

Brussels, XXX [...](2023) XXX draft

# Annex to EASA Opinion No 05/2023

# COMMISSION IMPLEMENTING REGULATION (EU) .../...

## of XXX

amending Commission Regulation (EU) No 1178/2011 and Commission Regulation (EU) No 965/2012 as regards the clarification of requirements for cruise relief co-pilots, updates of requirements for flight crew licensing and medical certification, and improvements for general aviation

## COMMISSION IMPLEMENTING REGULATION (EU) 202X/xxx

## of XXX

### amending Commission Regulation (EU) No 1178/2011 and Commission Regulation (EU) No 965/2012 as regards the clarification of requirements for cruise relief co-pilots, updates of requirements for flight crew licensing and medical certification, and improvements for general aviation

## THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (<sup>1</sup>), and in particular Articles 23, 27 and 31 thereof,

Whereas:

- (1) Commission Regulation (EU) No 1178/2011 (<sup>2</sup>) lays down the requirements for pilots who are involved in the operation of aircraft as specified in points (b)(i) and (ii) of Article 2(1) of Regulation (EU) 2018/1139.
- (2) Commission Regulation (EU) No 965/2012 (<sup>3</sup>) lays down technical requirements and administrative procedures related to air operations.
- In accordance with Article 140(2), point (b) of Regulation (EU) 2018/1139, Regulation (EU) No 1178/2011 is to be adapted to Regulation (EU) 2018/1139 as regards the definition of complex motor-powered aircraft which was included in Regulation (EC) No 216/2008 of the European Parliament and of the Council (<sup>4</sup>), repealed by Regulation (EU) 2018/1139. Regulation (EU) No 1178/2011 should therefore be amended accordingly.
- (4) As regards single-engine aeroplanes, Regulation (EU) No 1178/2011 should be amended to reflect the latest technical developments and to consider future designs, such

<sup>(&</sup>lt;sup>1</sup>) <u>OJ L 212, 22.8.2018, p. 1</u>.

<sup>(&</sup>lt;sup>2</sup>) Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (<u>OJ L 311, 25.11.2011, p. 1</u>).

<sup>(&</sup>lt;sup>3</sup>) Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

<sup>&</sup>lt;sup>4</sup> Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1).

as electric engines and hybrid engine designs, consisting of both thermal and electric engine components.

- (5) Regulation (EU) No 1178/2011 should also be amended to clarify and to update its provisions, based on issues highlighted to the European Union Aviation Safety Agency by its Advisory Bodies, revealed during monitoring and implementation support activities, or identified to be problematic specifically for general aviation or aero-medical certification.
- (6) When simplifying the requirements for revalidating the privileges of a mountain rating, appropriate transitional provisions should be put in place to ensure a smooth transition from the current to the future applicable requirements.
- (7) The provisions for cruise relief co-pilots in both Regulation (EU) No 1178/2011 and Regulation (EU) No 965/2012 should be revised to ensure adequate training of such pilots and to establish appropriate operating procedures for the transfer of authority between flight crew members.
- (8) The provision for pilots who have reached the age of 60 and who are involved in singlepilot helicopter emergency medical services (HEMS) operations in both Regulation (EU) No 1178/2011 and Regulation (EU) No 965/2012 should be revised to facilitate a higher coverage of HEMS operations in the European Union while not adversely impacting flight safety.
- (9) Since medical research requires strict protocols, the provisions related to special medical circumstances should be revisited to ensure that they are fit for purpose, do not adversely impact flight safety and ensure compliance with established medical research principles.
- (10) The provisions allowing persons to apply for a change of their competent authority should be revised to be applicable also to medical certificate holders who have not yet been issued with a licence.
- (11) Since the International Civil Aviation Organization (ICAO) recommends the assessment of health risk factors and preventive advice, medical requirements should be revisited to enable the assessment of health risks and especially the cardiovascular risk factors.
- (12) The provisions for aero-medical assessment should be revisited to ensure that they give proper consideration to the degenerative effects of ageing on the body systems.
- (13) Amendments to requirements for medical certificates, for aero-medical examiners and for aero-medical centres, as well as amendments related to age limitations for pilots engaged in HEMS, should apply with deferral, to give Member States' competent authorities time that is needed to prepare for the implementation of these regulatory changes.
- (14) The European Union Aviation Safety Agency has prepared draft implementing rules and submitted them to the Commission with Opinion No 05/2023 in accordance with Article 75(2) points (b) and (c) and Article 76(1) of Regulation (EU) 2018/1139.

