EASA
European Union Aviation Safety Agency

Product Certification and Design Organisation Approval Workshop 2019

Part-26 / CS 26

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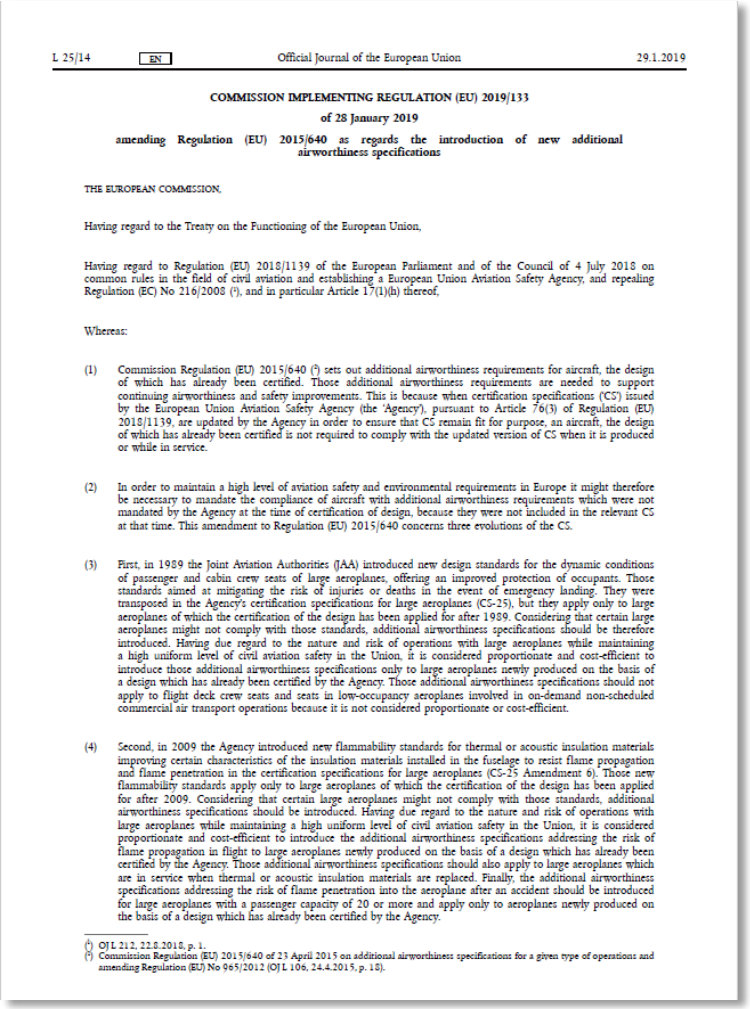
Recent amendment to Part-26



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COMMISSION IMPLEMENTING REGULATION (EU) 2019/133

of 28 January 2019

amending Regulation (EU) 2015/640 as regards the introduction of new additional airworthiness specifications

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 repealing Regulation (EC) No 216/2008 (1), and in particular Article 17(1)(h) thereof,

Whereas:

(1) Commission Regulation (EU) 2015/640 (2) sets out additional airworthiness requirements for aircraft, the design of which has already been certified. Those additional airworthiness requirements are needed to support continuing airworthiness and safety improvements. This is because when certification specifications ('CS') issued by the European Union Aviation Safety Agency (the 'Agency'), pursuant to Article 76(3) of Regulation (EU) 2018/1139, are updated by the Agency in order to ensure that CS remain fit for purpose, an aircraft, the design of which has already been certified is not required to comply with the updated version of CS when it is produced or while in service.

(2) In order to maintain a high level of aviation safety and environmental requirements in Europe it might therefore be necessary to mandate the compliance of aircraft with additional airworthiness requirements which were not mandated by the Agency at the time of certification of design, because they were not included in the relevant CS at that time. This amendment to Regulation (EU) 2015/640 concerns three evolutions of the CS.

(3) First, in 1989 the Joint Aviation Authorities (JAA) introduced new design standards for the dynamic conditions of passenger and cabin crew seats of large aeroplanes, offering an improved protection of occupants. Those standards aimed at mitigating the risk of injuries or deaths in the event of emergency landing. They were transposed in the Agency's certification specifications for large aeroplanes (CS-25), but they apply only to large aeroplanes of which the certification of the design has been applied for after 1989. Considering that certain large aeroplanes might not comply with those standards, additional airworthiness specifications should be therefore introduced. Having due regard to the nature and risk of operations with large aeroplanes while maintaining a high uniform level of civil aviation safety in the Union, it is considered proportionate and cost-efficient to introduce those additional airworthiness specifications only to large aeroplanes newly produced on the basis of a design which has already been certified by the Agency. Those additional airworthiness specifications should not apply to flight deck crew seats and seats in low-occupancy aeroplanes involved in on-demand non-scheduled commercial air transport operations because it is not considered proportionate or cost-efficient.

