by the ATO.

### 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 point (b)(3)(ii)(F) for TRI(A) training) is also introduced in AMC2 FCL.930.TRI for TRI(H) training (new point (ja)).

In the context of the amendments and clarifications on type rating training and related in-aircraft training as well as type rating instructor training (see amending Commission Implementing Regulation (EU) 2024/2076, particularly the amendments to point FCL.930.TRI and Section A of Appendix 9 to Part-FCL), and also inspired by an AltMoC notification received, a new point (n) is added, to outline the specific training that TRIs for helicopters need to complete before conducting take-off and landing training in the aircraft.

Finally, point (I) 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 - <sup>4</sup>training course

[...]

Part 3

[...]

## Exercise <mark>56</mark>: UPRT

[...]

### Rationale

RMT.0678

See NPA 2020-14, page 63.

## AMC1 FCL.930.IRI IRI — Training course

[...]

## Part 3

## FLIGHT INSTRUCTION SYLLABUS

(a) An approved IRI course should comprise of at least When conducting the 10 hours of flight instruction, of which a maximum of 8 hours may be conducted in an FSTD. A a similar number of hours should be used for the instruction and practice of preflight and post-flight briefing for each exercise.

[...]

### Rationale

RMT.0587

Input received from Member States and stakeholders revealed a contradiction between point FCL.930.IRI and the associated AMC. Point FCL.930.IRI(a)(3) allows the entire IRI training course to take place in either the aircraft or an FSTD, without requiring minimum in-aircraft training time. At the same time, AMC1 FCL.930.IRI Part 3 point (a) illustrates an IRI training course arrangement which includes at least 2 hours of in-aircraft training. This amendment aligns the AMC text with that of point FCL.930.IRI.

## AMC1 FCL.1015 Examiner standardisation

### GENERAL

(a) The competent authority mayshould 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.

(b) The course should last:



[...]

- (2) for other examiners, at least 3 days, divided into theoretical training (1 day) and practical training in an FFS conducting real or role-played proficiency checks, skill tests or assessments of competence (at least 2 days).
- (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.0587, RMT.0678
<u>RMT.0587</u>	
Based on input received from a Member State at the Air which could not be discussed), point (b)(2) is amended by	
This point applies to all examiners other than FE and examiner standardisation training not necessarily, and nor IRE). Hence, that phrase is deleted to make the text more of aircraft or FSTDs are already contained in subsequent p	t in all cases, takes place in an FFS (e.g. CRE, general. Specific arrangements for the use
<u>RMT.0678</u>	
As regards the amendments to points (a) and (c) of AMC1	FCL.1015, 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 the 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 ;
  - (23) 90 minutes for LAPL(A) or LAPL(H), PPL(A) or PPL(H) and CPL(A) or CPL(H), including navigation section;
  - (34) 60 minutes for a PPL(As) and CPL(As);
  - (45) 60 minutes for IR, EIR BIR, instructor certificates, and SP type or class ratings; and



- (56) 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, see rationale No 1 on page 58 of NPA 2020-14.

## 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:

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 introduced to explain the intention behind the amendment of point FCL.1010.SFE(a)(1)(i) with Regulation (EU) 2019/1747.

## AMC1 to 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 point (a) should do all of the following:
  - 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 point (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 point (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 introduced 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 point (d), the start of the second sentence was revised to correctly refer to 'applicants for an ATPL *theoretical knowledge examination*'.



## AMC1 to Appendix 3 Training courses for the issue of a CPL and an ATPL

[...]

## E. CPL modular course: aeroplanes

- [...]
- (c) The following flight time is suggested for the flying training:
  - [...]
  - (3) ME training

If required, operation of an ME aeroplane in the eExercises 1 through 17, including operation of the aeroplane with one engine simulated inoperative, and engine shutdown and restart (the latter exercise at a safe altitude unless carried out in an FSTD). Before commencing training, the applicant should have complied with the type and class ratings prerequisites requirements as appropriate to the aeroplane used for the test.

[...]

