

Airworthiness Directive

AD No.: 2021-0288

Issued: 21 December 2021

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: Type/Model designation(s):

AIRBUS A300 and A300-600 aeroplanes

Effective Date: 04 January 2022

TCDS Number(s): EASA.A.172

Foreign AD: Not applicable

Supersedure: This AD supersedes DGAC France AD 98-028-242(B) dated 28 January 1998.

ATA 53 - Fuselage - Frame 40 Rear Fitting at Stringer 27 - Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A300 B2-1C, A300 B2-203, A300 B2K-3C, A300 B4-103, A300 B4-120, A300 B4-203, A300 B4-220, A300 B4-2C, A300 C4-203 and A300 F4-203 aeroplanes, all manufacturer serial numbers (MSN); and

A300 B4-603, A300 B4-605R, A300 B4-622, A300 B4-622R, A300 C4-620 and A300 F4-605R aeroplanes, all MSN, except those on which Airbus modification (mod) 11525 has been embodied in production.

Definitions:

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

The applicable SB: Airbus Service Bulletin (SB) A300-53-0332 Revision 01, or SB A300-57-6075 Revision 02, as applicable.

Affected area: Profile of fuselage frame (FR) 40 rear fitting at stringer 27, both left-hand (LH) and right-hand (RH) sides.



AFT: Average flight time (AFT), which is 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 are A300 aeroplanes.

Group 2 are A300-600 aeroplanes which do not have Airbus mod 11557 or Airbus SB A300-57-6076 (any revision) embodied, and on which the profile of FR40 in the affected area has not been repaired in accordance with the instructions of the applicable SB (at any revision).

Group 3 are A300-600 aeroplanes which do not have Airbus mod 11557 or Airbus SB A300-57-6076 (any revision) embodied, and on which the profile of FR40 in the affected area has been repaired in accordance with the instructions of the applicable SB (at any revision).

Group 4 are A300-600 aeroplanes which have Airbus mod 11557 or Airbus SB A300-57-6076 (any revision) embodied.

Reason:

Routine inspections on an in-service aeroplane revealed the presence of cracks on fuselage FR40 rear fitting, at stringer 27, LH and RH sides. Stress concentration in this area, together with a significant change in the structural geometry, were considered to be at the origin of this cracking, which was confirmed through a sampling inspection programme.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To initially address this potential unsafe condition, Airbus established a high frequency eddy current (HFEC) inspection program for A300 aeroplanes and published SB A300-53-0332 (later revised). A similar HFEC inspection program was defined for A300-600 aeroplanes and published through SB A300-57-6075 (later revised). DGAC France issued AD 98-028-242(B) accordingly to require repetitive HFEC inspections of the affected area, as defined in this AD, on both A300 and A300-600 aeroplanes. At the same time, Airbus introduced mod 11557 in production and published the associated SB A300-57-6076 for improvement of the rear fitting at stringer 27 on A300-600 aeroplanes.

Since that AD was issued, the AFT of the A300-600 fleet has changed. It was determined that the existing inspection threshold and interval values must be modified, and that repetitive inspections of the affected area must be accomplished following the embodiment of any corrective action. Consequently, Airbus published SB A300-57-6075 Revision 02 to provide amended instructions for inspection.

For the reasons described above, this AD retains the requirements of DGAC France AD 98-028-24F2(B), which is superseded, and requires inspections of the affected area on A300-600 aeroplanes at the new intervals.



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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 aeroplanes: Within the compliance time and, thereafter, at intervals not to exceed the values as specified in the applicable SB, as applicable, depending on aeroplane model and AFT, accomplish an HFEC inspection of the affected area in accordance with the instructions of the applicable SB.
- (2) For Group 2 aeroplanes: Within the compliance time as specified in Table 1 of this AD, as applicable, or within 3 months after the effective date of this AD (without exceeding the limits of SB 57-6075R01), whichever occurs later, and, thereafter, at intervals not to exceed the values as specified in Table 1 of this AD, as applicable, accomplish an HFEC inspection of the affected area in accordance with the instructions of the applicable SB.

Compliance Time Interval

(FC or FH, whichever occurs first since last inspection)

LR Within 1 200 FC or 2 500 FH

SR Within 1 300 FC or 1 900 FH

Unterval

(FC or FH, whichever occurs first since last inspection)

Within 1 200 FC or 2 500 FH

Within 1 300 FC or 1 900 FH

Table 1 – Inspections / Group 2

(3) For Group 3 aeroplanes: Within the compliance time as specified in Table 2 of this AD, as applicable, or within 3 months after the effective date of this AD (without exceeding the limits of SB 57-6075R01), whichever occurs later, and, thereafter, at intervals not to exceed the values as specified in Table 2 of this AD, as applicable, accomplish an HFEC inspection of the affected area in accordance with the instructions of the applicable SB.

AFT	Compliance Time (whichever occurs first since FR40 profile modification in accordance with the applicable SB)	Interval (FC or FH, whichever occurs first since last inspection)
LR	Within 23 700 FC or 51 100 FH	Within 2 200 FC or 4 900 FH
SR	Within 25 500 FC or 38 300 FH	Within 2 400 FC or 3 700 FH

Table 2 - Inspections / Group 3

(4) For Group 4 aeroplanes: Within the compliance time as specified in Table 3 of this AD, as applicable, or within 3 months after the effective date of this AD (without exceeding the limits of SB 57-6075R01), whichever occurs later, and, thereafter, at intervals not to exceed the values as specified in Table 3 of this AD, as applicable, accomplish an HFEC inspection of the affected area in accordance with the instructions of the applicable SB.



Table 3 – Inspe	ctions / Group 4
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	Compliance Time	Interval
AFT	(whichever occurs first since	(FC or FH, whichever occurs first
	SB A300-57-6076 embodiment)	since last inspection)
LR	Within 31 700 FC or 68 400 FH	Within 2 200 FC or 4 900 FH
SR	Within 34 200 FC or 51 300 FH	Within 2 400 FC or 3 700 FH

Corrective Action(s):

(5) If, during any inspection as required by paragraph (1), (2), (3) or (4) of this AD, as applicable, discrepancies are detected, as defined in the applicable SB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable SB.

Credit:

(6) Inspection(s) and corrective action(s), accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A300-53-0332 at original issue or SB A300-57-6075 at original issue or Revision 01, are acceptable to comply with the initial requirements of paragraphs (1), (2), (3), (4) and (5) of this AD for that aeroplane.

Terminating Action:

(7) None.

Ref. Publications:

Airbus SB A300-53-0332 original issue dated 24 November 1997, or Revision 01 dated 31 January 2003.

Airbus SB A300-57-6075 original issue dated 24 November 1997, or Revision 01 dated 20 February 2003, or Revision 02 dated 13 January 2021.

Airbus SB A300-57-6076 original issue dated 24 November 1997, or Revision 01 dated 04 July 2000.

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.
- 2. This AD was posted on 22 November 2021 as PAD 21-170 for consultation until 20 December 2021. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed (zipped) file attached to the record for this AD.
- 3. 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</u> reporting system. 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 – IIAW (Airworthiness Office),

E-mail: continued.airworthiness-wb.external@airbus.com.