(15) The requirements laid down in this Regulation are in accordance with the opinion of the Committee for the application of common safety rules in the field of civil aviation established by Article 127(1) of Regulation (EU) 2018/1139,

# HAS ADOPTED THIS REGULATION:

## Article 1

Commission Regulation (EU) No 1178/2011 is amended as follows:

- (1) Article 2 is amended as follows:
  - (a) paragraph 3 is replaced by the following:
    - (3) "Complex aircraft" means:
      - (a) an aeroplane:
        - (i) with a maximum certificated take-off mass exceeding 5 700 kg, or
        - (ii) certificated for a maximum passenger seating configuration of more than nineteen, or
        - (iii) certificated for operation with a minimum crew of two pilots, or
        - (iv) equipped with (a) turbojet engine(s) or more than one turboprop engine; or
      - (b) a helicopter certificated:
        - (i) for a maximum take-off mass exceeding 3 175 kg, or
        - (ii) for a maximum passenger seating configuration of more than nine, or
        - (iii) for operation with a minimum crew of two pilots; or
      - (c) a tilt rotor aircraft.';
  - (b) after paragraph 8, the following paragraphs 8a and 8b are inserted:
    - (8a) "SEP aeroplane" means a single-engine, single-pilot aeroplane for which no type rating is required and whose single centric propulsion unit is operated by a single thrust control and driven by either of the following types of engine:
      - (a) a piston engine;
      - (b) an electric engine system which, if so specified following the certification process in accordance with Commission Regulation (EU) No 748/2012, may consist of more than one electric engine;
      - (c) if so specified following the certification process in accordance with Commission Regulation (EU) No 748/2012, a hybrid engine system that consists of piston and electric engines;
    - (8b) "SEP helicopter" means a single-engine, single-pilot helicopter which is powered by a piston engine;';

#### Rationale

### RMT.0587 (paragraph (3))

The definition of 'LAPL' was included in Article 2 of the Aircrew Regulation to establish the connection between this term and the term 'leisure pilot licence' that is used in Regulation (EC) No 216/2008 ('old Basic Regulation', which is no longer in force). As Regulation (EU) 2018/1139 ('new Basic Regulation' in force) does not use the term 'leisure pilot licence', such definition is no longer needed.

Instead, the definition of 'complex aircraft' is introduced in Article 2, as Part-FCL includes specific requirements for complex aeroplanes and complex helicopters. Inserting a definition for 'complex aircraft' is necessary, as the new Basic Regulation does not include a definition of 'complex motor-powered aircraft' (unlike Article 3(j) of the old Basic Regulation). Furthermore, in accordance with Article 140(2)(b) of the new Basic Regulation, implementing rules shall be adapted to include those definitions that were not transferred from the old to the new Basic Regulation. The proposed definition uses those criteria that were included in the definition as in the old Basic Regulation and, as per Article 140 of the new Basic Regulation, is still applicable today.

### RMT.0678 (paragraphs (8a) and (8b))

See NPA 2020-14, page 21.

In reaction to a comment received regarding the new 'single-engine piston (SEP) aeroplane concept', as illustrated in NPA 2020-14, the new redefined 'SEP aeroplane' class is proposed to also cover future engine architectures where more than one (electric) engine will drive a single centric propulsion unit (propeller). Today, such engine architectures would not by default qualify as 'single engine', since, technically speaking, more than one engine is involved. Furthermore, such 'multi-engine single centric propulsion architecture' could even be a 'hybrid' system where both piston engine(s) and electric engine(s) contribute to the aircraft's single centric propulsion. Such engines would not fall under paragraph (a) or (b), since they are neither pure 'piston' engines nor pure 'electric' engines.

However, if the different engines that together form such a (hybrid) engine system cannot be operated separately by the pilot (single throttle control), and provided that the pilot's workload, as regards engine operation and emergency procedures in case of engine failure, will be comparable to a conventional single-engine aeroplane, for the pilot such an aeroplane will 'feel' like a conventional single-engine aeroplane. Furthermore, failure of some of the engines will result in a loss of power but never in an asymmetric flight condition, due to the single centric propulsion unit (propeller). If these criteria are confirmed during the certification process, from a flight crew licensing perspective, such aeroplanes can be treated as a single-engine aeroplane.

