Transposition of provisions on electronic flight bags from ICAO Annex 6

**EXECUTIVE SUMMARY**

The objective of this Decision is to maintain a high level of safety with regard to the use of electronic flight bags (EFBs) by all types of operators.

This Decision introduces acceptable means of compliance (AMC) and guidance material (GM) related to the use of EFBs for all Annexes to Regulation (EU) No 965/2012. These AMC and GM were developed taking into consideration the current AMC 20-25, the current industry and competent authorities best practices, the comments received during the public consultation of Notice of Proposed Amendment (NPA) 2016-12, as well as the outcome of a focused consultation held in August 2018 related to the use of EFB application displaying the own-ship position in flight.

The amendments are expected to maintain the current level of safety while ensuring compliance with the ICAO Standards and Recommended Practices (SARPs) and limiting the regulatory burden linked with the introduction of the operational approval for the use of some EFB applications by commercial air transport (CAT) operators.

In addition, with this Decision the AMC and GM for air operations with sailplanes are deleted from the AMC and GM to Regulation (EU) No 965/2012 (except for those associated with authority requirements in Part-ARO).

**Action area:** Airlines

**Affected rules:** Annex I Definitions, AMC & GM to Part-ORO, AMC & GM to Part-CAT, AMC & GM to Part-SPA, AMC & GM to Part-NCC, AMC & GM to Part-NCO, AMC & GM to Part-SPO, AMC-20

**Affected stakeholders:** CAs and operators

**Driver:** Level playing field

**Rulemaking group:** Yes

**Rulemaking Procedure:** Standard

**Impact assessment:** Full

**Start Terms of Reference:** 05.10.2015

**Consultation Notice of Proposed Amendment:** 04.10.2016

**Proposal to Commission Opinion:** 18.12.2017

**Adoption by Commission Implementing Rules:** 14.12.2018

**Decision Certification Specifications, Acceptable Means of Compliance, Guidance Material:** 27.2.2019
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1. About this Decision

The European Union Aviation Safety Agency (EASA) developed ED Decision 2019/008/R in line with Regulation (EC) No 216/2008\(^1\) and the Rulemaking Procedure\(^2\).

This rulemaking activity is included in the European Plan for Aviation Safety (EPAS)\(^3\) under rulemaking task (RMT).0601. The scope and timescales of the task were defined in the related Terms of Reference\(^4\).

The draft text of this Decision has been developed by EASA based on the input of Rulemaking Group (RMG) RMT.0601. All interested parties were consulted through Notice of Proposed Amendment (NPA) 2016-12\(^5\). 266 comments were received from all interested parties, including 9 EU competent authorities, 8 EFB developers, 13 air operators, and several associations.

EASA reviewed the comments received during the consultation. The comments received and the EASA responses to them were presented in comment-Response Document (CRD) 2016-12\(^6\). Based on the comments received, EASA published Opinion No 10/2017 on 18 December 2017, which was addressed to the European Commission. The related EU Regulation (EU) 2018/1975 was adopted on 14 December 2018.

The final text of this Decision, with the acceptable means of compliance (AMC)/guidance material (GM), has been developed by EASA taking also in consideration the outcome of a focused consultation with EASA advisory bodies related to new provisions for the use of EFB applications displaying own-ship position in flight, which were not consulted through NPA 2016-12. Comments were received from 9 Members States, 4 aircraft manufacturers or EFB developers and 2 operators or associations of operators.

The major milestones of this rulemaking activity are presented on the title page.

In addition, the existing AMC and GM addressing air operations for sailplanes have been deleted from the AMC and GM of Regulation (EU) No 965/2012 and its Annexes (except for those associated with authority requirements Part-ARO).

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\(^2\) EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the ‘Rulemaking Procedure’. See MB Decision No 18-2015 of 15 December 2015 replacing Decision 01/2012 concerning the procedure to be applied by EASA for the issuing of opinions, certification specifications and guidance material (http://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-18-2015-rulemaking-procedure).

