



Airworthiness Directive

AD No.: 2018-0160

Issued: 25 July 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:

AIRBUS

Type/Model designation(s):

A380 aeroplanes

Effective Date: 08 August 2018

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Frame 46 Horizontal Cruciform Fittings – Inspection / Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The inspection SB: Airbus Service Bulletin (SB) A380-57-8130.

The modification SB: Airbus SB A380-57-8114.

Affected locations: Left hand (LH) and right hand (RH) horizontal cruciform fittings at frame (FR) 46.

Groups: Group 1 aeroplanes are those that do not have Airbus modification (mod) 73622 embodied in production, nor the modification SB embodied in service. Group 2 aeroplanes are those that have Airbus mod 73622 embodied in production, or the modification SB embodied in service.



Reason:

During full scale fatigue testing of the A380 aeroplane, cracks were detected on a horizontal cruciform fitting at FR46. The results of the subsequent investigations determined that the subject cracks were fatigue related and initiated by high local stress.

This condition, if not detected and corrected, could reduce the structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued the inspection SB to provide instructions to inspect the affected locations. Airbus also published the modification SB, providing instructions to modify Group 1 aeroplanes, to ease access for further inspections.

For the reasons described above, this AD requires repetitive special detailed inspection (SDI) of the affected locations and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires modification of Group 1 aeroplanes.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 and Group 2 aeroplanes: Before exceeding 7 990 flight cycles (FC) or 58 900 flight hours (FH), whichever occurs first since aeroplane first flight, and, thereafter, at intervals not to exceed 4 500 FC or 33 700 FH, whichever occurs first, accomplish an SDI of the affected locations in accordance with the instructions of the inspection SB.

Corrective Action(s):

- (2) If, during any SDI as required by paragraph (1) of this AD, any crack is found, depending on findings, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the inspection SB, or contact Airbus for approved repair instructions and, within the compliance time as specified in those instructions, accomplish the repair accordingly. If no compliance time is defined in the repair instructions, accomplish the repair before next flight.

Modification:

- (3) For Group 1 aeroplanes: If, during the first SDI as required by paragraph (1) of this AD, no crack is found, before next flight, modify the aeroplane in accordance with the instructions of the modification SB.

Terminating Action(s):

- (4) None.

Related action(s):

- (5) After the first SDI of an aeroplane as required by paragraph (1) of this AD, the accomplishment of Airworthiness Limitation Item (ALI) task 572100-00094-01A is no longer required for that aeroplane.



Ref. Publications:

Airbus SB A380-57-8114 original issue, dated 10 May 2017.

Airbus SB A380-57-8130 original issue, dated 19 April 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 12 June 2018 as PAD 18-080 for consultation until 10 July 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 - EIANA (Airworthiness Office), Telephone: +33 562 110 253; Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.

