



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 18-170**

**Issued: 11 December 2018**

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

## Design Approval Holder's Name:

AIRBUS

## Type/Model designation(s):

A300, A300-600 and A300-600ST aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.A.172 and EASA.A.014

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes DGAC France AD F-1998-481-270R2 dated 12 November 2003 and DGAC France AD F-2000-038-032R1 dated 21 January 2004.

## ATA 53 – Fuselage – Aft Fitting of Frame 40 – Inspection

### Manufacturer(s):

Airbus, formerly Airbus Industrie

### Applicability:

Airbus A300 B1, A330 B2-1A, A300 B2-1C, A300 B2K-3C, A300 B2-202, A300 B2-203, A300 B2-320, A300 B4-2C, A300 B4-102, A300 B4-103, A300 B4-120, A300 B4-203, A300 B4-220, A300 C4-203, A300 F4-203, A300 B4-601, A300 B4-603, A300 B4-620, A300 B4-622, A300 B4-605R, A300 B4-622R, A300 C4-605R variant F, A300 C4-620 and A300F4-608ST aeroplanes, all manufacturer serial numbers, and

A300 F4-605R aeroplanes, all manufacturer serial numbers, on which AIRBUS production modification (mod.) No. 12170 has not been embodied.

### Definitions:

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

**The applicable SB:** Airbus Service Bulletin (SB) A300-53-0296 Revision 01, or SB A300-53-6048 Revision 05, or SB A300-53-9017 Revision 02, as applicable.



**Affected area:** The profile of frame (FR) 40 aft fittings at stringers 33 both left hand and right hand side of the fuselage.

**AFT:** The average flight time (AFT) is the ratio of the flight hours (FH), specified in hours and hundredth of hours, divided by the flight cycles (FC), counted from first flight for selecting the inspection threshold and from the last inspection for selecting the inspection interval.

**Group:**

Group 1 are A300 aeroplanes.

Group 2 are A300-600 and A300-600ST aeroplanes on which Airbus mod. 10430 (validated by Airbus mod. 19020 for A300-600ST) was not embodied and for which the profile of FR40 aft fittings was not modified in accordance with the instructions of the applicable SB (at previous revision).

Group 3 are A300-600 and A300-600ST aeroplanes on which Airbus mod. 10430 (validated by Airbus mod. 19020 for A300-600ST) was not embodied and for which the profile of FR40 aft fittings was modified in accordance with the instructions of the applicable SB (at previous revision).

Group 4 are A300-600 and A300-600ST aeroplanes on which Airbus mod. 10430 (validated by Airbus mod. 19020 for A300-600ST) was embodied.

**Reason:**

After embodiment of Airbus SB A300-53-0161, cracks were reported on three aeroplanes. Investigations highlighted that these cracks were caused by a local stress concentration at FR40 upper flange run-out, where the profile of the FR40 changes at the center wing box connection.

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

Subsequently to this finding, Airbus established a High Frequency Eddy Current (HFEC) inspection program for A300 aeroplanes implemented in service through Airbus SB A300-53-0296. In the same time, Airbus launched mod. 10430 in production line associated to SB A300-53-6048 for the retrofit campaign for A300-600. The same HFEC inspection program was defined for A300-600 aeroplanes and included in SB A300-53-6048 instructions.

DGAC France AD F-1998-481-270 was published to mandate the embodiment of these two SBs.

DGAC France AD F-2000-038-032 was also published later to mandate Airbus SB A300-53-9017 applicable to A300-600ST aeroplanes.

Since DGAC France AD F-1998-481-270 and F-2000-038-032 were issued, material data used in the frame of fatigue and damage tolerance analysis has been changed. It was determined that the existing threshold and interval values must be reduced for A300-600 and A300-600ST fleet. Consequently, Airbus revised SB A300-53-6048 to revision 05 and SB A300-53-9017 to revision 02 to take into account the new thresholds and intervals.



For the reasons described above, this AD retains the requirement of DGAC France AD F-1998-481-270 and F-2000-038-032, which are superseded, and introduces new thresholds and intervals for A300-600 and A300-600ST aeroplanes.

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

Required as indicated, unless accomplished previously:

#### Modification:

- (1) For group 1, within the threshold defined in the applicable SB, accomplish the modification of the profile of FR40 aft fittings in accordance with the instructions of the applicable SB.
- (2) For group 2, before next flight after the effective date of this AD, contact Airbus for approved instructions and accomplish those instructions accordingly.

#### Inspection(s):

- (3) For group 1, within the compliance time defined in the applicable SB, accomplish the HFEC inspection of the affected area in accordance with the instructions of the applicable SB.
- (4) For group 3 and group 4, within the compliance time defined in Table 1 of this AD or within the 'grace periods' (see Note 1 of this AD) as defined in the applicable inspection SB, whichever occurs later, and, thereafter, at intervals not to exceed the values defined in Table 2 of this AD, as applicable, accomplish the HFEC inspection of the affected area in accordance with the instructions of the applicable SB.

Table 1: Inspection thresholds

AFT	Group 3 aeroplanes	Group 4 aeroplanes
$\geq 1,5$	Within the compliance time defined in the applicable SB.	Within 13 900 FC or 30 000 FH, whichever occurs first since aeroplane first flight.
$< 1,5$	Within the compliance time defined in the applicable SB.	Within 15 000 FC or 22 500 FH, whichever occurs first since aeroplane first flight.

Table 2: Inspection interval

AFT	Intervals
$\geq 1,5$	Within 7 100 FC or 15 300 FH, whichever occurs first since last inspection.
$< 1,5$	Within 7 600 FC or 11 500 FH, whichever occurs first since last inspection.

Note 1: The 12 months grace period, as defined in paragraph 1.E.(2) of the applicable inspection SB, has to be counted from the effective date of this AD, without exceeding the inspection threshold and interval defined in Airbus SB A300-53-6048 Revision 01 or SB A300-53-9017 original issue, as applicable.



**Corrective Action(s):**

- (5) If, during any inspection as required by paragraph (3) of this AD, a crack is detected, before next flight, accomplish corrective actions in accordance with the instruction of applicable SB, or contact Airbus to obtain approved instructions for corrective action and accomplish those instructions accordingly.
- (6) If, during any inspection as required by paragraph (4) of this AD, a crack is detected, before next flight, contact Airbus to obtain approved instructions for corrective action and accomplish those instructions accordingly.

**Reporting:**

- (7) If, during any inspection as required by paragraph (3) or (4) of this AD, a crack is found, within 10 days after the inspection, report inspection results to Airbus. Using the inspection report in accordance with the instructions of the applicable SB is acceptable to comply with this requirement.
- (8) If, during any inspection as required by paragraph (3) or (4) of this AD, no cracks are found, within 30 days after the inspection, report inspection results to Airbus. Using the inspection report in accordance with the instructions of the applicable SB is acceptable to comply with this requirement.

**Ref. Publications:**

Airbus SB A300-53-0296 Revision 01 dated 30 September 1998.

Airbus SB A300-53-6048 Revision 05 dated 04 October 2018.

Airbus SB A300-53-9017 Revision 02 dated 24 September 2018.

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

**Remarks:**

- 1. This Proposed AD will be closed for consultation on 08 January 2019.
- 2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
- 3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).
- 4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – EIAW (Airworthiness Office)  
E-mail: [continued.airworthiness-wb.external@airbus.com](mailto:continued.airworthiness-wb.external@airbus.com).