(4) Second, in 2009 the Agency introduced new flammability standards for thermal or acoustic insulation materials improving certain characteristics of the insulation materials installed in the fuselage to resist flame propagation and flame penetration in the certification specifications for large aeroplanes (CS-25 Amendment 6). Those new flammability standards apply only to large aeroplanes of which the certification of the design has been applied for after 2009. Considering that certain large aeroplanes might not comply with those standards, additional airworthiness specifications should be introduced. Having due regard to the nature and risk of operations with large aeroplanes while maintaining a high uniform level of civil aviation safety in the Union, it is considered proportionate and cost-efficient to introduce the additional airworthiness specifications addressing the risk of flame propagation in flight to large aeroplanes newly produced on the basis of a design which has already been certified by the Agency. Those additional airworthiness specifications should also apply to large aeroplanes which are in service when thermal or acoustic insulation materials are replaced. Finally, the additional airworthiness specifications addressing the risk of flame penetration into the aeroplane after an accident should be introduced for large aeroplanes with a passenger capacity of 20 or more and apply only to aeroplanes newly produced on the basis of a design which has already been certified by the Agency.

(1) OJ L 212, 22.8.2018, p. 1.
(2) Commission Regulation (EU) 2015/640 of 23 April 2015 on additional airworthiness specifications for a given type of operations and amending Regulation (EU) No 965/2012 (OJ L 106, 24.4.2015, p. 18).

- Regulation (EU) No 2019/133 adopted 28 January 2019
- 1st amendment since adoption of Regulation (EU) 2015/640
- Introducing additional airworthiness requirements for operation on
  - Halon replacement
  - Seat crashworthiness
  - Thermal/acoustic insulation material

Recent amendment to Part-26

Halon replacement

Operators of large aircraft shall ensure that

- built-in fire extinguishers for each lavatory waste receptacle in an aircraft for which the first CofA is issued from 18 Feb 2020, and
- portable fire extinguishers in an aircraft for which the first CofA is issued from 19 May 2019

do not use halon as an extinguishing agent.

Seat crashworthiness

Operators of large aeroplanes used in CAT

- and for which the first CofA is issued from 18 Feb 2021

shall ensure that the aeroplanes are equipped with “16g” seats in their cabins.

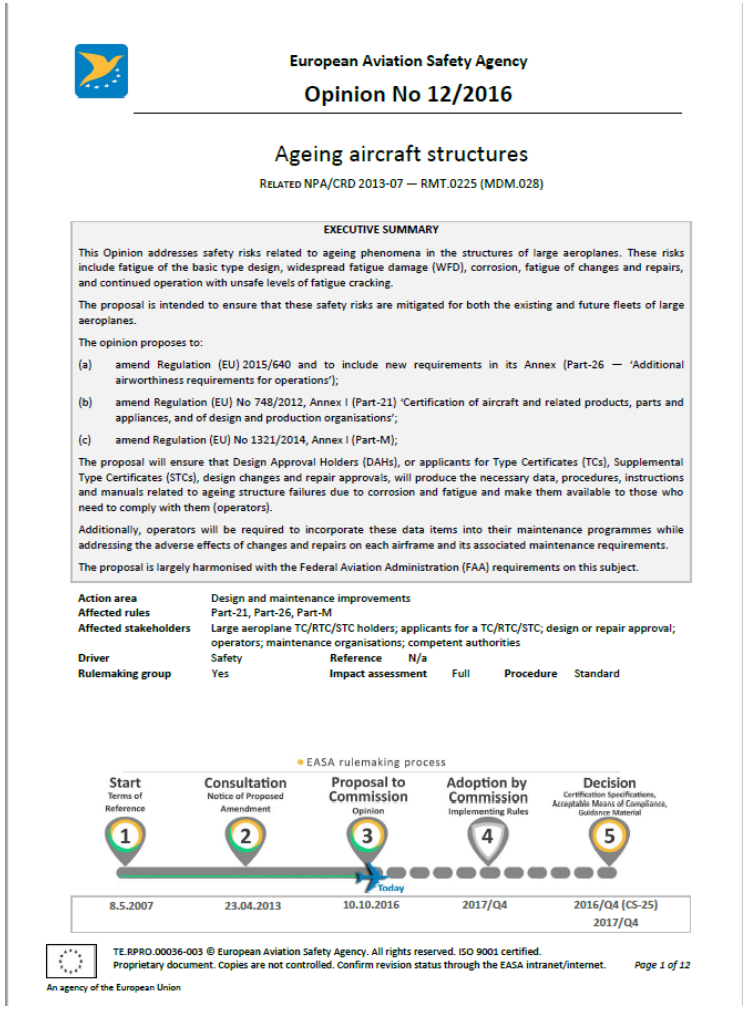
Flight deck crew seats and low occupancy aeroplanes are excluded from the applicability.

