Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-089
Issued: 19 July 2024

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder’s Name: AIRBUS S.A.S.
Type/Model designation(s): A350 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]
TCDS Number(s): EASA.A.151
Foreign AD: Not applicable
Supersedure: This AD supersedes EASA AD 2022-0080 dated 09 May 2022.

ATA 57 – Wings – Centre Wing Box Fasteners – Replacement

Manufacturer(s): Airbus

Applicability: Airbus A350-941 and A350-1041 aeroplanes, manufacturer serial numbers (MSN) 0005 through 0058 (inclusive), 0060 through 0107 (inclusive), 0109 through 0130 (inclusive), 0132 through 0138 (inclusive), 0140 through 0151 (inclusive), 0153 through 0155 (inclusive), 0157 through 0165 (inclusive), 0167 through 0170 (inclusive), 0172 through 0193 (inclusive), 0195 through 0221 (inclusive), 0223 through 0241 (inclusive), 0243 through 0252 (inclusive), 0254 through 0269 (inclusive), 0271 through 0274 (inclusive), 0276 through 0282 (inclusive), 0284 through 0287 (inclusive), 0289 through 0303 (inclusive), 0305 through 0316 (inclusive), 0318 through 0352 (inclusive), 0354 through 0359 (inclusive), 0362 through 0366 (inclusive), 0368 through 0376 (inclusive), 0378 through 0383 (inclusive), 0385 through 0408 (inclusive), 0410 through 0429 (inclusive), 0431 through 0437 (inclusive), 0439, 0441 through 0443 (inclusive), 0445 through 0449 (inclusive), 0451, 0452, 0454, 0455, 0458, 0462, 0464, 0465, 0468 through 0470 (inclusive), 0472, 0474 through 0476 (inclusive), 0478, 0479, 0481, 0482, 0484, 0488, 0489, 0491, 0497, 0499, 0500, 0502, 0517, 0524, 0531, 0535 and MSN 0536.
Definitions:
For the purpose of this AD, the following definitions apply:


Affected parts: Fasteners, installed on the left-hand and right-hand centre wing box (CWB) at front and rear spar area, as specified in the SB.

Reason:
During flight and fatigue test, it was detected that some fasteners rotated inside their fastener holes of the CWB. Further investigation identified insufficient friction for the application.

This condition, if not corrected, could lead to a loss of fastener clamping and crack of nut sealant cover, possibly resulting, in case of lightning strike, in a fuel tank explosion and consequent loss of the aeroplane.

To address this potential unsafe condition, Airbus issued the SB at original issue to provide instructions to replace the affected parts and to introduce additional head nut cap protection at front and rear spar in the CWB. Consequently, EASA issued AD 2022-0080 to require replacement of the affected parts and introduction of additional head nut cap protection at front and rear spar in the CWB.

Since that AD was issued, it was determined that additional A350 MSNs are affected by the same potential unsafe condition. The SB has been revised accordingly, now at Revision 01.

For the reasons described above, this AD retains the requirements of EASA AD 2022-0080, which is superseded, and expands the Applicability to include additional A350 MSNs.

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:

(1) Within 69 months after 23 May 2022 [the effective date of EASA AD 2022-0080], replace the affected parts and apply additional head nut cap protection at front and rear spar in the CWB in accordance with the instructions of the SB.

(2) [RESERVED]

Ref. Publications:
Airbus SB A350-57-P069 original issue dated 16 November 2021, and Revision 1 dated 07 June 2024.

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

Remarks:
1. This Proposed AD will be closed for consultation on 16 August 2024.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS A350 XWB, E-mail: continued-airworthiness.a350@airbus.com.