

European Union Aviation Safety Agency

Explanatory Note to Decision 2019/025/R

Loss of control prevention and recovery training (Operator UPRT in accordance with CS-FSTD(A) — Issue 2)

RMT.0581

EXECUTIVE SUMMARY

The objective of this Decision is to address an identified urgent implementation issue in the field of upset prevention and recovery training (UPRT) in accordance with Regulation (EU) No 965/2012 ('Air OPS Regulation') and CS-FSTD(A) — Issue 2.

Following consultation with its Advisory Bodies (ABs), EASA identified that a number of flight simulation training device (FSTD) operators are unable to update their FSTDs in accordance with CS-FSTD(A) — Issue 2 by 20 December 2019. Consequently, some EU air operators cannot comply with the above-mentioned deadline that was set for using the updated FSTDs to provide UPRT in accordance with Annex III (Part-ORO) to the Air OPS Regulation. To ensure that enough updated FSTDs are available for use by EU air operators, it is necessary to provide FSTD manufacturers and FSTD operators with additional time to apply such necessary updates and receive the respective approvals from their competent authorities.

Considering the issues faced, the European Union Aviation Safety Agency (EASA) decided to extend the deadline for a limited period of eight months until 20 August 2020 to achieve a balance between the needs of industry and the timely implementation of the updated UPRT.

To that end, this Decision:

- defers the applicability of CS-FSTD(A) Issue 2 to providing UPRT in accordance with the Air OPS Regulation to 20 August 2020; and
- amends acceptable means of compliance (AMC) and guidance material (GM) to points ORO.FC.220 and ORO.FC.230 of Part-ORO to clarify the use of updated FSTDs for UPRT.

The amendments are expected to address issues relating to the implementation of CS-FSTD(A) — Issue 2 while ensuring its application without undue delay.

Action area: Aircraft upset in flight (LOC-I)

Affected rules: — ED Decision 2018/006/R (CS-FSTD(A) — Issue 2

AMC & GM to Annex III (Part-ORO) to Regulation (EU) No 965/2012

Affected stakeholders: Air operators, national aviation authorities, FSTD manufacturers, FSTD operators, flight crew

Driver:SafetyRulemaking group:NoImpact assessment:NoneRulemaking Procedure:Direct

EASA special rulemaking procedure milestones

Start
Terms of
Reference

AB consultation
Draft Decision
Certification Specifications,
Acceptable Means of Compliance,
Guidance Material
Today

4.5.2015, Issue 2 22.11.2019 17.12.2019

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1. About this Decision

The European Union Aviation Safety Agency (EASA) developed ED Decision 2019/025/R in line with Regulation (EU) 2018/1139¹ ('Basic Regulation') and the Rulemaking Procedure².

This rulemaking activity is included in the European Plan for Aviation Safety (EPAS) <u>2019-2023</u> under rulemaking task (RMT).0581. The scope and timescales of the task were defined in the related Terms of Reference³. This RMT is kept active to address an urgent issue in the context of UPRT in accordance with Regulation (EU) No 965/2012⁴ ('Air OPS Regulation').

The draft text of this Decision was developed by EASA and was consulted with the Advisory Bodies (ABs), in accordance with Article 15 'Special rulemaking procedure: direct publication' of MB Decision No 18-2015, during a focused consultation from 21 November 2019 to 4 December 2019. 15 comments were received from AB members.

EASA reviewed the comments received during the focused consultation. The comments received and EASA's responses to them are summarised under Section 2.4 below.

The final text of this Decision, with the AMC & GM to Part-ORO and the amendment to <u>ED Decision</u> 2018/006/R (CS-FSTD(A) — Issue 2), was developed by EASA based on the outcome of the focused consultation.

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

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) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576075096825&uri=CELEX:32012R0965).



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 (OJ L 212, 22.8.2018, p. 1) (https://eurlex.europa.eu/legal-content/EN/TXT/?qid=1535612134845&uri=CELEX:32018R1139).

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 ToR RMT.0581 and RMT.0582, Issue 2, 4.5.2019.

2. In summary — why and what

2.1. Why we need to change the CS/AMC & GM

Through feedback received from national aviation authorities and industry, EASA identified that a number of FSTD operators will not be able to comply with the initially set deadline (20 December 2019) for providing UPRT in FSTDs that are updated in accordance with ED Decision 2018/006/R (CS-FSTD(A) — Issue 2). Therefore, such FSTDs would not be available by 20 December 2019. To ensure that enough updated FSTDs are available for use by European air operators, it is necessary to provide FSTD manufacturers and FSTD operators with additional time to apply such necessary updates and receive the respective approvals from their competent authorities.