Hence, the introductory sentence of this definition is amended to clarify the main criteria of the SEP aeroplane class (single centric propulsion unit, single engine (throttle) control), and an additional paragraph (c) is added to allow aeroplanes with hybrid 'multi-engine single centric propulsion systems' to also fall within the new SEP aeroplane class. However, this will not happen by default but only if the certification process will so determine, after confirming that the above-described criteria (single engine (throttle) control, pilot workload comparable to a conventional single-engine aeroplane) will apply.

Adding a paragraph (c) ('hybrid engines') means that such a hybrid engine represents one 'type of engine as specified in Article 2(8a)', as stated in many places of the proposed new rule text. As a consequence, the new requirements for specific differences training (point FCL.135.A(b), point FCL.710(a) and (c)(1)(ii)) and for keeping privileges for variants with that particular type of engine valid (point FCL.140.A(c), point FCL.710(d)(3)) will apply. In principle, this means that the new SEP aeroplane class will be home to aeroplanes with different engine types, with specific requirements

for differences training to go from one variant (engine type) to another. This solution seems proportionate and constitutes a significant simplification and alleviation, compared to the initial framework proposed with NPA 2020-14 – see also the rationale for proposed amendments to point FCL.710 in Annex II to this Opinion (draft amendment to Annex I – Part-FCL).

When drafting this proposal for amending Article 2, the idea to let 'hybrid engine privileges' automatically include privileges for piston engines and electric engines was also discussed, since hybrid engines encompass both of these technologies. However, since different means of hybrid engine architectures will be possible and such a 'hybrid covers all' approach will not be appropriate for every future design, EASA concluded that, for the time being, privileges for hybrid engines will not automatically include privileges for pure piston and electric engines, and the regular differences training framework will apply, when moving between variants with engine types as per paragraphs (a), (b) and (c) of Article 2(8a). Further alleviations might be introduced in the future for particular designs, if appropriate, after gaining more experience with hybrid engine designs.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the term 'single throttle control' in the introductory phrase of paragraph (8a) was changed to 'single thrust control'. This more general term fits better since electric engines do not have a throttle. Additionally, new GM guidance material to Article 2 (GM1 Article 2(8a)) is proposed to explain the intention behind the general reference to 'single thrust control'.

Finally, based on an internal review, in paragraphs (b) and (c) of point (8a) the phrase 'Annex I (Part-21) to' was removed before the phrase 'Commission Regulation (EU) No 748/2012', since both Annex I (Part-21) and Annex IV (Part-21 Light) will be relevant in the context of this definition. Hence, the more generic reference to Regulation (EU) No 748/2012 is more appropriate.

- (2) in Article 3, paragraph 1 is replaced by the following:
  - '1. Without prejudice to Regulation (EU) 2020/723, pilots of aircraft referred to in Article 2(1)(b)(i) and (ii) of Regulation (EU) 2018/1139 shall comply with the technical requirements and administrative procedures laid down in Annex I and Annex IV to this Regulation.';

#### Rationale

RMT.0587

Legal references are updated to point to the new Basic Regulation as well as to Delegated Regulation (EU) 2020/723 since the requirements for the acceptance of third-country licences were moved from Regulation (EU) No 1178/2011 to that Regulation.

(3) after Article 3, the following Article 3a is inserted as follows:

*Article 3a* 

# Transitional measures for medical assessment protocols applied in accordance with point ARA.MED.330 of Annex VI (Part-ARA) and medical certificates issued on the basis thereof

1. Notwithstanding the deletion of point ARA.MED.330 of Annex VI (Part-ARA) in accordance with Annex III to *[Reference to amending Regulation]*, Member States involved in medical assessment protocols in accordance with that point shall be entitled to continue with the application of the relevant protocol in accordance with

its validity period, as defined on *[date of entry into force of amending Regulation]* or earlier.

2. Holders of medical certificates issued in accordance with medical assessment protocols as specified in paragraph 1 shall be entitled to exercise the privileges of their pilot licences on the basis of such medical certificates, as long as the relevant medical assessment protocol continues to apply in accordance with paragraph 1.';

### Rationale

RMT.0287

As a result of the discussions that took place during the Medical Experts' Group (MEG) meetings regarding the provisions of point ARA.MED.330, and based on the assessment of the rulemaking group, it was revealed that there is a need to amend point ARA.MED.330, as it does not comply with the criteria for medical research protocols especially in terms of objectivity and ethical principles. During the NPA consultation, a large number of comments were received from Member States and industry requesting that point ARA.MED.330 be deleted as it does not comply with the aviation safety principles in addition to the justification mentioned above. As a result, the MEG was consulted again regarding the deletion of point ARA.MED.330 and, with the vast majority, the MEG members were in favour of deleting point ARA.MED.330. Considering the current EASA research project on diabetes mellitus, the MEG members also agreed to allow the current protocol established under point ARA.MED.330 to continue until the defined end date in order to have no impact on the licence holders enrolled in the protocol.

