Airworthiness Directive

AD No.: 2018-0058R2

Issued: 06 May 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: Revision 2: 13 May 2019
Revision 1: 15 February 2019
Original issue: 16 March 2018

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2018-0058R1 dated 08 February 2019.

ATA 27 – Flight Controls – Station Position Pick-Off Unit – Calibration Procedure

Manufacturer(s):
Airbus

Applicability:
Airbus A350-941 aeroplanes, all manufacturer serial numbers, except those on which Airbus modification (mod) 113663 has been embodied in production.

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

The inspection SB: Airbus Service Bulletin (SB) A350-27-P021.

The modification SB: Airbus SB A350-27-P030.

Aeroplane date of manufacture: The date of transfer of title (ownership) which is referenced in Airbus documentation at the time of first delivery to an operator.

Reason:

Occurrences were reported of malfunctions of Station Position Pick-Off Units (SPPU). Investigations indicated that internal wiring failures occurred due to water ingress via certain electrical connectors, inducing subsequent icing during flight.

This condition, if not detected and corrected, could lead to hidden sensor signal drift (at flap station 3) which, in combination with an independent failure of a flap down drive disconnect, might lead to in-flight detachment of the outer flap surface, possibly resulting in damage to the aeroplane, and/or injury to persons on the ground.

Airbus determined that the SPPU calibration test can highlight all hidden faults, but this test is only scheduled after removal/installation of the equipment. Consequently, to address this potential unsafe condition, Airbus issued the inspection SB, providing instructions to accomplish the SPPU calibration test at regular intervals. Consequently, EASA issued AD 2018-0058 (later revised) to require repetitive SPPU calibration tests and, depending on findings, accomplishment of applicable corrective action(s).

Since EASA AD 2018-0058R1 was issued, Airbus developed mod 113663, introducing slat flap control computer software standard S5.2 to implement the position anomaly monitor. Post-mod 113663 aeroplanes are not subject to the repetitive SPPU calibration tests as required by this AD. Airbus published the modification SB accordingly, providing instructions for in-service modification.

For the reason described above, this AD is revised accordingly by reducing the Applicability, and introduces reference to the modification SB as optional terminating action.

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

Required as indicated, unless accomplished previously:

Repetitive SPPU calibration test:

(1) Within 200 flight cycles (FC) after 15 February 2019, the effective date of Revision 1 of this AD, or within 200 FC after the aeroplane date of manufacture, whichever occurs later, and, thereafter, at intervals not to exceed 200 FC, accomplish an SPPU calibration test in accordance with the instructions of the inspection SB.

Corrective Action(s):

(2) If, during any test as required by paragraph (1) of this AD, discrepancies are detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the inspection SB.

Terminating Action:

(3) Modification of an aeroplane in accordance with the instructions of the modification SB constitutes terminating action for the repetitive SPPU calibration tests as required by paragraph (1) of this AD for that aeroplane.

Ref. Publications:

Airbus SB A350-27-P021 original issue dated 13 February 2018.

Airbus SB A350-27-P030 original issue dated 20 March 2019.

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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

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.