Airworthiness Directive

AD No.: 2020-0051

Issued: 11 March 2020

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):

A300-600 aeroplanes

Effective Date: 25 March 2020

TCDS Number(s): EASA.A.172

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2016-0249 dated 14 December 2016, including its correction dated 10 January 2017.

ATA 53 – Fuselage – Upper Frame Feet Fittings – Modification

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A300B4-603, A300B4-605R, A300B4-620, A300B4-622, A300B4-622R, A300C4-605R variant F, A300C4-620, A300F4-605R and A300F4-622R aeroplanes, all manufacturer serial numbers.

Definitions:

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

AFT: Average flight time (AFT), determined by dividing the accumulated flight hours (FH, counted from take-off up to landing) by the number of accumulated flight cycles (FC). Short range (SR) aeroplanes are those with an AFT equal to or less than 1.5 FH per FC. Long range (LR) aeroplanes are those with an AFT higher than 1.5 FH per FC.

Groups: Group 1 aeroplanes are those which do not have Airbus modification (mod) 12168 or Airbus Service Bulletin (SB) A300-53-6125 (any Revision) embodied. Group 2 aeroplanes are those which have Airbus mod 12168 or Airbus SB A300-53-6125 (any Revision) embodied.

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Reason:

During inspection of an A300-600 aeroplane in accordance with Airworthiness Limitation Item (ALI) 53-15-54, Frames (FR) 43, FR44, FR45 and FR46 were found cracked between stringer (STGR) 24 and STGR 30 on the aeroplane right hand side. FR45 was also found cracked on the aeroplane left hand side.

This condition, if not corrected, could reduce the structural integrity of the fuselage.

To address this potential unsafe condition and improve the fatigue life of the upper frame feet fittings, Airbus issued SB A300-53-6125 to provide instructions for expansion of the most sensitive fastener holes between FR41 and FR46. DGAC France issued AD F-2004-002 (EASA approval 2003-2108) to require the structural modification defined in SB A300-53-6125 Revision 03 (Airbus mod 12168).

AD F-2004-002 was subsequently superseded by EASA AD 2013-0295 to amend the inspection programme in this area, as provided in SB A300-53-6122, which was replaced by ALI task 531558, published in the Airbus A300-600 ALS Part 2 Revision 01 dated 07 August 2015.

After that AD was issued, a new investigation was conducted in the frame of the Widespread Fatigue Damage study. Airbus revised the thresholds for the accomplishment of the instructions defined in SB A300-53-6125 and issued SB A300-53-6178 to provide modification instructions to improve the fatigue life of upper frame feet fittings on aeroplanes on which Airbus mod 12168 or Airbus SB A300-53-6125 was embodied. Consequently, EASA AD 2016-0249 was issued, superseding EASA AD 2013-0295, and requiring modification of the upper frame feet fittings from FR41 to FR46.

Since that AD was issued, Airbus SB A300-53-6178 was revised to clarify that a rotating probe inspection has to be performed before oversizing of the open-holes.

For the reason described above, this AD retains the requirements of EASA AD 2016-0249, which is superseded, and requires modification in accordance with Airbus SB A300-53-6178 at Revision 01. For aeroplanes modified in accordance with Airbus SB A300-53-6178 at original issue, this AD requires additional work, consisting in determining whether or not a rotating probe inspection was performed before oversizing of the open-holes and, depending on findings, additional corrective action(s).

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

Required as indicated, unless accomplished previously:

Modification:

(1) For Group 1 aeroplanes: Before exceeding the thresholds as specified in Table 1 of this AD, as applicable, modify the upper frame feet fittings in accordance with the instructions of Airbus SB A300-53-6125 Revision 04.

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Table 1 – Modification SB A300-53-6125

AFT	Compliance Time (FC or FH, whichever occurs first since first flight)
LR	10 200 FC or 22 100 FH
SR	11 000 FC or 16 600 FH

(2) For Group 2 aeroplanes: Within the thresholds as specified in Table 2 of this AD, as applicable depending on aeroplane configuration, modify the upper frame feet fittings in accordance with the instructions of Airbus SB A300-53-6178 Revision 01.

Table 2 – Modification SB A300-53-6178

Aeroplane Configuration	Compliance Time (FC or FH, whichever occurs first)
Post-mod 12168	27 100 FC or 47 300 FH since aeroplane first flight
Post-SB A300-53-6125	27 100 FC or 47 300 FH after SB A300-53-6125 embodiment

(3) For Group 2 aeroplanes that have been modified, before the effective date of this AD, in accordance with the instructions of Airbus SB A300-53-6178 at original issue, within 3 800 FC or 6 200 FH, whichever occurs first after embodiment of that SB, accomplish the additional work as specified in and in accordance with the instructions of Airbus SB A300-53-6178 at Revision 01.

Additional Post-Modification Actions:

(4) No later than 6 months (estimated by projection of aeroplane usage) prior to exceeding 24 500 FC or 42 700 FH, whichever occurs first, after Airbus SB A300-53-6178 embodiment (at any revision), contact Airbus for additional work instructions and, within the compliance time(s) stated therein, accomplish those instructions accordingly.

Ref. Publications:

Airbus SB A300-53-6125 original issue dated 08 November 2000, or Revision 01 dated 13 June 2003, or Revision 02 dated 25 February 2005, or Revision 03 dated 13 September 2011, or Revision 04 dated 17 March 2015.

Airbus SB A300-53-6178 original issue dated 17 March 2015, or Revision 01 dated 20 September 2019.

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.

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2. This AD was posted on 06 February 2020 as PAD 20-028 for consultation until 05 March 2020. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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 – EIAW (Airworthiness Office)
E-mail: continued.airworthiness-wb.external@airbus.com.

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