

# **Executive Director Decision**

# 2018/005/R

## of 27 March 2018

## amending the Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes

## 'CS-25 – Amendment 21'

THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY,

Having regard to Regulation (EC) No 216/2008<sup>1</sup>, and in particular Article 38(3)(a) thereof,

Having regard to Regulation (EU) No 748/2012<sup>2</sup>, in particular paragraph 21.A.16A of the Annex (Part-21) thereof,

#### Whereas:

- (1) EASA shall, pursuant to Article 18(c) of Regulation (EC) No 216/2008, issue certification specifications and acceptable means of compliance, as well as guidance material, for the application of Regulation (EC) No 216/2008 and its implementing rules.
- (2) Certification specifications are non-binding technical standards adopted by EASA that indicate the means to demonstrate compliance with Regulation (EC) No 216/2008 and its implementing rules, and which can be used by organisations for the purpose of certification.
- (3) Acceptable means of compliance are non-binding standards adopted by EASA that may be used by persons and organisations to demonstrate compliance with Regulation (EC) No 216/2008 and its implementing rules, or with the certification specifications; when acceptable means of compliance are complied with, the related requirements of the implementing rules or with certification specifications are met.
- (4) With Decision 2003/002/RM of 17 October 2003, the Executive Director issued Certification Specifications including Airworthiness Codes and Acceptable Means of Compliance for Large Aeroplanes (CS-25 Initial issue).
- (5) EASA shall, pursuant to Article 19(2) of Regulation (EC) No 216/2008, reflect the state of the art and the best practices in the fields concerned and update its decisions, taking into account worldwide aircraft experience in service, and scientific and technical progress.

<sup>&</sup>lt;sup>2</sup> Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (OJ L 224, 21.8.2012, p.1-85).



<sup>&</sup>lt;sup>1</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).

- (6) A number of commercial air transport large aeroplane accidents or serious incidents occurred either during/at the end of a go-around (G/A) phase, or with the aeroplane close to the ground (but not in G/A mode) and with the pilots attempting to climb. A loss of the normal G/A flight path or a loss of control of the aircraft has been observed in relation to inadequate awareness of the aeroplane's state, or inadequate management by the flight crew of the relationship between the pitch attitude and the thrust. Unusual pitch-up trim positions have also been factors in some occurrences in other flight phases. Rulemaking Task RMT.0647 was created to mitigate these risk factors at the aeroplane design level. As an outcome, CS-25 is amended to ensure that:
  - The design of each large aeroplane is such that a go-around procedure with all engines operating can be safely conducted by the flight crew without requiring exceptional piloting skill or alertness. The risk of excessive crew workload and the risk of a somatogravic illusion must be carefully evaluated, and design mitigation measures must be put in place if those risks are too high;
  - b. The design of each large aeroplane provides adequate longitudinal controllability and authority during go-arounds and in other flight phases (focusing on low-speed situations).
- (7) In order to increase the efficiency of the rulemaking process, EASA proposes regular updates of CS-25 in the frame of rulemaking task RMT.0673 after identification of items that are non-complex, non-controversial, and mature. In this context, CS-25 is amended as regards the following items: landing in abnormal configurations; fuel tank vent fire protection; indication that engine anti-icing systems are functioning; oxygen fire hazards in gaseous oxygen systems; flight instrument external probe de-icing tests; flight crew seats; non-magnetic standby compass; security requirements; engine ETOPS capability; engine cowl retention; and editorial corrections.
- (8) EASA, pursuant to Article 52(1)(c) of Regulation (EC) No 216/2008 and Articles 6(3), 7 and 8 of the EASA Rulemaking Procedure<sup>3</sup>, has widely consulted interested parties on the matters which are the subject of this Decision and has provided thereafter a written response to the comments received<sup>4</sup>,

HAS DECIDED:

#### Article 1

The Annex to this Decision is issued as Amendment 21 to the Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes (CS-25).

### Article 2

This Decision shall enter into force on the day following that of its publication in the Official Publication of the Agency.

Done at Cologne, 27 March 2018

For the European Aviation Safety Agency The Executive Director

#### Patrick KY

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<sup>&</sup>lt;sup>3</sup> EASA Management Board (MB) Decision No 18-2015 of 15 December 2015 replacing Decision 01/2012 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications, acceptable means of compliance and guidance material ('Rulemaking Procedure') (http://www.easa.europa.eu/system/files/dfu/EASA%20MB%20Decision%2018-2015%20on% 20Rulemaking%20Procedure.pdf)

<sup>&</sup>lt;sup>1</sup> NPA 2017-06 and NPA 2017-12 are available on EASA Website here: <u>https://www.easa.europa.eu/document-library/notices-of-proposed-amendment</u>

CRD 2017-06 and CRD 2017-12 are available on EASA Website here: http://easa.europa.eu/document-library/comment-response-documents