

Airworthiness Directive AD No.: 2013-0184R2

Issued: 03 December 2018

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): A300 and A300-600 aeroplanes

Effective Date:	Revision 2: 03 December 2018 Revision 1: 05 September 2013 Original issue: 27 August 2013	
TCDS Number(s):	EASA.A.172	
Foreign AD:	Not applicable	
Revision:	This AD revises EASA AD 2013-0184R1 dated 22 August 2013. The original issue of this AD superseded DGAC France AD 2002-184(B) dated 03 April 2002.	

ATA 53 – Fuselage – Frame 47 Splice Fitting Holes Between Stringers 24 and 26 – Inspection

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

AIRBUS

Airbus A300 B4-103, A300 B4-120, A300 B4-203, A300 B4-2C, A300 C4-203 and A300 F4-203 aeroplanes, all Manufacturer Serial Numbers (MSN), and Airbus A300-600 aeroplanes, all certified models, all MSN.

Definitions:

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

The applicable inspection Service Bulletin (SB): Airbus SB A300-53-0350 Revision 03 and SB A300-53-6123 Revision 07, as applicable.

Groups:

Group 1 are A300 B4-100 aeroplanes. Group 2 are A300 B4-200, A300 C4-203 and A300 F4-203 aeroplanes.



Group 3 are A300-600 aeroplanes.

Configuration (pre- or post-mod/SB):

For Group 1 and 2 aeroplanes: Airbus modification (mod) 5890 or SB A300-53-0199 (any revision). For Group 3: Airbus mod 5890 or SB A300-53-6131 (any revision).

Splice:

Basic splices have Part Number (P/N) A53834139-200/-201/-202/-203. Reinforced splices have P/N A53812635-200/-201/-202/-203.

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 or splice replacement for selecting the inspection threshold (TH) and from the last inspection for selecting the inspection interval (INT).

Reason:

In order to prevent crack development in the fastener holes at Frame (FR) 47 splicing joint on A300 aeroplanes, Airbus developed mod 5890 for aeroplanes in production and issued corresponding SB A300-53-0199 for aeroplanes in service. Subsequently, cracks were found on FR47 splice fitting between stringers (STRG) 24 and 26 on A300 aeroplanes in post-mod configuration.

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

To address this potential unsafe condition, DGAC France issued AD 2002-184(B), superseding AD 85-152-069 and AD 1999-515-298, to require repetitive high frequency eddy current (HFEC) rotating probe inspections of the splice fitting between STRG 24 and 26 and, depending on findings, corrective action(s). That AD also expanded the Applicability to include A300-600 aeroplanes, which have the same design.

Since that AD was issued, a fleet survey and updated Fatigue and Damage Tolerance analyses were performed in order to substantiate the second A300-600 Extended Service Goal (ESG2) exercise. The results of these analyses determined that the inspection threshold and intervals for A300-600 aeroplanes had to be reduced to allow timely detection of these cracks and the accomplishment of an applicable corrective action. Consequently, EASA issued AD 2013-0184 (later revised), retaining the requirements of DGAC France AD 2002-184(B), which was superseded, to require accomplishment of the actions for A300-600 aeroplanes within the new thresholds and intervals introduced with Revision 05 of Airbus SB A300-53-6123.

Since EASA AD 2013-0184R1 was issued, Airbus conducted further analysis and concluded that the number of fastener holes to be inspected can be reduced for all A300-600 aeroplanes and that the inspection interval can be relaxed for A300-600 equipped with reinforced splices. Consequently, Airbus published Revision 07 of SB A300-53-6123.

For the reason described above, this AD is revised to adjust the new interval values for A300-600 aeroplanes according to the updated analyses results. This revised AD also includes editorial changes to introduce the latest AD writing standards, without affecting the requirements.



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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within the applicable thresholds as defined in Appendix 1 of this AD, and, thereafter, at intervals not to exceed the applicable values as defined in Appendix 2 of this AD, as applicable, remove the fasteners and accomplish an HFEC rotating probe inspection of the splice fitting between STRG 24 and 26 in accordance with the instructions of the applicable inspection SB. Before release to service of the aeroplane after each HFEC inspection, provided no cracks are found, install new fasteners.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, cracks are found, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable inspection SB.

Credit:

(3) Inspections and corrective actions, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A300-53-6123 at original issue up to Revision 06, or SB A300-53-0350 at original issue up to Revision 02, as applicable, are acceptable to comply with the requirements of paragraphs (1) and (2) of this AD. After the effective date of this AD, the repetitive inspections required by paragraph (1) and the corrective actions required by paragraph (2) of this AD must be accomplished in accordance with the instructions of the applicable inspection SB.

Terminating Action:

(4) None.

