Airworthiness Directive

AD No.: 2017-0009

Issued: 16 January 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: 30 January 2017

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Flaps Parts – Identification / Inspection [Improper Heat Treatment]

Manufacturer(s):
Airbus

Applicability:
Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers (MSN).

Reason:
Airbus quality controls identified that several structural parts installed on certain inboard flaps, on A380 aeroplanes, were manufactured from improperly heat-treated materials. Subsequent review identified the affected flaps and established that those flaps were installed on aeroplanes manufactured between November 2011 and February 2013. From February 2013, Airbus implemented measures into the manufacturing processes to ensure detection and prevention of installation of improperly heat-treated parts.

Detailed safety assessment was accomplished to identify the possible impact of affected parts on the aeroplane structure. The result of this structural analysis demonstrated the capability of the affected structure to sustain static limit loads, but failed to confirm that the affected structures met the certified fatigue life.

This condition, if not detected and corrected, could lead to flap failure, possibly resulting in reduced control of the aeroplane.

To address this potentially unsafe condition, Airbus issued Service Bulletin (SB) A380-57-8097 to provide inspection instructions for affected flap structural parts.

For the reasons described above, this AD requires identification of the affected inboard flaps, a one-time special detailed inspection (SDI) and, depending on findings, accomplishment of applicable corrective action(s).

Required Action(s) and Compliance Time(s):
Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, the affected inboard flaps are those listed by serial number (s/n) in Appendix 1 of this AD. Airbus SB A380-57-8097 also lists the corresponding aeroplane MSN on which these parts were installed on the production line. However, that MSN list is for information only, as it cannot be excluded that an affected inboard flap was removed from an aeroplane and later re-installed on another aeroplane.

(1) Within 3 months after the effective date of this AD, identify the s/n of the left hand (LH) and right hand (RH) inboard flaps installed on the aeroplane.

A review of aeroplane delivery and/or maintenance records is acceptable for identifying the s/n of installed flaps, provided those records can be relied upon for that purpose and the s/n of the affected parts can be positively identified from that review.

(2) For each affected inboard flap (see Note 1 of this AD), identified as required by paragraph (1) of this AD, within 6 years accumulated by the affected flap from the date as defined in Appendix 1 of this AD, accomplish an SDI of the affected flap parts, in accordance with the instructions of Airbus SB A380-57-8097.

(3) If, during the SDI as required by paragraph (2) of this AD, a part manufactured with improper heat treatment is detected, within 30 days after that SDI, contact Airbus for replacement instructions and within the compliance time indicated in those instructions, replace the affected inboard flap accordingly.

(4) From the effective date of this AD, it is allowed to install on an aeroplane an inboard flap, provided that, prior to installation, it has been determined that the part is a serviceable part as defined in Note 2 of this AD.

Note 2: For the purpose of this AD, a serviceable inboard flap is a part that is not listed by s/n in Appendix 1 of this AD, or has an s/n listed in Appendix 1 of this AD, but has passed an SDI in accordance with the instructions of Airbus SB A380-57-8097.

Ref. Publications:
Airbus SB A380-57-8097 original issue, dated 30 September 2016.

The use of later approved revisions of this 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 13 December 2016 as PAD 16-170 for consultation until 10 January 2017. The Comment Response Document can be found at http://ad.easa.europa.eu.

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.

Appendix 1 – Affected Inboard Flaps

For the purpose of this Appendix, the “start date”, used for calculating the remaining service life, is shown as day/month/year (dd/mm/yyyy), and corresponds to the date of transfer of title of the aeroplane (where the s/n of the flap was recorded as installed) which is referenced in Airbus documentation as the time of aeroplane first delivery to an operator.

s/n		Start Date
LH	RH	
TB2045	TB2044	26/09/2012
TB2047	TB2045	13/09/2012
TB2052	TB2050	31/10/2012
TB2054	TB2052	28/11/2012
TB2060	TB2057	07/02/2013
TB2063	TB2063	03/07/2013
TB2055	TB2072	10/12/2012
TB2058	TB2055	20/12/2012
TB2044	TB2059	01/10/2012
TB2048	TB2046	01/10/2012
TB2049	TB2047	12/10/2012
TB2050	TB2048	19/12/2012
TB2051	TB2049	09/11/2012
TB2053	TB2051	30/11/2012
TB2057	TB2054	28/12/2012
TB2059	TB2056	27/12/2012
TB2064	TB2064	03/05/2013
TB2062	TB2062	13/03/2013
TB2065	TB2053	12/09/2013
TB2066	TB2065	08/05/2013

s/n		Start Date
LH	RH	
TB2068	TB2061	04/06/2013
TB2056	TB2058	28/02/2013
TB2067	TB2069	19/09/2013
TB2061	TB2060	21/03/2013
TB2072	TB2067	17/06/2013
TB2078	TB2075	17/10/2013
TB2079	TB2077	29/10/2013
TB2069	TB2066	28/08/2013
TB2073	TB2074	19/09/2013
TB2075	TB2073	25/10/2013
TB2080	TB2078	29/11/2013
TB2074	TB2071	29/08/2013
TB2076	TB2076	27/11/2013
TB2081	TB2079	14/11/2013
TB2082	TB2070	27/11/2013
TB2070	TB2080	29/10/2013
TB2077	TB2081	12/12/2013
TB2083	TB2083	19/12/2013
TB2084	TB2043	19/12/2013
TB2086	TB2068	16/01/2014