## **COMMISSION IMPLEMENTING REGULATION (EU) 2020/1159**

## of 5 August 2020

# amending Regulations (EU) No 1321/2014 and (EU) No 2015/640 as regards the introduction of new additional airworthiness requirements

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 point (h) of Article 17(1) thereof,

Whereas:

- (1) Pursuant to Article 76(3) of Regulation (EU) 2018/1139, the European Union Aviation Safety Agency (the 'Agency') issues certification specifications ('CS') and regularly updates them. However, an aircraft, the design of which has already been certified, is not required to comply with an updated version of CS when it is produced or while in service. Therefore, in order to maintain a high level of aviation safety and environmental requirements in the Union, compliance of such aircraft with additional airworthiness requirements that were not included in the initial CS at the time of certification of design should be introduced. Commission Regulation (EU) 2015/640 (<sup>2</sup>) sets out such additional airworthiness requirements. That Regulation should now be amended to add new requirements on ageing aircraft.
- (2) In 2007, the Agency issued Acceptable Means of Compliance (AMC) 20-20 which provide technical guidance for developing a continuing structural integrity programme aiming at ensuring safe operation of ageing aircraft throughout their operational life. Due to the non-binding nature of the AMC, the application of that guidance may not be consistent throughout the Union. In consequence, there may be currently large aircraft in operation which were designed, modified or repaired without effectively addressing damage tolerance evaluations, widespread fatigue damage and corrosion prevention. With the objective of preventing catastrophic failures due to fatigue, including widespread fatigue and corrosion, additional airworthiness requirements on ageing aircraft should be introduced in Regulation (EU) 2015/640.
- (3) Any aircraft could be considered to be ageing from the moment of its manufacture. The ageing of an aircraft depends on such factors as age, the number of flight cycles and the number of flight hours. Individual aircraft components age differently and some of the ageing factors are fatigue through repetitive cycles, wear, deterioration and corrosion. Those factors could cause significant safety concern if they are not properly managed throughout the life of the aircraft. Service experience has shown that there is a need to continually update knowledge about the structural integrity of ageing aircraft. Therefore, new requirements to keep up to date knowledge about ageing factors on the basis of real-time operational experience and with the use of modern tools of analysis and testing should be introduced in Regulation (EU) 2015/640.
- (4) Those requirements on ageing aircraft should ensure that design approval holders produce the data and follow procedures, instructions and manuals necessary to prevent ageing structure failures due to corrosion and fatigue and make them available to operators. In order to achieve this, design approval holders should be required to develop a comprehensive continuing structural integrity programme for the aircraft type and to evaluate existing changes and repair designs for damage tolerance. At the same time, operators should be required to incorporate into their maintenance programme those data whilst addressing the adverse effects of changes and repairs on each airframe and its associated maintenance requirements.

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

<sup>(2)</sup> 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).

(5) In order to ensure that those data, procedures, instructions and manuals produced on the basis of those new requirements are also used when maintaining large aeroplanes, point M.A.302 of Annex I to Commission Regulation (EU) No 1321/2014 (<sup>3</sup>) needs to refer to the requirements introduced in Part-26 of Annex I to Regulation (EU) 2015/640.

(6) Several hundred large aeroplanes fitted with Class D cargo or baggage compartments are currently registered in Member States. The risk of uncontrollable fires in this type of compartment is considered high, in particular considering that the carriage of lithium batteries in cargo or baggage compartments has increased over recent years, together with the identified risk of thermal runaways and the subsequent fires related to those batteries.

- (7) In September 2007 the Agency had introduced new design standards eliminating Class D cargo and baggage compartments from the certification specifications for large aeroplanes. Those standards were aimed at mitigating the risk of injuries or fatalities in the event of an in-flight fire in the cargo or baggage compartment, but they only apply to large aeroplanes certified on the basis of requests made after September 2007. Considering that certain large aeroplanes might not comply with those standards and having due regard to the nature and risk of operations with large aeroplanes, those standards should now apply to all in service large aeroplanes certified by the Agency.
- (8) For the last few decades, runway excursions have been major contributors to accidents worldwide and a significant risk to aviation safety. The EASA Annual Safety Review 2018 identifies runway excursions as one of the two highest key risk areas. Furthermore, runway excursions accounted for 30 % of the non-fatal accidents over the same period and for the same population. The number of occurrences of runway excursions during landings has increased in line with the growth in traffic. As aviation traffic is expected to continue to grow worldwide, as well as in Europe, the number of runway excursions can also be expected to increase further if no action is taken.
- (9) In January 2020 the Agency has introduced new design standards for the installation of systems supporting flight crews in their decision-making during approach and landing. Those standards are aimed at mitigating the risk of runway excursions during landing. Having due regard to the nature and risk of operations with large aeroplanes those new standards should apply now to all in service large aeroplanes certified by the Agency.
- (10) Commission Regulations (EU) No 1321/2014 and (EU) No 2015/640 should therefore be amended accordingly. In consideration of the ongoing COVID-19 outbreak, a transition period has been included to avoid additional burden to the industry during this crisis and to facilitate the compliance with the new rules and procedures introduced by this Regulation.
- (11) The measures provided for in this Regulation are based on opinion No 12/2016 (4) and opinion 04/2019 (5) issued by the Agency in accordance with Article 76(1) of Regulation (EU) 2018/1139.
- (12) The measures provided for in this Regulation are in accordance with the opinion of the Committee referred to in Article 127(3) of Regulation (EU) 2018/1139,

HAS ADOPTED THIS REGULATION:

#### Article 1

Annex I (Part-M) to Regulation (EU) No 1321/2014 is amended in accordance with Annex I to this Regulation.

