



Airworthiness Directive

AD No.: 2018-0275

Issued: 14 December 2018

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):

A380 aeroplanes

Effective Date: 28 December 2018

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Frame 56 Vertical Cruciform Fittings – Inspection / Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers, except those on which Airbus modification (mod) 75132 or mod 75442 has been embodied in production.

Definitions:

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

The inspection SB: Airbus Service Bulletin (SB) A380-57-8136.

The applicable modification SB: Airbus SB A380-57-8137 and SB A380-57-8139 (for right-hand (RH) side), as applicable; and SB A380-57-8138 and SB A380-57-8140 (for left-hand (LH) side), as applicable.

Affected locations: Vertical cruciform fittings at fuselage (center wing box) frame (FR) 56, LH and RH sides.



Reason:

During full scale fatigue testing of the A380 aeroplane, cracks were detected on a vertical cruciform fitting at fuselage FR56. 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 inspection instructions for the affected locations. Airbus also published the modification SB, providing instructions to modify affected aeroplanes.

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

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Before exceeding 8 000 flight cycles or 59 000 flight hours, whichever occurs first since aeroplane first flight, accomplish an SDI of the affected locations in accordance with the instructions of the inspection SB.

Corrective Action(s):

- (2) If, during the SDI as required by paragraph (1) of this AD, any crack is found, before next flight, depending on crack depth, modify the aeroplane in accordance with the instructions of the applicable modification SB, as defined in Table 1 of this AD, 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.

Table 1 – Modification

Crack Depth	RH/LH	Instructions
1 mm or less	RH	SB A380-57-8137
	LH	SB A380-57-8138
4 mm or less, but more than 1 mm	RH	SB A380-57-8139
	LH	SB A380-57-8140
More than 4 mm	RH or LH	Airbus Instructions

Modification:

- (3) If, during the SDI as required by paragraph (1) of this AD, no crack or other damage is found on either RH side or LH side, or both, before next flight, modify the aeroplane in accordance with the instructions of Airbus SB A380-57-8137 (RH side) and/or SB A380-57-8138 (LH side), as applicable.



Ref. Publications:

Airbus SB A380-57-8136 original issue dated 24 October 2018.

Airbus SB A380-57-8137 original issue dated 24 October 2018.

Airbus SB A380-57-8138 original issue dated 24 October 2018.

Airbus SB A380-57-8139 original issue dated 24 October 2018.

Airbus SB A380-57-8140 original issue dated 24 October 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 14 November 2018 as PAD 18-156 for consultation until 12 December 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.