## F. ATP/IR integrated course: helicopters

- [...]
- (d) The flight instruction is divided into four phases:
  - [...]
  - (2) phase 2:
    - [...]
    - (ii) recognition of and recovery from the incipient vortex ring state recovery;
    - [...]
- G. ATP integrated course: helicopters
  - [...]
  - (d) The flight instruction is divided into three phases:
    - [...]
    - (2) phase 2:
      - [...]
      - (ii) recognition of and recovery from the incipient vortex ring state recovery;
         [...]

## I. CPL/IR integrated course: helicopters

- [...]
- (d) The flight instruction is divided into three phases:



- [...]
- (2) phase 2:
  - [...]
  - (ii) recognition of and recovery from the incipient vortex ring state recovery;
  - [...]

J. CPL integrated course: helicopters

- [...]
- (d) The flight instruction is divided into two phases:
  - [...]
  - (2) phase 2:
    - [...]
    - (ii) recognition of and recovery from the incipient vortex ring state recovery;
       [...]

K. CPL modular course: helicopters

- [...]
- (d) [...]
  - [...]
  - (4) recognition of and recovery from the incipient vortex ring state condition;
     [...]

### Rationale

RMT.0587

Following a discussion during the Aircrew TeB meeting in December 2023, point (3) of Section E of that AMC is amended to clarify that, before commencing multi-engine training during a CPL modular course, applicants need to comply with the multi-engine- elated <u>prerequisites</u> (as required by Appendix 3 Section E point 3(b)), but not the related entire set of <u>requirements</u>. In that context, the current AMC text is more prescriptive than the rule and therefore needs to be revised. In reaction to a comment received for NPA 2024-104, the phrase '(the latter exercise at a safe altitude unless carried out in an FSTD)' is added, for consistency with other AMC on the same topic (e.g. AMC1 to Appendix 3, Section D point (d)(4)(iv)).

Additionally, based on input received from a Member State, the terminology for exercises related to the vortex ring state is adapted to be in line with the adapted text in AMC related to LAPL(H) and PPL(H) training (see above AMC2 FCL.115 and AMC2 FCL.210).



## AMC5 to Appendix 6 Modular training courses for the IR

[...]

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

(a) an BIREIR 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 <del>, BPL, SPL</del> , PPL, CPL, IR SKILL TEST AND PROFICIENCY CHECK						
Applicant's last name(s):						
Applic	cant's first name(s):			LAPL: A	□ H□ <del>B□ S□.</del>	
Signat	ture of applicant:			BPL:	SPL:	
Туре о	of licence*:			PPL: A	] H 🗌 As 🗌	
Licenc	ce number*:			CPL: A	] H 🗌 As 🗌	
State:				IR: A	] H 🗌 As 🗌	
1	Details of the flight			1		
Group	<del>, c<mark>C</mark>lass, type of aircraf</del>	t:	Registration:			
Aerod	Irome or site:	Take-off time:	Landing time:		Flight time:	
					Total flight time:	
2	Result of the test				1	
Skill te	est details:					
Pass		Fail 🗌	Partial pass			
3	Remarks	1	1			



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 to Appendix 9 Section A point 1c 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

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

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

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

The remaining 20 % of the training syllabus need to be completed in an FSTD that is suitable for the relevant exercises, or in the aircraft.

Independently, Appendix 9 Section A point 1a contains a requirement for applicants to complete additional take-off and landing training in the aircraft (unless undergoing ZFTT, or undergoing type rating training for cruise relief co-pilots).

(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 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 needed to be conducted in FFSs, or, in cases where an FFS is not available and accessible, in other FSTDs in combination with in-aircraft training. The subsequent Regulation (EU) 2024/2076 complemented this framework with the option to combine training in FFS, if available and accessible, and FSTDs. 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, that OSD for flight crew needs to be understood in the light of the requirements of the currently applicable Part-FCL, Appendix 9 Section A 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 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 introduces 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.

This GM was included for consultation with the Advisory Bodies in NPA 2023-104 (re-consultation prior to publishing Opinion No 05/2023) and was subsequently slightly updated to reflect the latest changes to Appendix 9 Section A (new paragraph numbering, introduction of combining FFS and FSTD training for SPA and helicopters).



GM1 to Appendix 9 Section B point (5)(I); 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 the amendment introduced by Regulation (EU) 2020/359, Appendix 9 to Part-FCL was amended to allow holders of instrument ratings (IRs) 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.