<sup>(&</sup>lt;sup>3</sup>) Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1).

<sup>&</sup>lt;sup>(4)</sup> Opinion 12/2016: Ageing aircraft structures.

<sup>&</sup>lt;sup>(5)</sup> Opinion 04/2019: Reduction of runway excursions and Class D compartments

#### Article 2

Regulation (EU) 2015/640 is amended as follows

(1) Article 1 is replaced by the following:

'Article 1

#### Subject matter and scope

1. This Regulation lays down common additional airworthiness specifications related to the continuing airworthiness and safety improvements of aircraft.

2. This Regulation applies to:

(a) operators of:

- (i) aircraft registered in a Member State;
- (ii) aircraft registered in a third country and used by an operator for which a Member State ensures oversight;
- (b) holders of a type-certificate, restricted type-certificate, supplemental type-certificate or a change and repair design approval approved by the Agency in accordance with Commission Regulation (EU) No 748/2012 \*or deemed to have been issued in accordance with Article 3 of that Regulation;
- (c) the applicants for a type-certificate or a restricted type-certificate for a turbine-powered large aeroplane, for which the application was submitted before 1 January 2019 and who are issued with the certificate after 26 August 2020 when specified in Annex I (Part-26).
- \* Commission 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).;
- (2) In Article 2, the following points (e) to (o) are added:
  - (e) "limit of validity" (LOV) means, in the context of the engineering data that supports the structural maintenance programme, a period of time, stated as a number of total accumulated flight cycles or flight hours or both, during which it is demonstrated that widespread fatigue damage will not occur in the aeroplane;
  - (f) "airworthiness limitation section" (ALS) means a section in the instructions for continued airworthiness, as required by points 21.A.61, 21.A.107 and 21.A.120A of Annex I (Part 21) to Regulation (EU) No 748/2012, that contains airworthiness limitations that set out each mandatory replacement time, inspection interval and related inspection procedure;
  - (g) "corrosion prevention and control programme" (CPCP) means a document reflecting a systematic approach to prevent and to control corrosion in an aeroplane's primary structure, consisting of basic corrosion tasks, including inspections, areas subject to those tasks, defined corrosion levels and compliance times (implementation thresholds and repeat intervals). A baseline CPCP is established by the type certificate holder, which can be adapted by operators to create a CPCP in their maintenance programme specific to their operations;
  - (h) "widespread fatigue damage" (WFD) means a simultaneous presence of cracks at multiple locations in the structure of an aeroplane that are of such size and number that the structure will no longer meet the fail-safe strength or residual strength used for certification of that structure;
  - (i) "baseline structure" refers to the structure that is designed under the type certificate for that aeroplane model (that is, the 'as delivered aeroplane model configuration');
  - (j) "fatigue-critical baseline structure" (FCBS) means the baseline structure of an aeroplane that is classified by the type certificate holder as a fatigue-critical structure;
  - (k) "fatigue-critical modified structure" (FCMS) means any fatigue critical structure of an aeroplane introduced or affected by a change to its type design and that is not already listed as part of the fatigue-critical baseline structure;

- (l) "damage tolerance evaluation" (DTE) is a process that leads to a determination of maintenance actions necessary to detect or preclude fatigue cracking that could contribute to a catastrophic failure. When applied to repairs and changes, a DTE includes the evaluation of the repair or change and the fatigue critical structure affected by the repair or change;
- (m) "damage tolerance inspection" (DTI) means a documented inspection requirement or other maintenance action developed by holders of a type-certificate or restricted type-certificate as a result of a damage tolerance evaluation. A DTI includes the areas to be inspected, the inspection method, the inspection procedures (including the sequential inspection steps and acceptance and rejection criteria), the inspection threshold and any repetitive intervals associated with those inspections. DTIs may also specify maintenance actions such as replacement, repair or modification;
- (n) "repair evaluation guideline" (REG) means a process established by the type certificate holder that guides operators to establish damage tolerance inspections for repairs that affect fatigue-critical structure to ensure the continued structural integrity of all relevant repairs;
- (o) "fatigue-critical structure" (FCS) means a structure of an aeroplane that is susceptible to fatigue cracking that could lead to a catastrophic failure of the aeroplane.';
- (3) Annex I (Part-26) is amended in accordance with Annex II to this Regulation.

#### Article 3

#### Entry into force and application

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

It shall apply from 26 February 2021 with the exception of point (4) of Annex II that shall apply from 26 August 2023.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 5 August 2020.

