EASA AD No.: 2018-0174



Airworthiness Directive

AD No.: 2018-0174

Issued: 14 August 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name: Type/Model designation(s):

AIRBUS A310 aeroplanes

Effective Date: 28 August 2018

TCDS Number(s): EASA.A.172

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Top Skin Stringer Joints at Rib 19 – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A310-304, A310-308, A310-322, A310-324 and A310-325 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A310-57-2108.

Affected areas: Top skin stringers 9 to 15 at the stringer joint, outboard of Rib 19, on both wings.

AFT: Average flight time (AFT), which is flight hours (FH) divided by flight cycles (FC) accumulated by an individual aeroplane, specified in hours and hundredth of an hour. Refer to the Airbus A310 Maintenance Review Board Report Section D2 to determine the AFT.



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Reason:

In response to US 14 CFR Part 26 concerning Widespread Fatigue Damage (WFD), Airbus assessed all wing structural items of the Airbus A310 design deemed potentially susceptible to WFD. The top skin stringer joints at rib 19 at level of the first fastener row were highlighted as an area of uniform stress distribution, indicating that cracks may develop in adjacent stringers at the same time, which is known as Multi Element Damage.

This condition, if not corrected, could reduce the structural integrity of the wing.

Prompted by the conclusion of WFD analysis, Airbus issued the SB to provide modification instructions. The accomplishment of this modification at the specified time will extend the life of the fastener holes in the affected area in order to reach the Limit of Validity.

For the reasons described above, this AD requires a one-time inspection of the holes in the affected area, accomplishment of applicable corrective action(s), depending on findings, and modification.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Within the compliance times as specified in Table 1 of this AD, as applicable, accomplish a rototest inspection of the holes in the affected areas in accordance with the instructions of the SB.

AFT	Compliance Time (FC or FH, whichever occurs first since aeroplane first flight)
Special (long) Range: AFT > 4.0 FH/FC	34 500 FC or 172 600 FH
Normal (short) Range:	42 100 FC or 117 800 FH

Table 1 – Rototest Inspection / Fastener Holes Modification

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, discrepancies are detected, before next flight, contact Airbus to obtain approved instructions for corrective action and accomplish those instructions accordingly.
- (3) If, during the inspection as required by paragraph (1) of this AD, no repair or discrepancies are detected, before next flight, modify the fastener holes in accordance with the instructions of the SB.
- (4) If, during the inspection as required by paragraph (1) of this AD, structure is identified within the affected area that has a repair already embodied, before next flight, contact the repair design approval holder for further approved instructions and, within the compliance time(s) specified therein, accomplish those instructions accordingly.



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Ref. Publications:

Airbus SB A310-57-2108 at original issue, dated 09 November 2017.

The use of later approved revisions of the above-mentioned document 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 26 March 2018 as PAD 18-043 for consultation until 23 April 2018. 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.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAW (Airworthiness Office), E-mail: continued.airworthiness-wb.external@airbus.com.