Thermal/acoustic insulation material

Operators of large aeroplanes used in CAT shall ensure that

- the thermal/acoustic insulation material has the latest flame propagation and/or penetration resistance characteristics:
  - when used as replacement from 18 Feb 2021 on aeroplanes of first CofA issued before 18 Feb 2021,
  - when used on aeroplanes of first CofA issued from 18 Feb 2021, and with a passenger capacity of 20 or more.

EASA opinions pending adoption



European Aviation Safety Agency

Opinion No 12/2016

Ageing aircraft structures

RELATED NPA/CRD 2013-07 — RMT.0225 (MDM.028)

EXECUTIVE SUMMARY

This Opinion addresses safety risks related to ageing phenomena in the structures of large aeroplanes. These risks include fatigue of the basic type design, widespread fatigue damage (WFD), corrosion, fatigue of changes and repairs, and continued operation with unsafe levels of fatigue cracking.

The proposal is intended to ensure that these safety risks are mitigated for both the existing and future fleets of large aeroplanes.

The opinion proposes to:

(a) amend Regulation (EU) 2015/640 and to include new requirements in its Annex (Part-26 — 'Additional airworthiness requirements for operations');

(b) amend Regulation (EU) No 748/2012, Annex I (Part-21) 'Certification of aircraft and related products, parts and appliances, and of design and production organisations';

(c) amend Regulation (EU) No 1321/2014, Annex I (Part-M);

The proposal will ensure that Design Approval Holders (DAHs), or applicants for Type Certificates (TCs), Supplemental Type Certificates (STCs), design changes and repair approvals, will produce the necessary data, procedures, instructions and manuals related to ageing structure failures due to corrosion and fatigue and make them available to those who need to comply with them (operators).

Additionally, operators will be required to incorporate these data items into their maintenance programmes while addressing the adverse effects of changes and repairs on each airframe and its associated maintenance requirements.

The proposal is largely harmonised with the Federal Aviation Administration (FAA) requirements on this subject.

Action area	Design and maintenance improvements				
Affected rules	Part-21, Part-26, Part-M				
Affected stakeholders	Large aeroplane TC/RTC/STC holders; applicants for a TC/RTC/STC; design or repair approval; operators; maintenance organisations; competent authorities				
Driver	Safety	**Reference**	N/a		
Rulemaking group	Yes	**Impact assessment**	Full	**Procedure**	Standard

EASA rulemaking process

Start (Terms of Reference)	Consultation (Notice of Proposed Amendment)	Proposal to Commission (Opinion)	Adoption by Commission (Implementing Rules)	Decision (Certification Specifications, Acceptable Means of Compliance, Guidance Material)
8.5.2007	23.04.2013	10.10.2016	2017/Q4	2016/Q4 (CS-25) 2017/Q4

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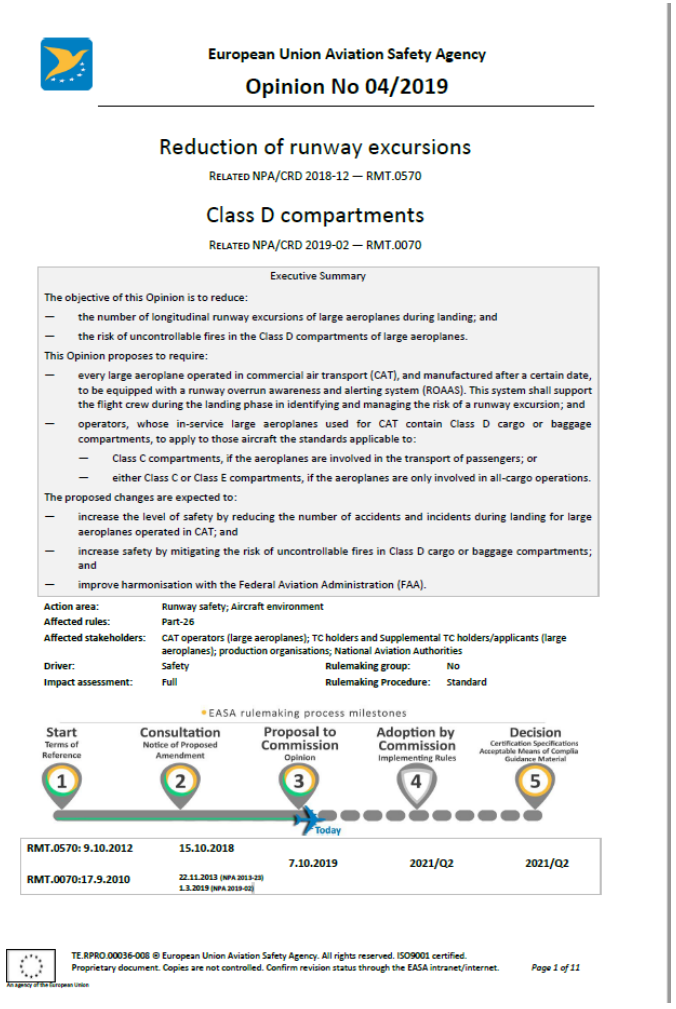