Ref. Publications:

Airbus SB A300-53-0199 original issue dated 08 July 1985, or Revision 01 dated 28 November 1985, or Revision 02 dated 06 February 1987, or Revision 03 dated 03 June 1987, or Revision 04 dated 12 November 2002.

Airbus SB A300-53-0350 original issue dated 25 October 1999, or Revision 01 dated 18 December 2001, or Revision 02 dated 12 November 2002, or Revision 03 dated 26 July 2007.

Airbus SB A300-53-6123 original issue dated 25 October 1999, or Revision 02 dated 12 November 2002, or Revision 03 dated 20 August 2004, or Revision 04 dated 25 April 2008, or Revision 05 dated 01 August 2011, or Revision 06 dated 28 September 2011, or Revision 07 dated 08 November 2018.

Airbus SB A300-53-6131 original issue dated 22 August 2001.

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.
- The original issue of this AD was posted on 12 March 2013 as PAD 13-045 for consultation until 09 April 2013. The Comment Response Document can be found in the <u>EASA Safety</u> <u>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 Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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</u> <u>safety reporting system</u>.
- For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAW (Airworthiness Office)
 E-mail: continued.airworthiness-wb.external@airbus.com.



Appendix 1 – Inspection Thresholds

Inspection thresholds, whichever occurs later, A or B

Compliance Time A:

Group	Aeroplane Configuration	Compliance Time (FC or FH, whichever occurs first)	
1	Pre- mod/SB	Before exceeding 4 000 flight Cycles (FC) or 8 000 Flight Hours (FH)	
	Post- mod/SB	Before exceeding 10 500 FC or 21 200 FH	
2	Pre- mod/SB	Before exceeding 3 300 FC or 6 800 FH	
	Post- mod/SB	Before exceeding 8 650 FC or 18 000 FH	
3	Pre- mod/SB	AFT > 1.5 : Before exceeding 2 500 FC or 5 500 FH	
		AFT ≤ 1.5: Before exceeding 2 700 FC or 4 100 FH	
	Post- mod/SB	AFT > 1.5 : Before exceeding 6 800 FC or 14 700 FH	
		AFT ≤ 1.5 : Before exceeding 7 300 FC or 11 000 FH	

Compliance Time B

For all A300B4 models post-Mod 5890, or post-SB A300-53-0199: Before exceeding 750 FC or 1 500 FH, whichever occurs first after 13 April 2002 (the effective date of DGAC France AD 2002-184(B)).

For all other A300 models: Before exceeding 1 800 FC or 3 000 FH, whichever occurs first after 13 April 2002 (the effective date of DGAC France AD 2002-184(B)).

For A300-600 models: Before exceeding 800 FC or 1 750 FH, whichever occurs first after 27 August 2013 [the effective date of EASA AD 2013-0184 at original issue]



Appendix 2 – Inspection Intervals

Inspection intervals, whichever occurs later, A or B

Compliance Time A:

Group	Aeroplane Configuration	Compliance Times (FC or FH, whichever occurs first)
1	Pre-mod/SB	2 800 FC or 5 700 FH
	Post-mod/SB (Basic splice P/N A53834139-200/-201)	
	Post-mod/SB (Basic splice P/N A53834139-202/-203 or Reinforced splice)	4 800 FC or 9 700 FH
2	Pre-mod/SB	2 200 EC or 4 800 EU
	Post-mod/SB (Basic splice)	2 300 FC 01 4 800 FH
	Post-mod/SB (Basic splice P/N A53834139-202/-203 or Reinforced splice)	3 950 FC or 8 200 FH
3	Dro mod/SP	AFT > 1.5 : 2 000 FC or 4 300 FH
	Pre-mou/SB	AFT ≤ 1.5 : 2 100 FC or 3 200 FH
	Dest mod/SP (Desig fishelate)	AFT > 1.5 : 2 000 FC or 4 300 FH
		AFT ≤ 1.5 : 2 100 FC or 3 200 FH
	Post-mod/SB (Reinforced fishplate)	AFT > 1.5 : 2 300 FC or 5 000 FH
		AFT ≤ 1.5 : 2 500 FC or 3 800 FH

Compliance Time B

For all A300B4 models post-Mod 5890, or post-SB A300-53-0199: Before exceeding 750 FC or 1 500 FH, whichever occurs first after 13 April 2002 (the effective date of DGAC France AD 2002-184(B)).

For all other A300 models: Before exceeding 1 800 FC or 3 000 FH, whichever occurs first after 13 April 2002 (the effective date of DGAC France AD 2002-184(B)).

For A300-600 models: Before exceeding 800 FC or 1 750 FH, whichever occurs first after 27 August 2013 [the effective date of EASA AD 2013-0184 at original issue].

