



Airworthiness Directive

AD No.: 2015-0141R1

Issued: 05 February 2016

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: Revision 1: 12 February 2016
Original issue: 29 July 2015

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2015-0141 dated 15 July 2015.

ATA 57 – Wings – Leading Edge Shear Cleats – Inspection / Replacement

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers (MSN), except aeroplanes on which Airbus modification (mod) 73979, mod 73981 and mod 73983 have been embodied in production.

Reason:

During full scale fatigue tests, cracks were found on two intercostal shear cleats on the inboard outer fixed leading edge (IOFLE) of the wing. The affected shear cleats of each wing are located at the lower forward (FWD) intercostal to closing rib interface, and at the lower aft (AFT) intercostal to drive rib 3 inboard interface.

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

To address this unsafe condition, Airbus issued Service Bulletin (SB) A380-57-8035 to provide inspection instructions, and EASA issued AD 2012-0052 to require a one-time detailed inspection (DET) of the affected shear cleats, replacement of any cracked shear cleat(s), reporting of findings to Airbus, and accomplishment of possible follow-on instructions provided by Airbus.



EASA AD 2012-0052 was later revised to exclude aeroplanes with Airbus mods 73979, 73981 and 73983 that were modified (wing reinforced IOFLE structure) in production, and to introduce the same modifications for certain in-service aeroplanes (defined by MSN) through Airbus SB A380-57-8089 as optional terminating action.

After EASA AD 2012-0052R1 was issued, Airbus issued SB A380-57-8035 Revision 02 to introduce repetitive DET of the affected shear cleats. Consequently, EASA issued AD 2015-0141, which retained the requirements of EASA AD 2012-0052R1, which was superseded, and added repetitive DET of the affected shear cleats.

Since EASA AD 2015-0141 was issued, Airbus issued SB A380-57-8108 and SB A380-57-8110 to provide instructions for in-service (optional) modification of additional (defined by MSN) aeroplanes.

For the reasons described above, this AD is revised to introduce reference to Airbus SB A380-57-8108 and SB A380-57-8110 as optional terminating action for the repetitive inspections.

Additional Airbus SB's are still under development to make in-service installation of wing reinforced IOFLE structure available for additional aeroplanes, currently not listed by MSN in the published Airbus SBs. After those SB's are available, this AD is expected to be revised again.

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

Required as indicated, unless accomplished previously:

- (1) Before exceeding 2 500 flight cycles (FC) since first flight of the aeroplane and, thereafter, at intervals not to exceed 2 500 FC or 18 400 flight hours, whichever occurs first, accomplish a DET of the shear cleats of the lower FWD and AFT intercostals of each wing in accordance with the instructions of Airbus SB A380-57-8035 Revision 02.
- (2) If, during any DET as required by paragraph (1) of this AD, any crack is found, before next flight, replace the affected shear cleat(s) and accomplish a DET of the sub-spar, spreader plate and adjacent skin panels in accordance with the instructions of Airbus SB A380-57-8035 Revision 01 or Revision 02.
- (3) Accomplishment of a DET of the shear cleats of the lower FWD and AFT intercostals of each wing on an aeroplane, before 29 July 2015 [the effective date of the original issue of this AD] in accordance with the instructions of Airbus SB A380-57-8035 at original issue or Revision 01, is acceptable to comply with the initial DET as required by paragraph (1) of this AD for that aeroplane.
- (4) Replacement of the affected shear cleat(s) on an aeroplane, accomplished before 29 July 2015 [the effective date of the original issue of this AD] in accordance with the instructions of Airbus SB A380-57-8035 at original issue, and an additional inspection of surrounding structure in accordance with approved instructions provided by Airbus is acceptable to comply with the initial requirements of paragraph (2) of this AD for that aeroplane.



- (5) Accomplishment of corrective actions on an aeroplane, as required by paragraph (2) or (3) of this AD, or as specified in paragraph (4) of this AD, does not constitute terminating action for the repetitive DET required by this AD for that aeroplane.
- (6) Modification of an aeroplane in accordance with the instructions of Airbus SB A380-57-8089, or SB A380-57-8108, or SB A380-57-8110, depending on aeroplane MSN, constitutes terminating action for the repetitive DET as required by this AD for that aeroplane.

Ref. Publications:

Airbus SB A380-57-8035 original issue dated 16 September 2011, or Revision 01 dated 30 August 2013, or Revision 02 dated 09 June 2015.

Airbus SB A380-57-8089 original issue dated 01 October 2014.

Airbus SB A380-57-8108 original issue dated 05 October 2015.

Airbus SB A380-57-8110 original issue dated 01 October 2015.

The use of later approved revisions of these 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. The original issue of this AD was posted on 11 June 2015 as PAD 15-082 for consultation until 09 July 2015. 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. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.