For the Commission The President Ursula VON DER LEYEN

# ANNEX I

In point M.A. 302(d) of Annex I (Part-M) to Regulation (EU) No 1321/2014, the following point (3) is added:

(3) the applicable provisions of Annex I (Part-26) to Regulation (EU) 2015/640.'.

## ANNEX II

Annex I (Part-26) to Regulation (EU) 2015/640 is amended as follows:

(1) the Table of contents is replaced by the following:

#### 'ANNEX I

#### Part-26

## ADDITIONAL AIRWORTHINESS SPECIFICATIONS FOR OPERATIONS

#### CONTENTS

SUBPART A - GENERAL PROVISIONS

- 26.10 Competent authority
- 26.20 Temporary inoperative equipment
- 26.30 Demonstration of compliance
- SUBPART B LARGE AEROPLANES
- 26.50 Seats, berths, safety belts, and harnesses
- 26.60 Emergency landing dynamic conditions
- 26.100 Location of emergency exits
- 26.105 Emergency exit access
- 26.110 Emergency exit markings
- 26.120 Interior emergency lighting and emergency light operation
- 26.150 Compartment interiors
- 26.155 Flammability of cargo compartment liners
- 26.156 Termal or accoustic insulation materials
- 26.157 Conversion of Class D compartments
- 26.160 Lavatory fire protection
- 26.170 Fire extinguishers
- 26.200 Landing gear aural warning
- 26.205 Runway overrun awareness and alerting systems
- 26.250 Flight crew compartment door operating systems single incapacitation
- 26.300 Continuing structural integrity programme for ageing aeroplanes structures general requirements
- 26.301 Compliance Plan for (R)TC holders
- 26.302 Fatigue and damage tolerance evaluation
- 26.303 Limit of Validity
- 26.304 Corrosion prevention and control programme
- 26.305 Validity of the continuing structural integrity programme
- 26.306 Fatigue critical baseline structure
- 26.307 Damage tolerance data for existing changes to fatigue critical structure
- 26.308 Damage tolerance data for existing repairs to fatigue critical structure
- 26.309 Repair evaluation guidelines
- 26.330 Damage tolerance data for existing supplemental type-certificates (STCs), other existing major changes and existing repairs affecting those changes or STCs
- 26.331 Compliance Plan for STC holders

- 26.332 Identification of changes affecting fatigue critical structure
- 26.333 Damage tolerance data for STCs and repairs to those STCs approved on or after 1 September 2003
- 26.334 Damage tolerance data for STCs and other changes and repairs to those changes approved before 1 September 2003
- 26.370 Continuing airworthiness tasks and aircraft maintenance programme
- SUBPART C LARGE HELICOPTERS
- 26.400 Fire extinguishers
- Appendix I List of aeroplane models not subject to certain provisions of Annex I (Part-26)';
- (2) point 26.10 is replaced by the following:

## '26.10 Competent authority

- (a) For the purposes of this Annex, the competent authority to which operators need to demonstrate compliance of aircraft, the design of which has already been certified, with the requirements of this Annex shall be the authority designated by the Member State in which the operator has its principal place of business.
- (b) For the purposes of this Annex, the competent authority to which holders of type-certificates (TC), restricted TC, supplemental type-certificates (STC), changes and repair design approvals need to demonstrate compliance of the existing type-certificates (TC), restricted TC, supplemental type-certificates (STC), changes and repair design with the requirements of this Annex shall be the Agency.';
- (3) point 26.30 is amended as follows:
  - (a) paragraphs (a) and (b) are replaced by the following:
    - (a) The Agency shall issue, in accordance with Article 76(3) of Regulation (EU) 2018/1139, certification specifications as standard means to demonstrate compliance with this Annex. The certification specifications shall be sufficiently detailed and specific to indicate the conditions under which compliance with the requirements of this Annex may be demonstrated.
    - (b) Operators and holders of a type certificate, restricted type certificate, supplemental type certificate or a change and repair design approval may demonstrate compliance with the requirements of this Annex by complying with either of the following:
      - (i) the specifications issued by the Agency under paragraph (a) of this point or the equivalent certification specifications issued by the Agency under point 21.B.70 of Annex I to Regulation (EU) No 748/2012;
      - (ii) technical standards offering an equivalent level of safety to those included in those certification specifications.';
  - (b) the following paragraph (c) is added:
    - '(c) Holders of a type certificate, restricted type certificate, supplemental type certificate or a change and repair design approval shall make available to each known operator of the aeroplanes any changes to the "Instructions for Continued Airworthiness" (ICA) required to demonstrate compliance with this Annex. For the purposes of this Regulation, the ICA also include damage tolerance inspections (DTIs), repair evaluation guidelines (REGs), a baseline corrosion prevention and control programme (CPCP) and a list of fatigue-critical structures (FCSs) and airworthiness limitation sections (ALSs).';
- (4) the following point 26.157 is inserted:

## '26.157 Conversion of Class D compartments

Operators of large aeroplanes used in commercial air transport, type certified on or after 1 January 1958 shall ensure that:

