

Airworthiness Directive

AD No.: 2017-0210

Issued: 24 October 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

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

AIRBUS A300-600 and A300-600ST aeroplanes

Effective Date: 07 November 2017

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

Foreign AD: Not applicable

Supersedure: This AD supersedes DGAC France AD F-2005-124 (EASA approval 2005-6071)

dated 20 July 2005, and EASA AD 2016-0198 dated 06 October 2016.

ATA 57 – Wings – Centre Wing Box Frame 47 Angle Fittings – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A300 B4-603, A300 B4-620, A300 B4-605R, A300 B4-622, A300 B4-622R, A300 C4-605R variant F, A300 C4-620 and A300 F4-605R aeroplanes, all manufacturer serial numbers (MSN), except aeroplanes on which Airbus modification (mod) 12171 or mod 12249 has been embodied in production, or on which Airbus Service Bulletin (SB) A300-57-6069 has been embodied in service; and

A300 F4-608ST aeroplanes, all MSN.

Reason:

Prompted by cracks found on the Frame (FR) 47 angle fitting, Airbus issued SB A300-57-6049, SB A300-57-6050, and SB A300-57-6086.

These cracks, if not detected and corrected, could affect the structural integrity of the centre wing box (CWB) of the aeroplane.



Consequently, DGAC France published AD 94-241-170, AD 1999-147-279, AD 2000-533-328 and AD F-2004-159 (EASA approval 2004-9779), each AD superseding the previous one, to require repetitive high frequency eddy current (HFEC) rotating probe inspections of the FR47 internal lower angle fitting.

After DGAC France AD F-2004-159 was issued, cracks were reportedly found on the horizontal flange of the FR47 internal corner angle fitting during accomplishment of routine maintenance structural inspection and modification in accordance with the instructions of Airbus SB A300-57-6050. Prompted by these findings, Airbus reviewed and amended the inspection programme for the internal lower angle fitting flange (horizontal face).

Consequently, EASA issued AD 2012-0092, retaining the requirements of DGAC France AD F-2004-159, which was superseded, and requiring additional repetitive inspections of the CWB lower panel through the ultrasonic method and, depending on findings, re-installation of removed fasteners in transition fit instead of interference.

In addition, DGAC France had previously issued AD F 2005-124 (EASA approval 2005-6071) to require the same inspections for A300 F4-608ST aeroplanes, in accordance with Airbus SB A300-57-9001 and SB A300-57-9002.

Following the discovery of numerous cracks during the accomplishment of SB A300-57-6049 and SB A300-57-6089 inspections, Airbus developed in a first step a new (recommended) modification (Airbus SB A300-57-6113) and defined, for post-mod aeroplanes, new inspections, and published SB A300-57-6119, which included new inspection methods (ultrasonic/radiographic) with new inspection thresholds and intervals.

Consequently, EASA issued AD 2016-0198, retaining the requirements of EASA AD 2012-0092, which was superseded, to require repetitive inspections for post-SB A300-57-6113 aeroplanes.

Since EASA AD 2016-0198 was issued, Airbus revised in a second step the inspection programme for A300-600 pre-SB 57-6113 and A300-600ST aeroplanes, reducing inspection thresholds and intervals. At this opportunity, the existing ultrasonic inspection for A300-600 aeroplanes has been added for A300-600ST aeroplanes.

For the reasons described above, this new AD retains the requirements of EASA AD 2016-0198 for A300-600 aeroplanes and of DGAC France AD F-2005-124 for A300-600ST aeroplanes, which are both superseded, and requires repetitive inspections with new compliance time and intervals. This AD is applicable to both A300-600 and A300-600ST aeroplanes (applicable types and specificities for each model are referenced above and below).

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, the average flight time (AFT) can be established by dividing the flight hours (FH) by the flight cycles (FC), counted:

- [1] from first flight for selecting the inspection threshold (TH)
- [2] from the last inspection for selecting the inspection interval (INT).



Note 2: For the purpose of this AD, Group 1 aeroplanes are A300-600 aeroplanes that, on the effective date of this AD, are in pre-SB A300-57-6113 configuration, and A300-600ST aeroplanes (all MSN). Group 2 aeroplanes are A300-600 aeroplanes that, on the effective date of this AD, are in post-SB A300-57-6113 configuration.

