



## Airworthiness Directive

**AD No.:** 2015-0141R4

**Issued:** 13 October 2017

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 4: 13 October 2017  
 Revision 3: 30 January 2017  
 Revision 2: 27 July 2016  
 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 2015-0141R3 dated 30 January 2017. The original issue of this AD superseded EASA AD 2012-0052R1 dated 05 February 2015.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 those 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 (later revised) 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 applicable follow-on instructions provided by Airbus. That AD was later revised to reduce the Applicability by excluding certain post-mod aeroplanes, and to introduce that modification (installation of wing reinforced IOFLE structure) for certain in-service aeroplanes (defined by MSN) through Airbus SB A380-57-8089 as optional terminating action.

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 Consequently, EASA issued AD 2015-0141, retaining the requirements of EASA AD 2012-0052R1, which was superseded, and to require repetitive DET of the affected shear cleats.

After that AD was issued, Airbus developed additional modification instructions for installation of wing reinforced IOFLE structure, applicable for certain in-service aeroplanes (as defined by MSN), and issued SB A380-57-8108, SB A380-57-8109, SB A380-57-8110, SB A380-57-8131, SB A380-57-8134, SB A380-57-8135 and SB A380-57-8143 accordingly. Prompted by these developments, EASA revised AD 2015-0141 to introduce reference to these Airbus SBs as optional terminating action for the repetitive DET.

Since EASA AD 2015-0141R3 was issued, Airbus issued SB A380-57-8180 to provide instructions for in-service (optional) modification of additional (as defined by MSN) aeroplanes.

For the reason described above, this AD is revised to introduce reference to above-mentioned Airbus SBs as optional terminating action for the repetitive inspections required by this AD.

Additional Airbus SBs are still under development to make in-service installation of wing reinforced IOFLE structure available for additional aeroplanes, currently not listed by MSN in an Airbus SB identified in paragraph (6) of this AD. When other SBs become available, this AD is expected to be revised again.

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

Required as indicated, unless accomplished previously:

#### **Inspection(s):**

- (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.

#### **Corrective Action(s):**

- (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, including the associated corrective actions, in accordance with the instructions of Airbus SB A380-57-8035 Revision 01 or Revision 02.



**Credit:**

- (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.

**Terminating Action(s):**

- (5) Accomplishment of corrective action(s) 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 as 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 A380-57-8109, or SB A380-57-8110, or SB A380-57-8131, or SB A380-57-8134, or SB A380-57-8135, or SB A380-57-8143, or A380-57-8180, as applicable, depending on aeroplane MSN, constitutes terminating action for the repetitive DET 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 A380-57-8109 original issue dated 11 February 2016.

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

Airbus SB A380-57-8131 original issue dated 15 March 2016.

Airbus SB A380-57-8134 original issue dated 04 August 2016.

Airbus SB A380-57-8135 original issue dated 04 August 2016.

Airbus SB A380-57-8143 original issue dated 17 October 2016.

Airbus SB A380-57-8180 original issue dated 06 September 2017.



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](mailto: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](mailto:account.airworth-A380@airbus.com).