- (a) for aeroplanes, the operation of which involves the transport of passengers, each Class D cargo or baggage compartment, regardless of its volume, complies with the certification specifications applicable to a Class C compartment;
- (b) for aeroplanes, the operation of which involves the transport of cargo only, each Class D cargo compartment, regardless of its volume, complies with the certification specifications applicable to either a Class C or a Class E compartment.';

(5) the following point 26.205 is inserted:

#### '26.205 Runway overrun awareness and alerting systems

- (a) Operators of large aeroplanes used in commercial air transport shall ensure that every aeroplane for which the first individual certificate of airworthiness was issued on or after 1 January 2025, is equipped with a runway overrun awareness and alerting system.
- (b) This system shall be designed in a manner allowing to reduce the risk of a longitudinal runway excursion during landing by providing an alert, in-flight and on the ground, to the flight crew when the aeroplane is at risk of not being able to stop within the available distance to the end of the runway.';
- (6) the following points 26.300, 26.301, 26.302, 26.303, 26.304, 26.305, 26.306, 26.307, 26.308, 26.309, 26.330, 26.331, 26.332, 26.333, 26.334 and 26.370 are inserted:

## <sup>2</sup>26.300 Continuing structural integrity programme for ageing aeroplanes structures – general requirements

- (a) A holder of a type-certificate (TC) or a restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, shall establish a continuing structural integrity programme for ageing aeroplane structures, which shall comply with the requirements set out in points 26.301 to 26.309.
- (b) Paragraph (a) shall not apply to an aeroplane model, which was issued with a type-certificate before 26 February 2021 and which meets any of the following conditions:
  - (i) it is listed in Table A.1 of Appendix 1 of this Annex;
  - (ii) it is not operated anymore after 26 February 2021;
  - (iii) it has not been certified to conduct civil operation with a payload or passengers;
  - (iv) it has a restricted TC issued before 26 February 2021 in accordance with damage tolerance requirements, provided that it is not operated beyond 75 % of its design service goal and is primarily operated in support of the approval holders manufacturing operation;
  - (v) it is certified with a restricted TC and is designed primarily for firefighting.

The exceptions provided for in paragraph (b)(ii) to (b)(v) shall apply only after the holder of a type-certificate (TC) or a restricted TC submits to the Agency before 27 May 2021 for approval a list identifying the aeroplane type and models, variations or serial numbers together with information supporting the reasons why the aeroplane has been included in the list.

(c) For an aeroplane model which was issued with a first type-certificate before 26 February 2021 and for which an existing change or repair is not and will not be incorporated in any aeroplane in operation on and after 26 February 2022, paragraphs (a)(ii) and (a)(iii) of point 26.307 and paragraph (a)(ii) of point 26.308 shall not apply if before 26 February 2022 the holder of a type-certificate (TC) or a restricted TC submits to the Agency for the approval the list of all changes and repairs.

#### 26.301 Compliance Plan for (R)TC holders

- (a) A holder of a type-certificate (TC) or a restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, shall:
  - (i) establish a compliance plan for continuing structural integrity that describes the planned demonstration of compliance with the requirements set out in points 26.302 to 26.309;
  - (ii) submit the compliance plan for continuing structural integrity referred in paragraph (i) to the Agency before 27 May 2021 for approval.
- (b) An applicant for a TC or restricted TC referred to in letter (c) of Article 1 paragraph 2 shall:
  - (i) establish a compliance plan for continuing structural integrity that describes the planned demonstration of compliance with the requirements set out in points 26.303 to 26.306;
  - (ii) submit the compliance plan for continuing structural integrity referred to in paragraph (i) to the Agency before 27 May 2021 or, before the issuance of the certificate, if it occurs later, for approval.

#### 26.302 Fatigue and damage tolerance evaluation

- (a) A holder of a type-certificate (TC) or a restricted TC, for a turbine-powered large aeroplane certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more, certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, shall carry out a fatigue and damage tolerance evaluation of the aeroplane structure and develop the DTI that will avoid catastrophic failures due to fatigue throughout the operational life of the aeroplane.
- (b) Unless the documentation describing the DTI referred to in paragraph (a) have already been approved by the Agency in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012, the holder of a TC or a restricted TC shall submit that documentation to the Agency before 26 February 2023 for approval.

#### 26.303 Limit of Validity

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- (a) A holder of a type-certificate (TC) or a restricted TC, for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, certified with a maximum take-off weight (MTOW) greater than 34 019 kg (75 000 lbs), shall:
  - (i) establish a limit of validity (LOV) and include that LOV in an amended ALS;
  - (ii) identify existing and new maintenance actions upon which the LOV depends, and develop service information necessary for operators to implement those maintenance actions and submit the service information for the maintenance actions to the Agency in accordance with a binding schedule agreed with the Agency.

The aeroplane structural configurations to be evaluated for the purpose of establishing the LOV shall include all model variations and derivatives approved under the TC before 26 February 2021 and all structural changes and replacements to the structural configurations of those aeroplanes that are required by an airworthiness directive issued before 26 February 2021.

