Airworthiness Directive

AD No.: 2024-0155

Issued: 13 August 2024

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
AIRBUS S.A.S.

Type/Model designation(s):
A350 aeroplanes

Effective Date: 27 August 2024

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2022-0250 dated 14 December 2022.

ATA 57 – Wings – RIB 1 Corner Fitting and Upper / Lower Wing Skin Cover Edge Glow Sealant – Inspection / Modification

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Manufacturer(s):
Airbus

Applicability:
Airbus A350-941 and A350-1041 aeroplanes, manufacturer serial numbers (MSN) as listed in the inspection SB1, and/or the modification SB1, and/or the modification SB2, and/or the inspection SB2, as defined in this AD.

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

Affected area A: Stringer edges on left-hand (LH) and right-hand (RH) wings**.**

Affected area B: Upper and lower, front and rear spar corner fittings between RIB 1 and RIB 2 on LH and RH wings**.**

The inspection SB1: Airbus Service Bulletin (SB) A350-57-P067.

The inspection SB2: Airbus SB A350-57-P091.

The modification SB1: Airbus SB A350-57-P070.

The modification SB2: Airbus SB A350-57-P072, SB A350-57-P073 or SB A350-57-P074, as applicable to aeroplane MSN.

Groups: Group 1 aeroplanes are those with an MSN listed in the inspection SB1.
Group 2 aeroplanes are those with an MSN listed in the modification SB1, except aeroplanes on which Airbus modification 116294 was embodied in production.
Group 3 aeroplanes are those with an MSN listed in the modification SB2.
Group 4 aeroplanes are those with an MSN listed in the inspection SB2.

Note 1: Depending on aeroplane configuration, an aeroplane can belong to several groups.

Aeroplane date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.

Reason:
Occurrences have been reported from the A350 production line of missing or incorrect application of the lightning strike edge glow sealant protection at specific locations on the wing tanks. This sealant provides the second layer of protection to prevent stringer edge glow in case of lightning strike.

This condition, if not detected and corrected, combined with a pre-existing undetected incorrect installation of an adjacent fastener, could create an ignition source for the fuel vapour inside the tanks, which, in case of a lightning strike of high intensity in the immediate area, could possibly result in ignition of the fuel-air mixture in the affected fuel tank and consequent loss of the aeroplane.

To address this potential unsafe condition, Airbus issued the inspection SB1 to provide inspection instructions. Consequently, EASA issued AD 2020-0220 to require a one-time detailed inspection (DET) of the affected areas A and, depending on findings, accomplishment of applicable corrective action(s).

After EASA AD 2020-0220 was issued, Airbus published the modification SB1, for certain A350-941 aeroplanes, to restore two independent layers of lightning strike protection on the wing upper cover. Consequently, EASA issued AD 2022-0011 to require modification of those aeroplanes.

After EASA AD 2022-0011 was issued, Airbus published the modification SB2, for certain A350-941 and A350-1041 aeroplanes, to restore the two independent layers of lightning strike protection on the wing lower or upper cover. Consequently, EASA issued AD 2022-0250 to require modification of those aeroplanes.

Since EASA AD 2022-0250 was issued, Airbus published the inspection SB2, for certain A350-941 and A350-1041 aeroplanes, to provide inspection instructions on the upper and lower, front and rear spar corner fittings between RIB 1 and RIB 2.

For the reason described above, this AD retains the requirements of EASA AD 2022-0250, which is superseded, and requires a one-time DET of the affected areas B and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection:

(1) For Group 1 aeroplanes: At the next scheduled maintenance tank entry, or before exceeding 78 months since aeroplane date of manufacture, whichever occurs first after 27 October 2020 [the effective date of EASA AD 2020-0220], accomplish a DET of each affected area A in accordance with the instructions of the inspection SB1.

(2) For Group 4 aeroplanes: At the next scheduled maintenance tank entry, or before exceeding 78 months after the effective date of this AD, whichever occurs first, accomplish a DET of each affected area B in accordance with the instructions of the inspection SB2.

Corrective Action(s):

(3) If, during the inspection as required by paragraph (1) or (2) of this AD, as applicable, discrepancies are detected, as defined in the inspection SB1 or inspection SB2, as applicable, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the inspection SB1 or inspection SB2, as applicable.

Modification:

(4) For Group 2 aeroplanes: At the next scheduled maintenance tank entry, or before exceeding 78 months since aeroplane date of manufacture, whichever occurs first after 04 February 2022 [the effective date of EASA AD 2022-0011], apply sealant to the upper rib feet in the LH and RH wings in accordance with the instructions of the modification SB1.

(5) For Group 3 aeroplanes: At the next scheduled maintenance tank entry, or before exceeding 78 months since aeroplane date of manufacture, whichever occurs first after 28 December 2022 [the effective date of EASA AD 2022-0250], apply sealant to the lower or upper rib feet, as applicable, in the LH and RH wings in accordance with the instructions of the modification SB2.

Ref. Publications:

Airbus SB A350-57-P067 original issue dated 17 September 2020.

Airbus SB A350-57-P070 original issue dated 28 July 2021 or Revision 01 dated 14 March 2022.

Airbus SB A350-57-P072 original issue dated 24 June 2022.

Airbus SB A350-57-P073 original issue dated 24 June 2022.

Airbus SB A350-57-P074 original issue dated 24 June 2022.

Airbus SB A350-57-P091 original issue dated 30 May 2024.

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 02 July 2024 as 24-076 for consultation until 30 July 2024. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Safety 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. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS A350 XWB (1IAK), E-mail: continued-airworthiness.a350@airbus.com.