At the same time, through this RMT, EASA takes this opportunity to clarify in the related AMC & GM to Part-ORO that to provide UPRT in dynamic upsets, high-altitude stall events, and icing effects, it is necessary to utilise FSTDs that are updated in accordance with ED Decision 2018/006/R (CS-FSTD(A) — Issue 2). This Decision amending the AMC & GM to Part-ORO will apply as of 20 August 2020, thereby providing for a limited extension of the deadline for the use of the updated FSTDs for UPRT. In addition, Articles 1 and 2 of ED Decision 2018/006/R are also amended to clarify the applicability of CS-FSTD(A) — Issue 2 by removing the references to Regulation (EU) No 1178/2011⁵ ('Aircrew Regulation') and the Air OPS Regulation. In accordance with those two Regulations, CS-FSTD(A) generally applies, while the amended AMC & GM to Part-ORO, applicable as of 20 August 2020, specifically clarify the applicability of CS-FSTD(A) — Issue 2 in the context of certain upset prevention exercises during UPRT provided in accordance with the Air OPS Regulation.

EASA is convinced of the safety-critical importance of UPRT and recognises the efforts that several organisations invested to meet the deadline. However, given the reduced implementation rate and its operational consequences, EASA, after further consideration of the comments received, decided to extend the deadline for a limited period of eight months, until 20 August 2020, to achieve a balance between the needs of industry and the timely implementation of UPRT provided in updated FSTDs in accordance with the Air OPS Regulation.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. 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 proposal is to amend:

— AMC & GM to Part-ORO to clarify the need for FSTDs that are updated in accordance with CS-FSTD(A) — Issue 2, when providing UPRT in dynamic upsets, high-altitude stall events, and icing effects; the entry into force of this Decision that amends the AMC & GM to Part-ORO on 20 August 2020 will provide the FSTD industry with the additional time that is needed to update FSTDs in accordance with CS-FSTD(A) —Issue 2;

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 (OJ L 311, 25.11.2011, p. 1) (https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576137433598&uri=CELEX:32011R1178).



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 ED Decision 2018/006/R of 3 May 2018 to improve the clarity of its Articles 1 and 2 as regards the entry into force and applicability of that Decision.

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

2.3.1 Amendments to AMC & GM to Part-ORO (points ORO.FC.220; ORO.FC.230)

AMC1 ORO.FC.220&230, AMC2 ORO.FC.220&230, and GM3 ORO.FC.220&230 are amended to clearly specify that FSTDs that are used to provide UPRT must be qualified in accordance with the special evaluation requirements set out in CS-FSTD(A) — Issue 2. The amended AMC&GM will apply as of 20 August 2020.

2.3.2 Amendments to ED Decision 2018/006/R

ED Decision 2018/006/R is amended to clarify that CS-FSTD(A) — Issue 2 applies as of 20 December 2019; any reference to requirements of, or amendments to, the Aircrew or Air OPS Regulations is removed. These Regulations require to use FSTDs that are updated in accordance with CS-FSTD(A) — Issue 2, albeit now with different applicability dates.

2.4. What are the stakeholders' views

2.4.1 Deferral of applicability of CS-FSTD(A) — Issue 2

All comments received during the AB consultation either confirmed the issues referred to in Section 2.1. and supported the proposal to defer the applicability of CS-FSTD(A) — Issue 2 in the context of UPRT in accordance with Part-ORO, or remained neutral. No comment was opposed to the proposed deferral.

Two commentators suggested that due to the delay in the implementation of CS-FSTD(A) — Issue 2, the applicability of that CS should be deferred also in the Aircrew Regulation (flight crew licensing). In this regard, EASA highlighted that a deferral of the applicability of CS-FSTD(A) — Issue 2 in that domain is outside the scope of amendments to certification specifications (CS) or AMC & GM. Appendix 9 to Annex I (Part-FCL) to the Aircrew Regulation requires for specific upset prevention exercises to use FSTDs that are updated in accordance with special evaluation requirements that were introduced for the first time into CS-FSTD(A) — Issue 2. Additionally, the importance of UPRT for initial pilot training was considered.

2.4.2 Length of the deferral

A number of commentators stated that there was a need for a longer deferral (beyond the initially proposed 20 April 2020, i.e. 20 August 2020 or 20/31 December 2020) to provide FSTD manufacturers and operators with more time to update FSTDs in accordance with CS--FSTD(A) — Issue 2 and obtain the respective approvals from their competent authorities. EASA decided, after further consideration, to provide for an eight-month deferral instead. EASA believes that this slightly longer deferral still ensures a level playing field between those operators who made the effort to meet the initially set deadline and those who did not.

2.4.3 Reference to CS-FSTD(A) — Issue 2

One commentator highlighted that referring to 'the latest Issue of CS-FSTD(A) — Issue 2' would require FSTD operators to update their FSTDs following publication of each and every update to the

UPRT-related special evaluation requirements in CS-FSTD(A). It was stated that this is not in line with the overall philosophy of CSs and particularly CS-FSTD(A).001, point (b), according to which the CS-FSTD(A) issue that was used for the initial certification remains valid for any recurrent certification of that FSTD, unless the FSTD is recategorised.

EASA agrees that the objective of this Decision is not to overrule or contradict FSTD(A).001 and therefore, revised the text to refer to 'CS-FSTD(A) (Issue 2 or later)'. In this way, it is clear that in the context of the relevant UPRT exercises, the FSTD must comply with the CS-FSTD(A) issue that was used for the initial certification and, at least, CS-FSTD(A) — Issue 2.