\(^3\) https://www.easa.europa.eu/document-library/general-publications?publication_type%5B%5D=2467

\(^4\) https://www.easa.europa.eu/sites/default/files/dfu/ToR%20RMT.0601%20%26%20RMT.0602%20Issue%201.pdf

\(^5\) In accordance with Article 52 of Regulation (EC) No 216/2008 and Articles 6(3) and 7 of the Rulemaking Procedure.

2. In summary — why and what

2.1. Why we need to change the AMC/GM

The main issue to be addressed by this proposal is level playing field. This issue is linked with the following current conditions:

— There is a lack of requirements in the area of EFBs, as only AMC 20-25 is available;
— There are currently no requirements for the use of EFBs in Non-commercial operations with complex-motor-powered aircraft (NCC), Non-commercial operations with other than complex-motor-powered aircraft (NCO) and Specialised Operations (SPO), as AMC 20-25 is only applicable to CAT operations;
— The current ICAO provisions for EFBs in Annex 6 Part I, II and III, applicable since November 2014, have not yet been transposed into the European regulatory framework.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of Regulation (EU) 2018/1139. This Decision will contribute to the achievement of the overall objectives by addressing the issues outlined in Section 2.1.

The specific objective of this Decision is to:

— ensure compliance with the ICAO Standards and Recommended Practices (SARPs);
— provide specific requirements on the use of EFBs in Regulation (EU) No 965/2012 for CAT operations;
— provide requirements proportionate to the complexity of the operations and/or propose safety promotion actions related to the use of EFBs for non-commercial operations and specialised operations; and
— conduct a first review of AMC 20-25 based on the experience gained so far by competent authorities since its publication.

2.3. How we want to achieve it — overview of the amendments

The main changes made to the proposed AMC and GM to Part-CAT and Part-SPA published in CRD 2016-12 are described below:

— AMC5 ARO.OPS.200, which was initially proposed, has been deleted as it was considered too prescriptive for many type-B EFB applications;
— AMC1 CAT.GEN.MPA.141(b) has been amended to clarify the impact to the classification of EFB applications due to the possible EASA involvement through an ETSO or another EASA approval. Furthermore, it has been amended to specify that only applications which are tactically used to follow the intended route, avoid adverse weather, obstacles or traffic, are not eligible as EFB applications;
— AMC3 CAT.GEN.MPA.141(b) has been amended to remove from the list of type-B EFB applications the limitation to VFR only for chart applications displaying own-ship position in
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flight. The application type ‘Cabin-mounted video and aircraft exterior surveillance camera displays’ has been removed as well;

— AMC3 SPA.EFB.100(b) has been amended for clarification and simplification;

— AMC3 SPA.EFB.100(b)(3) has been amended for clarification and to reflect that a demonstration flight by the competent authority before the use of a type-B EFB application is left to the competent authority’s decision depending on the EFB application to be used;

— AMC4 SPA.EFB.100(b)(3) has been amended to introduce the handling of conflicting information between EFB applications and avionics as a topic to be included in flight crew training programme;

— AMC6 SPA.EFB.100(b)(3) has been amended for clarification and to:
  - remove the prescriptive criteria related to the GNSS position source; and
  - move the criteria related to the use of commercial off-the-shelf (COTS) position sources to a new dedicated AMC, which is common to airport moving map display (AMMD) applications and applications displaying the own-ship position in flight;

— A new AMC7 SPA.EFB.100(b)(3) has been inserted containing the criteria related to the use of commercial off-the-shelf (COTS) position sources for both AMMD applications and applications displaying the own-ship position in flight. In addition, some clarifications and simplifications have been introduced compared to the initial text in CRD 2016-12;

— AMC7 SPA.EFB.100(b)(3) has been renumbered to AMC8 SPA.EFB.100(b)(3) and amended to clarify the applicability of AMC10 SPA.EFB.100(b)(3) to EFB chart applications displaying the own-ship position in flight as an overlay;

