



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 18-122

Issued: 06 September 2018

Note: This Proposed Airworthiness Directive (PAD) 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.

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):

A300-600 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 EASA AD 2017-0210 dated 24 October 2017.

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 Service Bulletin (SB) A300-57-6069 has been embodied in service; and

Airbus A300 F4-608ST aeroplanes, all MSN.

Definitions:

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

The applicable inspection SB: For centre wing box (CWB) internal lower angle fittings (vertical face), Airbus SB A300-57-6049 Revision 08 and SB A300-57-9001 Revision 01, as applicable; for CWB internal lower angle fittings (horizontal face) and aft bottom panel, Airbus SB A300-57-6086



Revision 06 and SB A300-57-9002 Revision 02, as applicable; for CWB frame (FR) 47 / Rib 1 junction area, Airbus SB A300-57-6119 and SB A300-57-6121, as applicable.

The applicable modification SB: Airbus SB A300-57-6050 Revision 03 and SB A300-57-9016, as applicable.

AFT: The average flight time (AFT) can be established by dividing the flight hours (FH), specified in hours and hundredth of hours, by the flight cycles (FC), counted from first flight for selecting the inspection threshold and from the last inspection for selecting the inspection interval.

Groups: Group 1 aeroplanes are all A300-600 aeroplanes, except those on which Airbus modification (mod) 12171, or mod 12249, was embodied in production, or on which Airbus SB A300-57-6113 was embodied in service; and A300-600ST aeroplanes.

Group 2 aeroplanes are all A300-600 aeroplanes on which Airbus SB A300-57-6113 was embodied in service.

Group 3 aeroplanes are A300-600 aeroplanes on which Airbus mod 12171 or mod 12249 was embodied in production.

Reason:

Prompted by cracks found on CWB FR47 angle fittings, 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 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 CWB FR47 angle fittings 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 A300-57-6086 inspections, Airbus developed in a first step a new (recommended) modification (Airbus SB A300-57-6113), defined associated inspections programme and methods (ultrasonic/radiographic), and published SB A300-57-6119. 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.

After EASA AD 2016-0198 was issued, Airbus revised in a second step the inspection programme for A300-600 pre-SB A300-57-6113 and A300-600ST aeroplanes, reducing inspection thresholds and intervals. At this opportunity, the existing ultrasonic inspection of the CWB lower panel for A300-600 aeroplanes was added for A300-600ST aeroplanes. Consequently, EASA issued AD 2017-0210, retaining the requirements of EASA AD 2016-0198 for A300-600 aeroplanes and DGAC France AD F-2005-124 for A300-600ST aeroplanes, which were both superseded, to include these new requirements.

Since EASA AD 2017-0210 was issued, Airbus revised in a third step the inspection programme for A300-600 post-mod 12171 and post-mod 12249 reducing inspection thresholds and intervals and introducing the CWB lower panel inspection. Airbus published SB A300-57-6121, superseding ALI tasks 571012 & 571014.

For the reason described above, this AD retains the requirements of EASA AD 2017-0210, which is superseded, and expands the Applicability (Group 3) to include post-mod 12171 and post-mod 12249 aeroplanes.

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

Required as indicated, unless accomplished previously:

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 1 of this AD) as defined in the applicable modification SB, whichever occurs later, modify the angle fitting attachment holes right hand (RH) and left hand (LH) sides by cold expansion in accordance with the instructions of the applicable modification SB.

Note 1: 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, RH and LH sides, by cold expansion, in accordance with the instructions of the applicable modification SB.

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 2 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 1 of this AD, as applicable, 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 the applicable inspection SB.



Table 1 – Internal Lower Angle Fitting (Vertical Face) Inspections

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 3 of this AD)	Intervals (not to exceed)
> 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 2: The 12 months grace period, as defined in paragraph 1.E.(2) of the applicable inspection SB, has to be counted from 07 November 2017 (the effective date of EASA AD 2017-0210), without exceeding the inspection threshold and interval defined in Airbus SB A300-57-6049 Revision 07, or SB A300-57-9001 original issue, as applicable.

Note 3: For A300-600 aeroplanes, the thresholds in Tables 1, 2 and 3 of this AD 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 10155 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 4 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 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 the applicable inspection SB.