2.4.4 Update to GM3 ORO.FC.220&230

In two comments, it was suggested that based on the amendments to AMC1 ORO.FC.220&230 and AMC2 ORO.FC.220&230, the references to 'CS-FSTD(A) — Issue 2' in GM3 ORO.FC.220&230 should be deleted. EASA agrees that to meet the objective to defer the applicability of CS-FSTD(A) — Issue 2 for operator training, that GM (as amended by ED Decision 2019/005/R of 27 February 2019, applicable as of 20 December 2019) should be amended as well so that it does not interfere with the deferral. To that end, it was decided to withdraw the respective amendment to GM3 ORO.FC.220&230, which was introduced by ED Decision 2019/005/R, and update the GM with a reference to 'CS-FSTD(A) (Issue 2 or later)' with this Decision.

2.4.5 Reference to 'special evaluation requirements'

One commentator highlighted that while the proposed updated AMC text refers to 'special evaluation requirements set out in CS-FSTD(A) — Issue 2', CS-FSTD(A) — Issue 2 does not make reference to such 'special evaluation requirements'.

EASA explains that the term 'special evaluation requirements' is used in Appendix 9 to Part-FCL (as amended by Regulation (EU) 2018/1974) and in the context of existing FSTDs, refers to those evaluation requirements of CS-FSTD(A) — Issue 2 that are related to FSTD functionalities relevant for particular UPRT exercises.

2.4.6 Other comments

One commentator suggested to create additional guidance on the requirements for UPRT instructors and UPRT-related FSTD certification. EASA explains that the sole objective of this additional subtask under RMT.0581 is to address an urgent implementation issue and therefore, the development of further general GM cannot be considered. Additionally, EASA already provided further guidance on UPRT instructor qualification and FSTD certification in public UPRT info sessions that were held in Cologne on 18 June 2019 and 5 November 2019.

One commentator stated that FSTD manufacturers are not subject to the Aircrew and Air Ops Regulations, to which the proposed changes to CS and AMC & GM are related, hence, the reference to FSTD manufacturers should be deleted from this Explanatory Note. EASA notes that FSTD manufacturers will be involved in the process of updating FSTDs against CS-FSTD(A) — Issue 2 and are therefore also affected by the identified implementation issues. For these reasons, it is appropriate to also refer to FSTD manufacturers in the Explanatory Note. However, there is no reference to FSTD manufacturers in the text of this Decision or its Annex.

One commentator requested EASA to establish a list of FSTDs that cannot be updated in accordance with CS-FSTD(A) — Issue 2. EASA highlights that from a technical perspective, any FSTD can be updated in accordance with CS-FSTD(A) — Issue 2. Hence, the establishment of such a list is not possible.

2.5. What are the benefits and drawbacks

The main benefit from this Decision is that FSTD operators will have more time to update FSTDs in accordance with CS-FSTD(A) — Issue 2 and obtain the respective approvals from their competent authorities. By the initially prescribed end of the transitional period (20 December 2019), the number of updated FSTDs will not be sufficient to allow for full completion of EU air operators' recurrent training. To avoid such a situation and its negative impacts on EU air operations, a deferral of the applicability of CS-FSTD(A) — Issue 2 for air operator training to 20 August 2020 provides a solution.

Therefore, with this Decision, EASA, carefully weighs the needs of industry against the safety importance of UPRT in mitigating loss of control in-flight (LOC-I). Whereas EASA fully appreciates that many industry stakeholders were on track to achieve compliance with CS-FSTD(A) — Issue 2 by 20 December 2019, EASA took also note of both the general reduced implementation rate, primarily due to some FSTD manufactures and operators, and the operational consequences. The result of EASA's assessment is the decision to postpone the implementation of CS-FSTD(A) — Issue 2 in the context explained above.

No impact assessment was performed for this RMT. It was only considered that the new implementation deadline (20 August 2020) positively addresses an implementation challenge for a number of air operators.

3. How do we monitor and evaluate the rules

EASA will monitor the ongoing implementation of CS-FSTD(A) — Issue 2 through continuous exchange of information with the EASA ABs, as well as through standardisation activities.

4. References

4.1. Related regulations

- 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.)
- 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 (OJ L 311, 25.11.2011, p. 1)

4.2. Affected decisions

- Executive Director Decision 2018/006/R of 3 May 2018 issuing the Certification Specifications for Aeroplane Flight Simulation Training Devices 'CS-FSTD(A) — Issue 2'
- Decision 2014/017/R of the Executive Director of the Agency of 24 April 2014 on Acceptable Means of Compliance and Guidance Material to Part-ORO of Regulation (EU) No 965/2012 and repealing Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012 'AMC and GM to Part-ORO — Issue 2'
- Executive Director Decision 2019/005/R of 27 February 2019 amending the Acceptable Means of Compliance and Guidance Material to Annex I (Part-FCL) and Annex VII (Part-ORA) to Commission Regulation (EU) No 1178/2011, and the Acceptable Means of Compliance and Guidance Material to Annex I (Definitions) and Annex III (Part-ORO) to Commission Regulation (EU) No 965/2012 'AMC and GM to Part-ORO Issue 2, Amendment 13'

4.3. Other related docs

n/a