By way of derogation from paragraph (a)(ii), a holder of a type-certificate (TC) or a restricted TC for a turbinepowered large aeroplane shall not be required to develop and submit to the Agency the service information for a maintenance action applicable to an aeroplane model which will not be operated anymore after the scheduled point of submittal for the service information of that maintenance action. For this exception to take effect, the holder of a type-certificate (TC) or a restricted TC shall inform the Agency not later than the date at which the aeroplane model ceases operation.

- (b) The holder of the type-certificate (TC) or the restricted TC shall submit the LOV established in accordance with paragraph (a) and the amendment to the ALS referred to in that paragraph together with the binding schedule to the Agency, before the deadlines established in paragraphs (i) to (iii), for approval:
  - (i) 26 August 2022 for fatigue critical structure with a certification basis that does not include a damage tolerance evaluation;
  - (ii) 26 February 2026 for aeroplane structure subject to ongoing full-scale fatigue testing at the date of the applicability of this amending Regulation;
  - (iii) 26 February 2025 for all other aeroplane structures.
- (c) An applicant for a TC or restricted TC as referred in letter (c) of Article 1 paragraph 2, for a turbine-powered large aeroplane with a maximum take-off weight (MTOW) greater than 34 019 kg (75 000 lbs), shall:
  - (i) establish a limit of validity (LOV) and include that LOV in the ALS;
  - (ii) identify existing and new maintenance actions upon which the LOV depends, and develop service information necessary for operators to implement those maintenance actions and submit the service information for the maintenance actions to the Agency in accordance with a binding schedule agreed with the Agency.
- (d) The applicant for a TC or restricted TC as referred in letter (c) of Article 1 paragraph 2 shall submit the LOV established in accordance with paragraph (c) and the ALS referred to in that paragraph together with the binding schedule to the Agency, for approval.
- (e) The following deadlines shall apply to the obligations referred to in paragraph (d)
  - (i) before the date approved by the Agency in the plan of the applicant for completing tests and analyses of any aeroplane structure requiring new full-scale fatigue testing to support establishment of the LOV;
  - (ii) before 26 February 2025 for all other aeroplane structures.

#### 26.304 Corrosion prevention and control programme

- (a) A holder of a type-certificate (TC) or a restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, shall establish a baseline corrosion prevention and control programme (CPCP).
- (b) Unless the baseline CPCP referred to in paragraph (a) has already been approved by the Agency in accordance with point 21.A.3B(c)(1) of Annex 1 to Regulation (EU) No 748/2012 or in a maintenance review board report (MRBR) approved by the Agency, the holder of a type-certificate (TC) or a restricted TC shall submit the CPCP to the Agency before 26 February 2023, for approval.
- (c) An applicant for a TC or restricted TC as referred to in letter (c) of Article 1 paragraph 2, for a turbine-powered large aeroplane shall establish a baseline corrosion prevention and control programme (CPCP) prior to the TC being issued.

## 26.305 Validity of the continuing structural integrity programme

- (a) A holder of a type-certificate (TC) or a restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, shall establish and implement a process that ensures that the continuing structural integrity programme remains valid throughout the operational life of the aeroplane, taking into account service experience and current operations.
- (b) The holder of a type-certificate (TC) or a restricted TC shall submit a description of the process referred to in paragraph (a) to the Agency before 26 February 2023 for approval. The holder of a type-certificate (TC) or a restricted TC shall implement the process within 6 months after its approval by the Agency.
- (c) An applicant for a TC or restricted TC as referred to in letter (c) of Article 1 paragraph 2 for a turbine-powered large aeroplane, shall establish and implement a process that ensures that the continuing structural integrity programme remains valid throughout the operational life of the aeroplane, taking into account service experience and current operations. It shall submit a description of the process to the Agency before 26 February 2023, or before the issuance of the certificate, whichever occurs later, for approval and shall implement the process within 6 months after its approval by the Agency.

#### 26.306 Fatigue critical baseline structure

- (a) A holder of a type-certificate (TC) or a restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958, for which the application for TC was submitted before 1 January 2019, and certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more shall identify and list the fatiguecritical baseline structures (FCBS) for all aeroplane model variations and derivatives included in the TC or restricted TC.
- (b) The holder of a type-certificate (TC) or a restricted TC shall submit the list of the structures referred to in paragraph (a) to the Agency before 26 August 2021 for approval.
- (c) Upon approval of the list referred to in paragraph (a) by the Agency, the holder of a type-certificate (TC) or a restricted TC shall make it available to operators and persons required to comply with points 26.330 and 26.370.
- (d) An applicant for a TC or restricted TC as referred to in letter (c) of Article 1 paragraph 2, for a turbine-powered large aeroplane to be certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more shall identify and list the fatigue-critical baseline structures (FCBS) for all aeroplane model variations and derivatives included in the TC or restricted TC. It shall submit the list of these structures to the Agency before 26 August 2021, or before the issuance of the certificate, whichever occurs later, for approval.
- (e) Upon approval of the list referred to in paragraph (d) by the Agency, the applicant for a TC or restricted TC as referred to letter (c) of Article 1 paragraph 2 shall make it available to operators and persons required to comply with point 26.370.

