

# **Airworthiness Directive**

AD No.: 2019-0044

**Issued:** 07 March 2019

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 A300-600 and A300-600ST aeroplanes

Effective Date: 21 March 2019

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

Foreign AD: Not applicable

Supersedure: This AD supersedes DGAC France AD 1998-040-012(B)R1 dated 24 January 2001

and AD F-1995-063-177R5 dated 12 November 2003.

# ATA 57 – Wings – Centre Section Frame 40 Forward Fitting Radius at Tension Bolt Junction – Inspection / Repair

### Manufacturer(s):

Airbus, formerly Airbus Industrie

#### **Applicability:**

Airbus A300-600 aeroplanes, all certified models except A300F4-622R, all manufacturer serial numbers (MSN), except those that have embodied Airbus modification 12170 in production; and A300F4-608ST aeroplanes, all MSN.

#### **Definitions:**

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

**The applicable SB**: Airbus Service Bulletin (SB) A300-57-6062 Revision 05, and SB A300-57-9036 original issue, as applicable.

**Affected area**: Frame 40 Forward Fitting Radius at Tension Bolt Junction.

**AFT:** Average flight time (AFT) can be determined by dividing the flight hours (FH), specified in hours and hundredth of hours, by flight cycles (FC), counted from first flight, unless otherwise stated, for



selecting the inspection threshold (TH) and from the last inspection for selecting the inspection interval.

#### **Groups:**

- Group 1 aeroplanes are A300-600 and A300-600ST aeroplanes not repaired in accordance with Airbus SB A300-57-6084 (at any Revision).
- Group 2 aeroplanes are A300-600 aeroplanes repaired in accordance with Airbus SB A300-57-6084 (at any Revision).

#### Reason:

During sampling inspection on A300 fleet, cracks were reported in the radius of frame (FR) 40, adjacent to the tension bolts at the centre wing/outer wing.

This condition, if not detected and corrected, could lead to a reduction of the residual strength of the structure and lead to extensive repairs.

Prompted by these findings and to address this potential unsafe condition on A300-600 fleet, Airbus issued SB A300-57-6062 to provide inspection instructions. Consequently, DGAC France published AD 95-063-177 for A300-600 aeroplanes (except A300F4-622R), followed by AD 98-040-012 for A300-600ST aeroplanes (both ADs later revised) to require initial and repetitive ultrasonic test (UT) and high-frequency eddy current (HFEC) inspections and, depending on findings, accomplishment of applicable corrective action(s). Depending on a crack finding, Airbus SB A300-57-6062 instructs to accomplish a repair per SB A300-57-6084 to restore FR40 strength capability. That SB does not apply to A300-600ST aeroplanes.

Since DGAC France AD 1998-040-012(B) R1 and AD F-1995-063-177 R5 (EASA approval 2003-662) were issued, material data used in the frame of fatigue and damage tolerance analysis have been changed. It was determined that the existing threshold and interval values must be reduced. Consequently, Airbus revised SB A300-57-6062 to Revision 05 to take into account the new thresholds and intervals. Airbus also issued SB A300-57-9036, specifically for A300-600ST aeroplanes.

For the reasons described above, this AD retains the requirements of DGAC France AD 1998-040-012(B) R1 and AD F-1995-063-177 R5, which are superseded, and introduces new thresholds and intervals for the required inspections.

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

Required as indicated, unless accomplished previously:

#### Inspection(s):

- (1) For Group 1 aeroplanes: Within the applicable thresholds defined in Table 1 or Table 2 of this AD, as applicable, accomplish a UT inspection and, depending on findings, an HFEC inspection, and, thereafter, at intervals not exceeding the values defined in Table 4 of this AD, inspect the affected area (UT or HFEC method) in accordance with the instructions of the applicable SB.
- (2) For Group 2 aeroplanes: Within the applicable thresholds defined in Table 2 or Table 3 of this AD, as applicable, and thereafter, at intervals not exceeding the values defined in Table 4 of this



AD, accomplish an HFEC inspection of the affected area in accordance with the instructions of the applicable SB.