Modification:

(1) For A300-600 aeroplanes (all models, all MSN) pre-mod 10155: Before exceeding 15 100 FC or 38 900 FH, whichever occurs first since aeroplane first flight, or within the 'grace periods' (see Note 3 of this AD) as defined in Airbus SB A300-57-6050 Revision 03, whichever occurs later, modify the angle fitting attachment holes by cold expansion in accordance with the instructions of Airbus SB A300-57-6050 Revision 03.

Note 3: The grace periods as defined in paragraphs 1.B.(4).(a) and (b) of Airbus SB A300-57-6050 Revision 03 have to be counted from 06 January 2001, the effective date of DGAC France AD 2000-533-328.

(2) For A300-600ST aeroplanes (MSN 001 only): Before exceeding 15 100 FC or 38 900 FH, whichever occurs first since aeroplane first flight, modify the angle fitting attachment holes, right hand (RH) and left hand (LH) sides, by cold expansion, in accordance with the instructions of Airbus SB A300-57-9016.

Internal Lower Angle Fitting (Vertical Face) Inspections:

(3) For Group 1 aeroplanes: Before exceeding the threshold specified in Table 1 of this AD, as applicable, or within the 'grace periods' (see Note 4 of this AD) as defined in Airbus SB A300-57-6049 Revision 08, or SB A300-57-9001 Revision 01, as applicable, whichever occurs later, and, thereafter, at intervals not to exceed the values defined in Table 1 of this AD, accomplish an HFEC rotating probe inspection of holes H, I, K, L, M, N, U, V, W, X and Y of the internal lower angle fitting web (LH and RH), in accordance with the instructions of Airbus SB A300-57-6049 Revision 08, or SB A300-57-9001 Revision 01, as applicable.

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	Compliance Time (FC or FH, whichever occurs first)				
AFT	Thresholds	latomiolo			
	(see Note 5 of this AD)	Intervals			
> 1,5	7 400 FC or 15 950 FH	4 350 FC or 9 450 FH			
≤ 1,5	7 950 FC or 11 950 FH	4 700 FC or 7 100 FH			

Note 4: The 12-month grace period as defined in paragraphs 1.E.(2) of Airbus SB A300-57-6049 Revision 08, or SB A300-57-9001 Revision 01, as applicable, have to be counted from the effective date of this AD, without exceeding the inspection threshold and interval defined in Airbus SB A300-57-6049 Revision 07, or SB A300-57-9001 original issue.



Note 5: For A300-600 aeroplanes, the thresholds in Tables 1, 2 and 3 have to be counted since aeroplane first flight for aeroplanes in post-mod 10155 configuration, or since embodiment of Airbus SB A300-57-6050 for aeroplanes in pre-mod configuration.

Internal Lower Angle Fitting (Horizontal Face) Inspections:

(4) For Group 1 aeroplanes: Before exceeding the thresholds defined in Table 2 of this AD, as applicable, or within the 'grace periods' (see Note 6 of this AD) as defined in Airbus SB A300-57-6086 Revision 06, or SB A300-57-9002 Revision 02, as applicable, whichever occurs later, and, thereafter, at intervals not to exceed the values defined in Table 2 of this AD, accomplish an HFEC rotating probe inspection of the holes A, B, C, D, E, F, G, P, Q, S and T (adjacent to hole G) of the internal lower angle fitting horizontal splicing (LH and RH) in accordance with the instructions of Airbus SB A300-57-6086 Revision 06, or SB A300-57-9002 Revision 02, as applicable.

	Compliance Time (FC or FH, whichever occurs first)				
AFT	Thresholds	Intervals			
	(see Note 5 of this AD)				
> 1,5	6 800 FC or 14 750 FH	6 300 FC or 13 650 FH			
≤ 1,5	7 350 FC or 11 050 FH	6 800 FC or 10 250 FH			

Table 2 – Internal Lower Angle Fitting (Horizontal Face) Inspections

Note 6: The 12-month grace period as defined in paragraphs 1.E.(2) of Airbus SB A300-57-6086 Revision 06, or SB A300-57-9002 Revision 02, as applicable, have to be counted from the effective date of this AD, without exceeding the inspection threshold and interval defined in Airbus SB A300-57-6086 Revision 05, or SB A300-57-9002 Revision 01.