— AMC8 SPA.EFB.100(b)(3) has been renumbered to AMC9 SPA.EFB.100(b)(3) and amended to clarify the applicability of AMC10 SPA.EFB.100(b)(3) to EFB in-flight weather (IFW) applications displaying the own-ship position in flight as an overlay;

— A new AMC10 SPA.EFB.100(b)(3) has been added containing the criteria related to the use of EFB applications displaying the own-ship position in flight. This new AMC describes the conditions for the use of EFB applications displaying the own-ship position of an aircraft in all phases of flight and on all navigation charts;

— A new GM5 SPA.EFB.100(b)(3) has been added containing some provisions of the former AMC related to the criteria for the practical evaluation of COTS position sources, which were considered as best practices rather than acceptable means of compliance;

— A new GM6 SPA.EFB.100(b)(3) has been added recommending the use of a circle around the aircraft symbol on EFB applications displaying the own-ship position in flight; and

— Several editorial changes have been made.

Similar changes have been made to the proposed AMC/GM to Part-NCC and to the proposed AMC and GM to Part-SPO applicable to SPO operations with complex aircraft, published in CRD 2016-12:

— AMC5 NCC.GEN.131(b)(2) and AMC5 SPO.GEN.131(b)(2) have been amended for clarification and to:
2. In summary — why and what

- remove the prescriptive criteria related to the GNSS position source; and
- move the criteria related to the use of commercial off-the-shelf (COTS) position sources to a new dedicated AMC common to airport moving map display (AMMD) applications and applications displaying the own-ship position in flight;

- New AMC6 NCC.GEN.131(b)(2) and AMC6 SPO.GEN.131(b)(2) have been added containing the criteria related to the use of commercial off-the-shelf (COTS) position sources for both AMMD applications and applications displaying the own-ship position in flight. In addition, some clarifications and simplifications have been introduced compared to the initial text in CRD 2016-12;

- AMC6 NCC.GEN.131(b)(2) and AMC6 SPO.GEN.131(b)(2) have been renumbered to AMC7 NCC.GEN.131(b)(2) and AMC7 SPO.GEN.131(b)(2) and amended to clarify the applicability of AMC9 NCC.GEN.131(b)(2) (for NCC operations) and AMC9 SPO.GEN.131(b)(2) (for SPO operations with complex aircraft) with regard to EFB chart applications displaying the own-ship position in flight as an overlay;

- AMC7 NCC.GEN.131(b)(2) and AMC7 SPO.GEN.131(b)(2) have been renumbered to AMC8 NCC.GEN.131(b)(2) and AMC8 SPO.GEN.131(b)(2) and amended to clarify the applicability of the provisions of AMC9 NCC.GEN.131(b)(2) (for NCC operations) and AMC9 SPO.GEN.131(b)(2) (for SPO operations with complex aircraft) with regard to EFB in-flight weather (IFW) applications displaying the own-ship position in flight as an overlay;

- New AMC9 NCC.GEN.131(b)(2) and AMC9 SPO.GEN.131(b)(2) have been added containing the criteria related to the use of EFB applications displaying the own-ship position in flight. These new AMCs describe the conditions the use of EFB applications displaying the own-ship position of an aircraft in all phases of flight and on all navigation charts;

- New GM2 NCC.GEN.131(b)(2) and GM2 SPO.GEN.131(b)(2) have been added containing criteria for the practical evaluation of COTS position sources, which were considered to be best practices rather than acceptable means of compliance;

- New GM3 NCC.GEN.131(b)(2) and GM3 SPO.GEN.131(b)(2) have been added recommending the use of a circle around the aircraft symbol on EFB applications displaying the own-ship position in flight; and

- Several editorial changes have been made.
3. References

3.1. Related regulations


3.2. Affected decisions


3.3. Other reference documents

— ICAO Annex 6

— ICAO Doc 10020 ‘Manual of Electronic Flight Bags (EFBs)’

— FAA AC 120-76D

— FAA AC 91-78
4. Appendix

N/A