## 26.307 Damage tolerance data for existing changes to fatigue-critical structure

- (a) A holder of a type-certificate (TC) or restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958 certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more, for changes and fatigue-critical modified structure (FCMS) existing on 26 February 2021 shall:
  - (i) review existing design changes (design modifications) and identify all changes that affect FCBS identified in accordance with point 26.306;

- (ii) for each change identified in accordance with paragraph (a)(i), identify any associated fatigue-critical modified structure (FCMS);
- (iii) for each change identified in accordance with paragraph (a)(i), perform a damage tolerance evaluation and establish and document the associated damage tolerance inspections;
- (b) The holder of a type-certificate (TC) or a restricted TC shall submit the list of all fatigue-critical modified structure (FCMS) identified in accordance with paragraph (a)(ii) to the Agency before 26 February 2022, for approval.
- (c) The holder of a type-certificate (TC) or a restricted TC shall submit the damage tolerance data, including DTI, resulting from the evaluation performed in accordance with paragraph (a)(iii) to the Agency before 26 August 2022, for approval.
- (d) Upon approval by the Agency of the FCMS list submitted in accordance with paragraph (b), the holder of a type-certificate (TC) or restricted shall make that list available to operators and persons required to comply with points 26.330 and 26.370.

## 26.308 Damage tolerance data for existing repairs to fatigue-critical structure

- (a) A holder of a type-certificate (TC) or restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958 certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more, for published repairs existing on 26 February 2021 shall:
  - (i) review the repair data and identify each repair specified in the data that affects the fatigue-critical baseline structure and the fatigue-critical modified structure identified in accordance with paragraph (a) of point 26.306 and paragraph (a)(ii) of point 26.307;
  - (ii) perform a damage tolerance evaluation for each repair identified in accordance with paragraph (a)(i), unless previously done.
- (b) The holder of a type-certificate (TC) or restricted TC shall submit the damage tolerance data, including DTI, resulting from the evaluation performed in accordance with paragraph (a)(ii) to the Agency before 26 May 2022, for approval, unless already approved in accordance with point 21.A.435(b)(2) of Annex I (Part 21) to Regulation (EU) No 748/2012 before 26 August 2022.

## 26.309 Repair evaluation guidelines

- (a) A holder of a type-certificate (TC) or restricted TC for a turbine-powered large aeroplane certified on or after 1 January 1958 certified to carry 30 passengers or more, or with a payload capacity of 3 402 kg (7 500 lbs) or more and for which the TC or restricted TC was issued prior to 11 January 2008, shall develop repair evaluation guidelines (REGs) to establish:
  - a process for conducting surveys of affected aeroplane that enables the identification and documentation of all existing repairs affecting the fatigue-critical structure identified in accordance with paragraph (a) of point 26.306 and paragraph (a)(ii) of point 26.307;
  - (ii) a process that enables operators to obtain a DTI for repairs identified in accordance with paragraph (a)(i);
  - (iii) an implementation schedule that provides time frames for conducting aeroplane surveys, obtaining DTIs and incorporating DTIs into the maintenance programme of the operator of the aeroplane.
- (b) The holder of a TC or a restricted TC shall submit the repair evaluation guidelines developed in accordance with paragraph (a) to the Agency before 26 February 2023, for approval.

# 26.330 Damage tolerance data for existing supplemental type-certificates (STCs), other existing major changes and existing repairs affecting those changes or STCs

(a) A holder of a STC issued before 26 February 2021 for a major change, or a holder of a major change that has been deemed approved in accordance with Article 4 of Regulation (EU) No 748/2012, for large aeroplanes certified on or after 1 January 1958 to carry 30 or more passengers or that have a payload capacity of 3 402 kg (7 500 lbs) or more, shall support operators required to comply with point 26.370(a)(ii) by addressing the adverse effects of those changes and repairs to those changes on the aeroplane structure and shall comply with the requirements set out in points 26.331 to 26.334.

- (b) Paragraph (a) shall not apply to major changes and repairs to an aeroplane model first certified prior to 26 February 2021 when that aeroplane model meets any of the following conditions:
  - (i) it is listed in Table A.1 of Appendix 1;
  - (ii) it does not operate anymore after 26 February 2021;
  - (iii) it has not been certified to conduct civil operation with a payload or passengers;
  - (iv) it has a restricted TC and have been certified in accordance with damage tolerance requirements, provided that it is not operated beyond 75 % of its design service goal and is primarily operated in support of the restricted TC holders manufacturing operation;
  - (v) it is certified with a restricted TC and is designed primarily for firefighting;
- (c) Paragraph (a) shall not apply to major changes and repairs to an aeroplane first certified prior to 26 February 2021 when the changes or repairs are not, and will not be, embodied on any aeroplane in operation on or after 26 August 2022.
- (d) The exceptions provided for in paragraph (b)(ii) to (b)(v) and (c) shall apply only after the change approval holder submits a list of changes that affect fatigue-critical baseline structure, together with information supporting the reasons why each change has been included in the list, to the Agency before 26 February 2022 for approval.