- (4) point (iii) of Article 47(b), is replaced by the following:
  - (iii) SEP aeroplanes and SEP helicopters, both with a maximum take-off mass not exceeding 2 000 kg;';

Rationale			

RMT.0678

See NPA 2020-14, page 21.

(5) after Article  $4g(^5)$ , the following Article 4h is inserted:

## 'Article 4h

# Transitional measures for holders of a mountain rating

Holders of a mountain rating which was issued before *[Reference to start of application of this amending regulation]* with an expiry date endorsed in accordance with point FCL.815 of Annex I shall, in order to continue to exercise their privileges after that date, do all of the following:

1. have their mountain rating re-issued by the competent authority without an expiry date;

<sup>(&</sup>lt;sup>5</sup>) After the existing Article 4e, the insertion of a new Article 4f is already proposed with EASA Opinion No 03/2023, published on 31 August 2023 (<u>https://www.easa.europa.eu/en/document-library/opinions/opinion-no-032023</u>), and the insertion of a new Article 4g is planned with an EASA Opinion resulting from RMT.0731 (Introduction of a gyroplane pilot licence), which will still be published in 2023. If this draft regulation is adopted first, it should, after Article 4e, insert an *Article 4f – reserved* and an *Article 4g – reserved*, followed by the above Article 4h.

comply with point FCL.815(d), unless, within the preceding 2 years, they have revalidated their mountain rating in accordance with point FCL.815(e), as applicable until [*Reference to start of application of the amending regulation minus*]
<u>1 day</u>].';

#### Rationale

RMT.0678

Based on comments received for NPA 2020-14 and in the context of the amendments to point FCL.815(d) (removing the expiry date from the mountain rating), a transitional provision needs to be put in place to regulate how today's expiring mountain ratings will be transferred to the new arrangements for recent experience.

In reaction to comments received during the focused consultation with the EASA Advisory Bodies in June 2022, the text in paragraph 2 was complemented by additional wording to clarify that the new recency requirements for keeping the mountain rating valid will only become relevant for an individual pilot once 2 years have passed since his or her last revalidation event according to the previous revalidation requirement.

- (6) Annex I is amended in accordance with Annex I to this Regulation.
- (7) Annex IV is amended in accordance with Annex II to this Regulation.
- (8) Annex VI is amended in accordance with Annex III to this Regulation.
- (9) Annex VII is amended in accordance with Annex IV to this Regulation.
- (10) Annex VIII is amended in accordance with Annex V to this Regulation.

## Article 2

Commission Regulation (EU) No 965/2012 is amended as follows:

- (1) Annex III (Part-ORO) is amended in accordance with Annex VI to this Regulation.
- (2) Annex V (Part-SPA) is amended in accordance with Annex VII to this Regulation.

### Article 3

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

However, the following shall apply from *[entry into force of amending Regulation + 6 months]*:

- (1) point (7) of Annex I; [Age 60 HEMS FCL.065 amendment (RMT.0287)]
- (2) Annex II; [Part-MED (RMT.0287)]
- (3) points (6) to (21), (25) and (26) of Annex III; [Part-ARA Subpart MED (RMT.0287)]
- (4) points (2) to (9) of Annex IV; [Part-ORA Subpart AeMC (RMT.0287)]

## (5) Annex VII. [Age 60 HEMS – Part-SPA amendment (RMT.0287)]

[Note: References to elements selected for deferred application to be x-checked when preparing the final file for adoption (Commission)].

<u>Comment for the proofreader: During proofreading, please keep the above note and also keep the yellow-highlighted references in the above points (1) to (5), for the Commission's awareness.</u>

## Rationale

RMT.0287

Amendments to aero-medical requirements (mainly to Part-MED, Part-ARA Subpart MED and Part-ORA Subpart AeMC), including amendments related to age limitations for pilots engaged in HEMS operations (point FCL.065; point SPA.HEMS.30), should start to apply with deferral, to give Member States' competent authorities the time that is needed to prepare for the implementation of these regulatory changes.

This Regulation shall be binding in its entirety and directly applicable in all Member States. Done at Brussels,

> For the Commission The President [...]

[Choose between the two options, depending on the person who signs.]

On behalf of the President [...] [Position]