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

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 3 of this AD)	Intervals (not to exceed)
> 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

Note 4: The 12 months grace period, as defined in paragraphs 1.E.(2) of the applicable inspection SB, has to be counted from 07 November 2017 (the effective date of EASA AD 2017-0210), without exceeding the inspection threshold and interval defined in Airbus SB A300-57-6086 Revision 05, or SB A300-57-9002 Revision 01, as applicable.

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 4 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 3 of this AD, as applicable, accomplish an ultrasonic inspection of the aft bottom panel in accordance with the instructions of the applicable inspection SB.



Table 3 – Aft Bottom Panel Inspections

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 3 of this AD)	Intervals (not to exceed)
> 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

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, as applicable, accomplish ultrasonic and radiographic inspections of the FR47/Rib 1 junction area, in accordance with the instructions of the applicable inspection SB.

Table 4 – FR47 / Rib 1 Junction Area Inspections

Compliance Time (FC or FH, whichever occurs first)			
AFT	Area(s)	Thresholds (see Note 3 of this AD)	Intervals (not to exceed)
< 1.5	A	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
	E	12 000 FC or 18 080 FH	2 400 FC or 3 620 FH
≥ 1.5	A	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

Note 5: The thresholds in Table 4 of this AD have to be counted since embodiment of Airbus SB A300-57-6113.

- (7) For Group 3 aeroplanes: Before exceeding the thresholds defined in Table 5 of this AD, as applicable, or within the 'grace periods' (see Note 6 of this AD) as defined in applicable SB, whichever occurs later, and thereafter, at intervals not to exceed the values defined in Table 5 of this AD, as applicable, accomplish an HFEC rotating probe inspection of the CWB lower angle fittings (vertical junction area - holes H, I, J, K, L, M, N, U, V, W, X, Y and Z) in accordance with the instructions of the applicable inspection SB.

Table 5 – Vertical Junction Area Inspections

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 7 of this AD)	Intervals (not to exceed)
≤ 1.5	24 100 FC or 36 200 FH	13 000 FC or 19 500 FH
> 1.5	22 400 FC or 48 300 FH	12 050 FC or 26 050 FH



Note 6: The 12 months grace period, as defined in paragraphs 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 the ALI tasks 571012 & 571014.

Note 7: The thresholds in Tables 5, 6 and 7 of this AD have to be counted since aeroplane first flight.

- (8) For Group 3 aeroplanes: Before exceeding the thresholds defined in Table 6 of this AD, as applicable, or within the 'grace periods' (see Note 6 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 6 of this AD, as applicable, accomplish an HFEC rotating probe inspection of the CWB lower angle fittings (horizontal junction area - holes A, B, C, D, E, F, G, P, Q, S, and T) in accordance with the instructions of the applicable inspection SB.

Table 6 – Horizontal Junction Area Inspections

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 7 of this AD)	Intervals (not to exceed)
≤ 1.5	13 600 FC or 20 400 FH	6 500 FC or 9 800 FH
> 1.5	12 600 FC or 27 200 FH	6 050 FC or 13 050 FH

- (9) For Group 3 aeroplanes: Before exceeding the thresholds defined in Table 7 of this AD, as applicable, or within the 'grace periods' (see Note 8 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 7 of this AD, as applicable, accomplish an ultrasonic inspection of the CWB lower panel in accordance with the instructions of the applicable inspection SB.

Table 7 – CWB Lower Panel Inspections

Compliance Time (FC or FH, whichever occurs first)		
AFT	Thresholds (see Note 7 of this AD)	Intervals (not to exceed)
≤ 1.5	13 600 FC or 20 400 FH	1 950 FC or 2 950 FH
> 1.5	12 600 FC or 27 200 FH	1 800 FC or 3 950 FH

Note 8: The 12 months grace period, as defined in paragraphs 1.E.(2) of the applicable inspection SB, has to be counted from the effective date of this AD.

Corrective Action(s):

- (10) If, during any inspection as required by paragraph (3), (4), (5), (6), (7), (8), and (9) 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 inspection SB, or contact Airbus for approved corrective action instructions and accomplish those instructions accordingly.

Reporting:

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



Terminating Action:

(12) 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 A300-57-6069 original issue dated 08 June 2000, or Revision 01 dated 30 October 2003, or Revision 02 dated 22 December 2006.

Airbus SB A300-57-6086 Revision 05 dated 30 January 2012 and 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 A300-57-6121 original issue dated 31 August 2018.

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 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 04 October 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: 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.