European Union Aviation Safety Agency

Opinion No 04/2019

Reduction of runway excursions

RELATED NPA/CRD 2018-12 — RMT.0570

Class D compartments

RELATED NPA/CRD 2019-02 — RMT.0070

Executive Summary

The objective of this Opinion is to reduce:

— the number of longitudinal runway excursions of large aeroplanes during landing; and

— the risk of uncontrollable fires in the Class D compartments of large aeroplanes.

This Opinion proposes to require:

— every large aeroplane operated in commercial air transport (CAT), and manufactured after a certain date, to be equipped with a runway overrun awareness and alerting system (ROAAS). This system shall support the flight crew during the landing phase in identifying and managing the risk of a runway excursion; and

— operators, whose in-service large aeroplanes used for CAT contain Class D cargo or baggage compartments, to apply to those aircraft the standards applicable to:

  — Class C compartments, if the aeroplanes are involved in the transport of passengers; or

  — either Class C or Class E compartments, if the aeroplanes are only involved in all-cargo operations.

The proposed changes are expected to:

— increase the level of safety by reducing the number of accidents and incidents during landing for large aeroplanes operated in CAT; and

— increase safety by mitigating the risk of uncontrollable fires in Class D cargo or baggage compartments; and

— improve harmonisation with the Federal Aviation Administration (FAA).

Action area:	Runway safety; Aircraft environment		
Affected rules:	Part-26		
Affected stakeholders:	CAT operators (large aeroplanes); TC holders and Supplemental TC holders/applicants (large aeroplanes); production organisations; National Aviation Authorities		
Driver:	Safety	**Rulemaking group:**	No
Impact assessment:	Full	**Rulemaking Procedure:**	Standard

EASA rulemaking process milestones

Start (Terms of Reference)	Consultation (Notice of Proposed Amendment)	Proposal to Commission (Opinion)	Adoption by Commission (Implementing Rules)	Decision (Certification Specifications, Acceptable Means of Compliance, Guidance Material)
RMT.0570: 9.10.2012 RMT.0070:17.9.2010	15.10.2018 22.11.2013 (NPA 2013-23) 1.3.2019 (NPA 2019-02)	7.10.2019	2021/Q2	2021/Q2

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2 opinions, 3 subjects:

→ Ageing aircraft structures

→ Reduction of runway excursions

→ Conversion of Class D compartments

EASA opinions pending adoption

- **Ageing aircraft structures** (Opinion No 12/2016) setting specific objectives to address the following areas of residual risk:
  - *Fatigue of the basic type design*
  - *Widespread fatigue damage*
  - *Corrosion*
  - *Fatigue of changes and repairs*

- Affected DAHs and operators/owners of large aeroplanes will be allowed a time period to demonstrate compliance that is proportionate to the effort required

EASA opinions pending adoption

- **Reduction of runway excursions** (Opinion No 04/2019)
  - each large aeroplane operated in CAT, and manufactured after *[1 January 2025 or 3 years after the date of entry into force of the regulation, whichever comes later]*, is equipped with a **runway overrun awareness and alerting system (ROAAS)**

EASA opinions pending adoption

- **Conversion of Class D compartments** (Opinion No 04/2019)
  - for large aeroplanes operated in CAT, each Class D cargo or baggage compartment complies with the certification specifications applicable to:
    - a Class C compartment (if involved in transport of passengers) or;
    - either a Class C or Class E compartment (if only cargo operations).

  - The requirement shall apply from *[3 years after the date of entry into force of the regulation]*

Ongoing RMTs for future amendment of Part-26

In the following RMTs, an amendment of Part-26 is considered and the regulatory impacts of it are being assessed:

1. Possible opinion planned for 2021

→ RMT.0118 – On-ground Wing Contamination

→ RMT.0120 – Helicopter Ditching

→ RMT.0586 – Tyre Pressure Monitoring Systems

2. Possible opinion planned for 2022 or later

→ RMT.0710 – Rotorcraft survivability

→ RMT.0725 – Rotorcraft oil monitoring

→ RMT.0726 – Rotorcraft bird strike

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Thank you for your attention!

Questions are welcome.

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