Table 1 – Inspection Thresholds for Group 1 aeroplanes that have never been inspected per Airbus SB A300-57-6062 Revision 02, 03 or 04

Compliance Times (whichever occurs later, A or B)				
<b>AFT</b> ≥ 1.5		AFT < 1.5		
	FC or FH, whichever occurs t	first since aeroplane first flight		
A	Before exceeding 7 600 FC or 16 400 FH	Before exceeding 8 200 FC or 12 300 FH		
В	Within 12 months after the effective date of this AD, without exceeding the inspection intervals as defined in Airbus SB A300-57-6062 Revision 02, 03 or 04			

Table 2 – Inspection Thresholds for Group 1 aeroplanes that have been inspected per Airbus SB A300-57-6062 Revision 02, 03 or 04; and for Group 2 aeroplanes that have been inspected per Airbus SB A300-57-6062 Revision 02, 03 or 04, since SB A300-57-6084 embodiment

Compliance Times (whichever occurs later A or B)					
<b>AFT</b> ≥ <b>1.5</b>		AFT < 1.5			
A	FC or FH, whichever occurs first since last inspection per Airbus SB A300-57-6062 Revision 02, 03 or 04				
	UT: Within 2 800 FC or 6 000 FH	UT: Within 3 000 FC or 4 500 FH			
	HFEC: Within 1 300 FC or 2 800 FH	HFEC: Within 1 400 FC or 2 100 FH			
В	UT or HFEC: Within 12 months after the effective date of this AD, without exceeding the inspection intervals as defined in Airbus SB A300-57-6062 Revision 02, 03 or 04				

Table 3 – Inspection Thresholds for Group 2 aeroplanes that have never been inspected per Airbus SB A300-57-6062 Revision 02, 03 or 04, since SB A300-57-6084 embodiment

Compliance Times (whichever occurs later, A or B)					
AFT ≥ 1.5		AFT < 1.5			
	FC or FH, whichever occurs first a	fter SB A300-57-6084 embodiment			
A	Within 11 100 FC or 23 900 FH	Within 11 900 FC or 17 900 FH			
В	Within 12 months after the effective date of this AD, without exceeding the inspection intervals as defined in Airbus SB A300-57-6062 Revision 02, 03 or 04				

Table 4 – Inspection Methods and Intervals

Compliance Times  (not to exceed, FC or FH, whichever occurs first since last inspection)				
AFT ≥ 1.5		AFT < 1.5		
UT	2 800 FC or 6 000 FH	3 000 FC or 4 500 FH		
HFEC	1 300 FC or 2 800 FH	1 400 FC or 2 100 FH		

## Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any crack or damage is detected within the limits defined in the applicable SB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable SB.
- (4) If, during any inspection as required by paragraphs (1) or (2) of this AD, any crack or damage is detected beyond the limits defined in the applicable SB, before next flight, contact Airbus for approved instructions and accomplish those instructions.

#### Reporting:

(5) Within 30 days after each inspection as required by this AD, report all inspection results (including no findings) to Airbus.

#### Credit:

(6) Inspection(s) and corrective action(s) on an aeroplane, accomplished before the effective date of this AD, in accordance with the instructions of Airbus SB A300-57-6062 Revision 02, or Revision 03, or Revision 04, is acceptable to comply with the initial requirements of paragraphs (1), (2), (3) and (4) of this AD for that aeroplane.

## **Terminating Action:**

(7) None.

#### **Ref. Publications:**

Airbus SB A300-57-6062 Revision 02 dated 29 January 1997, or Revision 03 dated 26 October 2000, or Revision 04 dated 12 November 2002, and Revision 05 dated 03 October 2018.

Airbus SB A300-57-9036 original issue dated 03 October 2018.

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

#### **Remarks:**

 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.



2. This AD was posted on 12 November 2018 as PAD 18-152 for consultation until 10 December 2018. 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: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.
- 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 <a href="EU aviation safety reporting system">EU aviation safety reporting system</a>.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAW (Airworthiness Office),

E-mail: <a href="mailto:continued.airworthiness-wb.external@airbus.com">continued.airworthiness-wb.external@airbus.com</a>.