## **26.331** Compliance Plan for STC holders

A holder of a change approval shall:

(a) establish a compliance plan that addresses the requirements of points 26.332 to 26.334;

(b) submit the compliance plan referred in paragraph (a) to the Agency before 25 August 2021, for approval.

# 26.332 Identification of changes affecting fatigue critical structure

- (a) A holder of a change approval shall:
  - (i) review the changes and shall identify those changes that affect fatigue-critical baseline structure;
  - (ii) for each change identified in accordance with paragraph (a)(i), identify any associated FCMS;
  - (iii) identify the published repairs affecting each change identified in accordance with paragraph (a)(i).
- (b) The holder of a change approval that was issued on or after 1 September 2003, shall develop and submit a list of the changes and FCMS identified in accordance with paragraphs (a)(i) and (a)(ii) to the Agency before 26 February 2022, for approval, and, upon approval by the Agency, make the list available to persons and operators required to comply with paragraph (b)(ii) of point 26.370.
- (c) The holder of a change approval that was issued before 1 September 2003 shall:
  - (i) develop and submit a list of the changes identified in accordance with paragraph (a)(i)to the Agency before 26 February 2022, for approval;
  - (ii) upon request of an operator required to comply with point 26.370(a)(ii) for a change, identify and list any FCMS associated with the change and submit this data to the Agency within 12 months from the operators request, for approval;
  - (iii) upon approval of any data submitted according to paragraphs (c)(i) and (c)(ii), make that data available to persons and operators required to comply with paragraph (b)(ii) of point 26.370.

#### 26.333 Damage tolerance data for STCs and repairs to those STCs approved on or after 1 September 2003

- (a) A holder of a change approval that was issued on or after 1 September 2003 shall:
  - (i) for changes and published repairs identified in accordance with paragraph (a)(i) of point 26.332 and paragraph (a)(iii) of point 26.332, perform a damage tolerance evaluation;
  - (ii) establish and document the associated damage tolerance inspection, unless it has already been done.

- (b) The holder of a change approval shall submit the damage tolerance data resulting from the damage tolerance evaluation performed in accordance with paragraph (a)(i) to the Agency before 26 February 2023, for approval, unless it is already approved in accordance with point 21.B.111 of Annex I (Part 21) to Regulation (EU) No 748/2012.
- (c) By way of derogation from paragraph (b), for changes that did not have a damage tolerance evaluation requirement in the certification basis, the holder of a change approval identified in paragraph (a) shall submit the damage tolerance data resulting from the damage tolerance evaluation performed in accordance with paragraph (a) to the Agency, within the following deadlines, whichever occurs later, for approval:
  - (i) prior to an aeroplane with that change embodied being operated in accordance with Annex IV (Part-CAT) to Regulation (EU) No 965/2012 \*; or
  - (ii) before 26 February 2023.

#### 26.334 Damage tolerance data for STCs and other changes and repairs to those changes approved before 1 September 2003

- (a) A holder of a change approval that was issued before 1 September 2003 shall:
  - (i) for changes and published repairs identified in accordance with paragraph (a)(i) of point 26.332 and paragraph (a)(ii) of point 26.332 perform a damage tolerance evaluation;
  - (ii) establish and document the associated damage tolerance inspection, unless it has already been done;
- (b) The holder of a change approval shall submit the damage tolerance data resulting from the evaluation performed in accordance with paragraph (a)(i) to the Agency, within the following deadlines, whichever occurs later, for approval:
  - (i) prior to an aeroplane with that change embodied being operated in accordance with Annex IV (Part-CAT) to Regulation (EU) No 965/2012; or
  - (ii) before 26 February 2023.

## **26.370** Continuing airworthiness tasks and aircraft maintenance programme

- (a) Operators or owners of turbine-powered large aeroplanes certified on or after 1 January 1958 shall ensure the continuing airworthiness of ageing aeroplanes structures by preparing the aircraft maintenance programme provided for in point M.A.302 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 \*\* that shall include:
  - (i) for aeroplanes certified to carry 30 passengers or more, or with a payload capacity greater than 3 402 kg (7 500 lbs), an approved damage-tolerance-based inspection programme;
  - (ii) for aeroplanes operated in accordance with Annex IV (Part-CAT) to Regulation (EU) No 965/2012 and certified to carry 30 passengers or more or with a payload capacity greater than 3 402 kg (7 500 lbs), a means for addressing the adverse effects that repairs and modifications may have on fatigue-critical structure and on inspections provided for in point (a)(i);
  - (iii) for aeroplanes certified with a maximum take-off weight (MTOW) greater than 34 019 kg (75 000 lbs) an approved LOV;
  - (iv) a CPCP;
- (b) The following deadlines shall apply to the obligation referred to in paragraph (a):
  - (i) the aircraft maintenance programme shall be revised to address the requirements of points (a)(i), (a)(ii) and (a) (iv) before 26 February 2024 or before operating the aeroplane, whichever occurs later;
  - (ii) the aircraft maintenance programme shall be revised to address the requirements of point (a)(iii) before 26 August 2021, or 6 months after the publication of the LOV, or before operating the aeroplane, whichever occurs later;
- (c) For an aeroplane model first certified before 26 February 2021 and:
  - (i) that does not operate anymore after 26 February 2024 points (a)(i), (a)(ii) and (a)(iv) shall not apply;
  - (ii) that does not operate anymore after 26 August 2021 point (a)(iii) shall not apply;

