Airworthiness Directive

AD No.: 2019-0301

Issued: 12 December 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
AIRBUS

Type/Model designation(s):
A350 aeroplanes

Effective Date: 26 December 2019

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0213R1 dated 09 November 2018.

ATA 27 – Flight Controls – Aileron and Elevator Electro-Hydrostatic Actuators – Modification Aircraft Flight Manual – Amendment

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Manufacturer(s):
Airbus

Applicability:
Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers (MSN).

Definitions:
For the purpose of this AD, the following definitions apply:

The AFM TR: Airbus A350 Aircraft Flight Manual (AFM) Temporary Revision (TR) 113 issue 1.0.

The applicable ATA 31 modification SB: Airbus Service Bulletin (SB) A350-31-P028 and SB A350-31-P030 (for aeroplanes fitted with Flight Warning System (FWS) standard (STD) S4/2.0); and SB A350-31-P029 and SB A350-31-P030 (for aeroplanes fitted with FWS STD S5/2.2), as applicable.

The applicable ATA 27 modification SB: Airbus SB A350-27-P033, SB A350-27-P034, SB A350-27-P035 and SB A350-27-P036, as applicable to aeroplane MSN, including additional information provided by Airbus SB Information Transmission (SBIT) 19-0062.

Affected part: Electro hydrostatic actuators (EHA) for inboard ailerons, left-hand (LH) and right-hand (RH), having Part Number (P/N) CA67001-025 or P/N CB36001-003, and EHA for elevators, LH and RH, having P/N CA67006-025.

Groups: Group 1 aeroplanes are those that have an affected EHA installed. Group 2 aeroplanes are those that do not have an affected EHA installed.

Reason:

A technical issue was detected on an inboard aileron EHA, causing potential erroneous monitoring of those actuators. Consequently, in-flight loss of inboard aileron control may occur, which, due to the resulting drag, would lead to increased fuel consumption.

This condition, if not corrected, when combined with one engine inoperative, could result in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the AFM TR and Flight Operations Transmission (FOT) 999.0062/18, informing operators that Airbus provides two different Temporary Quick Changes (ATQC) to the electronic centralized aircraft monitoring (ECAM), depending on the installed FWS STD, either STD S4/2.0 or STD S5/2.2, as applicable, and issued the applicable ATA 31 SB accordingly, providing modification instructions.

Consequently, EASA issued AD 2018-0213 (later revised) to require amendment of the applicable AFM and activation of an ECAM Temporary Change (ETC), to update the procedures related to inboard aileron fault operations.

Since EASA AD 2018-0213R1 was issued, this technical issue has been confirmed as affecting both inboard ailerons and elevators EHAs. The failure can lead to the loss of the corresponding EHA and result in a reduction of safety margins, which combined with other independent failures, might result in a potentially unsafe condition. To correct this unsafe condition, Airbus developed the applicable ATA 27 modification SB, providing instructions for modification of the affected parts. Following issuance of applicable ATA 27 modification SB, as defined in this AD, Airbus published SBIT 19-0062 to provide clarification on the test procedures. It is expected that the applicable ATA 27 modification SB will be revised accordingly.

For the reasons described above, this AD retains the requirements of EASA AD 2018-0213R1, which is superseded, and requires modification of the affected parts. This AD also prohibits (re)installation of affected parts.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

AFM Amendment:

(1) For Group 1 aeroplanes: Within 30 days after 15 October 2018 [the effective date of the original issue of AD 2018-0213], amend the applicable AFM to incorporate the AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly (see Note 1 of this AD).

(2) Amending the applicable AFM to incorporate later AFM revisions, which include the AFM TR contents, as required by paragraph (1) of this AD, is acceptable to comply with the requirements of paragraph (1) of this AD.

Modification:

(3) For Group 1 aeroplanes: Within 6 months after 15 October 2018 [the effective date of the original issue of AD 2018-0213], activate ETC in accordance with the instructions of the applicable ATA 31 modification SB.

Note 1: Until the ETC activation is accomplished, as required by paragraph (3) of this AD, the AFM TR procedures, as required to be incorporated by paragraph (2) of this AD, take precedence over procedures displayed on the ECAM.

Credit:

(4) An aeroplane on which Airbus modification (mod) 113758 and mod 113759 have been embodied in production is compliant with the requirements of paragraphs (1) and (3) of this AD for that aeroplane.

Modification:

(5) For Group 1 aeroplanes: Within 24 months after the effective date of this AD, modify each affected part on the aeroplane, or replace each affected part with a non-affected part, in accordance with the instructions of the applicable ATA 27 modification SB.

Part Installation:

(6) Do not install an affected part on any aeroplane, as required by paragraph (6.1) or (6.2) of this AD, as applicable.

(6.1) For Group 1 aeroplanes: After replacement or modification of all affected parts on the aeroplane as required by paragraph (5) of this AD.

(6.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

Airbus A350 AFM TR 113 issue 1.0, approval date 17 August 2018.

Airbus SB A350-31-P028 original issue dated 17 September 2018.

Airbus SB A350-31-P029 original issue dated 17 September 2018.

Airbus SB A350-31-P030 original issue dated 17 September 2018.

Airbus SB A350-27-P033 original issue dated 11 June 2019.

Airbus SB A350-27-P034 original issue dated 11 June 2019.

Airbus SB A350-27-P035 original issue dated 11 June 2019.

Airbus SB A350-27-P036 original issue dated 11 June 2019.

Airbus SBIT 19-0062 original issue dated 26 August 2019.

FOT 999.0062/18 original issue dated 17 September 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. This AD was posted on 09 August 2019 as PAD 19-154 for consultation until 06 September 2019 and republished on 04 November 2019 as PAD 19-154R1 until 18 November 2019. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system.

5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS XWB, E-mail: continued-airworthiness.a350@airbus.com.