

Airworthiness Directive

AD No.: 2014-0213R1

Issued: 22 April 2022

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 or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name: Type/Model designation(s):

AIRBUS A380 aeroplanes

Effective Date: Revision 1: 29 April 2022

Original issue: 03 October 2014

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2014-0213 dated 19 September 2014.

ATA 53 – Fuselage – Section 19 Upper Cross Fitting Upper Beam Inner Cap Joints – Inspection

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) 77140 has been embodied in production.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-53-8074.

The applicable TD: Airbus Technical Disposition (TD) TD_G1_S4_04931_2013 issue C, TD G1 S4 05440 2013 Issue A, or TD G1 S4 05583 2013 issue A, as applicable.

Reason:

A refined analysis in correlation with the results of a fatigue test accomplished on the A380 frame (FR) 108 upper beam identified a structural area, for which the inspection threshold and intervals



published in the applicable Airworthiness Limitations Section (ALS) Part 2 must be reduced to retain the structural integrity of the affected area.

Failure to accomplish the affected inspections within the reduced threshold and intervals could result in an unsafe condition.

To address this potentially unsafe condition, Airbus issued the SB to provide the relevant inspection instructions.

Consequently, EASA issued AD 2014-0213 to require repetitive special detailed inspections (SDI) of the Section 19 upper cross fitting upper beam inner cap joints, both left--hand (LH) and right--hand (RH) sides, and, depending on findings, accomplishment of applicable corrective action(s). Accomplishment of these inspections also cancels the need for the affected A380 ALS Part 2 tasks.

Since that AD was issued, Airbus developed mod 77140 (increasing thicknesses and rivets diameters of some Section 19 frames and introduction of new carbon-fibre-reinforced polymers) and implemented this on the production line.

For the reason described above, this AD is revised to exclude post-mod 77140 aeroplanes from the Applicability. This revised AD also contains some editorial changes, introducing the latest AD writing standards, without affecting the requirements.

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) Within the compliance time as defined in Table 1 of Appendix 1 of this AD, and, thereafter, at intervals not to exceed the values as defined in Table 2 or Table 3 of Appendix 1 of this AD, as applicable, accomplish the actions as specified in either paragraph (1.1) or paragraph (1.2) of this AD on the LH and RH sides of the Section 19 upper cross fitting upper beam inner cap joint in accordance with the instructions of the SB.
 - (1.1) High Frequency Eddy-Current (HFEC) inspection of the upper beam and extension beam inner cap area at cross fitting joint positioned forward of FR108.
 - (1.2) Rototest of the sixth fastener hole of the lower attachment row at the upper cross fitting and the upper forward beam inner cap forward of FR108 area (refer to Figure A-SSAAA of the SB) and an HFEC of the rest of locations.

Corrective Action(s):

(2) If, during accomplishment of any rototest as specified in paragraph (1.2) of this AD, the first oversized fastener installation has to be exceeded at location of the sixth fastener hole of the lower attachment row at the upper cross fitting and the upper forward beam inner cap positioned forward of FR108 area, before next flight, contact Airbus for approved corrective action instructions and accomplish those instructions accordingly.



(3) If, during any HFEC inspection or rototest as required by paragraph (1) of this AD, any damage is detected, before next flight, contact Airbus for approved repair instructions and, within the compliance time defined in those instructions, accomplish the repair accordingly.

Credit:

(4) Inspection(s) on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of the applicable TD, as defined in this AD, are acceptable to comply with the initial action as required by paragraph (1) of this AD for that aeroplane. After the effective date of this AD, all actions must be accomplished in accordance with the instructions of the SB.

ALS:

(5) Compliance with the requirements of this AD cancels the need to accomplish Airworthiness Limitation Items task 535100-00012-01A and task 535100-00026-01A as detailed in A380 ALS Part 2.

Terminating Action:

(6) None.

Ref. Publications:

Airbus SB A380-53-8074 original issue dated 30 July 2014, or Revision 01 dated 05 February 2015, or Revision 02 dated 01 April 2020, or Revision 03 dated 09 September 2021.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Airbus TD_G1_S4_04931_2013 Issue C dated 23 October 2013.

Airbus TD_G1_S4_05440_2013 Issue A dated 06 November 2013.

Airbus TD_G1_S4_05583_2013 issue A dated 21 November 2013.

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 02 September 2014 as PAD 14-134 for consultation until 16 September 2014. No comments were received during the consultation period.
- 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 <u>EU aviation safety reporting system</u>. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be



installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. 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

Table 1 – Inspection Threshold

Aeroplane MSN	Compliance Time
0005, 0007, 0009, 0011, 0013, 0015, 0017, 0020, 0022, 0023, 0025, 0026, 0027, 0028, 0029, 0030, 0033, 0046 and 0051	Within 28 000 FH or 3 800 FC, whichever occurs first after the aeroplane first flight, but not later than 24 months after 03 October 2014 [the effective date of the original issue of this AD]
0006, 0008, 0010, 0012, 0016, 0019 and 0021	Within 31 200 FH or 3 500 FC, whichever occurs first after the aeroplane first flight, but not later than 24 months after 03 October 2014 [the effective date of the original issue of this AD]
All other MSN	Within 23 500 FH or 3 200 FC, whichever occurs first after the aeroplane first flight

Table 2 – Repetitive inspection for aeroplanes which have been previously inspected as specified in paragraph (1.1) of this AD

Aeroplane configuration	Interval (FH or FC, whichever occurs first)
Aeroplanes on which Airbus mod 64090 has not been embodied in production, and aeroplanes on which fastener ASNA2392-8-07 has been installed at the opportunity of any previous inspection as specified in paragraph (1.2) of this AD	Within 9 200 FH or 1 200 FC
Aeroplanes on which Airbus mod 64090 has been embodied in production, and aeroplanes on which fastener EN6115K8-7 or EN6115K8X7 has been installed at the opportunity of any previous inspection as specified in paragraph (1.2) of this AD	Within 8 000 FH or 1 050 FC

Table 3 – Repetitive inspections for aeroplanes which have been previously inspected as specified in paragraph (1.2) of this AD

Interval (FH or FC, whichever occurs first)	
Within 13 300 FH or 1 800 FC	