Aft Bottom Panel Inspections:

(5) For Group 1 aeroplanes: Before exceeding the thresholds defined in Table 3 of this AD, as applicable, or within the 'grace periods' (see Note 6 of this AD) as defined in Airbus SB A300-57-6086 Revision 06, or SB A300-57-9002 Revision 02, as applicable, whichever occurs later, and, thereafter, at intervals not to exceed the values defined in Table 3 of this AD, accomplish an ultrasonic inspection of the aft bottom panel in accordance with the instructions of Airbus SB A300-57-6086 Revision 06, or SB A300-57-9002 Revision 02, as applicable.

	Compliance Time (FC or FH, whichever occurs first)				
AFT	Thresholds	Intervals			
	(see Note 5 of this AD)				
> 1,5	6 800 FC or 14 750 FH	1 400 FC or 3 050 FH			
≤ 1,5	7 350 FC or 11 050 FH	1 500 FC or 2 250 FH			

Table 3 – Aft Bottom Panel Inspections

FR47 / Rib 1 Junction Area Inspections:

(6) For Group 2 aeroplanes: Before exceeding the thresholds defined in Table 4 of this AD, as applicable, and thereafter, at intervals not to exceed the values defined in Table 4 of this AD,



accomplish ultrasonic and radiographic inspections of the FR47/Rib 1 junction area, in accordance with the instructions of Airbus SB A300-57-6119.

Table 4 – FR47 / Rib 1 Junction Area Inspections

		Compliance Time (FC or FH, whichever occurs first)			
AFT	Area(s)	Thresholds (see Note 7 of this AD)	Intervals		
≥ 1,5	Α	9 500 FC or 20 520 FH	2 000 FC or 4 320 FH		
	B or C	7 700 FC or 16 690 FH	6 100 FC or 13 170 FH		
	D	2 700 FC or 5 990 FH	1 800 FC or 3 930 FH		
	E	11 100 FC or 24 110 FH	2 200 FC or 4 830 FH		
< 1,5	А	10 200 FC or 15 390 FH	2 100 FC or 3 240 FH		
	B or C	8 300 FC or 12 520 FH	6 500 FC or 9 880 FH		
	D	2 900 FC or 4 490 FH	1 900 FC or 2 900 FH		
	Е	12 000 FC or 18 080 FH	2 400 FC or 3 620 FH		

Note 7: The thresholds in Table 4 of this AD have to be counted since embodiment of Airbus SB A300-57-6113.

Corrective Action(s):

(7) If, during any inspection as required by paragraph (3), (4), (5) or (6) of this AD, as applicable, any crack indication is found, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable Airbus SB, or contact Airbus for approved corrective action instructions and accomplish those instructions accordingly.

Reporting:

(8) Within 30 days after each inspection as required by paragraphs (3), (4), (5) and (6) of this AD, report all inspection results (including no findings) to Airbus.

Credit:

(10) None.

Terminating Action:

(11) None.

Ref. Publications:

Airbus SB A300-57-6049 Revision 08 dated 04 July 2017.

Airbus SB A300-57-6050 Revision 03 dated 31 May 2001.

Airbus SB A300-57-6086 Revision 06 dated 04 July 2017.

Airbus SB A300-57-6113 original issue dated 25 April 2016.



Airbus SB A300-57-6119 original issue dated 25 April 2016.

Airbus SB A300-57-9016 original issue dated 13 June 2005.

Airbus SB A300-57-9001 Revision 01 dated 22 August 2017.

Airbus SB A300-57-9002 Revision 02 dated 22 August 2017.

The use of later approved revisions of these 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 25 August 2017 as PAD 17-117 for consultation until 22 September 2017. 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.
- For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAW (Airworthiness Office)
 E-mail: contact: AIRBUS EIAW (Airworthiness Office)