- (iii) with a restricted TC issued before 26 February 2021 in accordance with damage tolerance requirements, provided that it is not operated beyond 75 % of its design service goal and is primarily operated in support of the approval holders manufacturing operation points (a)(i), (a)(ii) and (a)(iv) shall not apply;
- (d) For an aeroplane model with a restricted type certificate issued before 26 February 2021 and the primary purpose of which is firefighting, points (a)(i) and (a)(ii) shall not apply.
- \* 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 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1).';

(7) the following Appendix 1 is added:

#### 'Appendix 1

## List of aeroplane models not subject to certain provisions of Annex I (Part-26)

## Table A.1

| TC Holder                     | Туре                                 | Models   | Provisions of Annex I (Part-26)<br>that do NOT apply |
|-------------------------------|--------------------------------------|--|--|
| The Boeing Company            | 707                                  | All  | 26.301 to 26.334                                     |
| The Boeing Company            | 720                                  | All  | 26.301 to 26.334                                     |
| The Boeing Company            | DC-10                                | DC-10-10<br>DC-10-30<br>DC-10-30F  | 26.301 to 26.334                                     |
| The Boeing Company            | DC-8                                 | All  | 26.301 to 26.334                                     |
| The Boeing Company            | DC-9                                 | DC-9-11, DC-9-12, DC-9-13,<br>DC-9-14, DC-9-15, DC-9-15F,<br>DC-9-21, DC-9-31, DC-9-32,<br>DC-9-32 (VC-9C), DC-9-32F, DC-<br>9-32F (C-9A, C-9B), DC-9-33F,<br>DC-9-34, DC-9-34F, DC-9-41,<br>DC-9-51 | 26.301 to 26.334                                     |
| The Boeing Company            | MD-90                                | MD-90-30   | 26.301 to 26.334                                     |
| FOKKER SERVICES B.V.          | F27                                  | Mark 100, 200, 300, 400, 500, 600, 700   | 26.301 to 26.334                                     |
| FOKKER SERVICES B.V.          | F28                                  | Mark 1000, 1000C, 2000, 3000, 3000C, 3000R, 3000C, 4000  | 26.301 to 26.334                                     |
| GULFSTREAM AEROSPACE<br>CORP. | G-159                                | G-159 (Gulfstream I)   | 26.301 to 26.334                                     |
| GULFSTREAM AEROSPACE<br>CORP. | G-II_III_IV_V                        | G-1159A (GIII)<br>G-1159B (GIIB)<br>G-1159 (GII)   | 26.301 to 26.334                                     |
| KELOWNA FLIGHTCRAFT LTD.      | CONVAIR<br>340/440                   | 440  | 26.301 to 26.334                                     |
| LEARJET INC.                  | Learjet<br>24/25/31/3-<br>6/35/55/60 | 24,24 A,24B,24B-A,24D, 24D-<br>A,24F,24F-<br>A,25,25B,25C,25D,25F  | 26.301 to 26.334                                     |

| TC Holder                       | Туре   | Models                         | Provisions of Annex I (Part-26)<br>that do NOT apply |
|---------------------------------|--------|--------------------------------|--|
| LOCKHEED MARTIN<br>CORPORATION  | 1329   | All                            | 26.301 to 26.334                                     |
| LOCKHEED MARTIN<br>CORPORATION  | 188    | All                            | 26.301 to 26.334                                     |
| LOCKHEED MARTIN<br>CORPORATION  | 382    | 382, 382B, 382E, 382F, 382G    | 26.301 to 26.334                                     |
| LOCKHEED MARTIN<br>CORPORATION  | L-1011 | All                            | 26.301 to 26.334                                     |
| PT. DIRGANTARA INDONESIA        | CN-235 | All                            | 26.301 to 26.334                                     |
| SABRELINER CORPORATION          | NA-265 | NA-265-65                      | 26.301 to 26.334                                     |
| VIKING AIR LIMITED              | SD3    | SD3-30<br>Sherpa<br>SD3 Sherpa | 26.301 to 26.334                                     |
| VIKING AIR LIMITED              | DHC-7  | All                            | 26.301 to 26.334                                     |
| VIKING AIR LIMITED              | CL-215 | CL-215-6B11                    | 26.301 to 26.334                                     |
| TUPOLEV PUBLIC STOCK<br>COMPANY | TU-204 | 204-120CE                      | 26.301 to 26.334'                                    |