EASA AD No.: 2017-0023



Airworthiness Directive

AD No.: 2017-0023

Issued: 10 February 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 aeroplanes

Effective Date: 24 February 2017

TCDS Number(s): EASA.A.172

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wing – Stringer Joint at Rib 18 – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A300B4-603, A300B4-605R, A300C4-605R variant F, A300B4-620, A300B4-622, A300B4-622R, A300C4-620 and A300F4-605R aeroplanes, all manufacturer serial numbers, except A300F4-605R aeroplanes that have embodied Airbus modification (mod) 12699 in production.

Reason:

In response to the FAA Part 26 rule change concerning Widespread Fatigue Damage (WFD), all wing structural items of the A300-600 design deemed potentially susceptible to WFD were assessed. The top stringer joints at Rib 18 were highlighted as an area of uniform stress distribution, indicating that cracks may develop in adjacent stringers at the same time which is known as Multi Element Damage (MED). Each affected stringer joint consists of three main load transferring parts: an overlapping flange, two straps attached through the stringer web and a strap on the top flange. All the components of the joint are attached with fasteners. The fastener holes were the subject of a MED WFD analysis, which showed that cracking could occur from a number of the holes in the joint on stringers 11, 12, 13, 14, 15, 16, 17 and 18.

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



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Prompted by the conclusion of the WFD analysis, Airbus issued Service Bulletin (SB) A300-57-6118 to provide modification instructions. The modification will both re-life via oversizing and inspect via non-destructive test a defined number of stringer joint fastener holes at Rib 18. This modification will delay the onset of cracking at the stringer joint, providing it is completed at the specified time and will delay the requirement for subsequent inspection.

For the reasons described above, this AD requires a detailed visual inspection (DVI) of the upper wing skin and the top stringer joints at Rib 18, and modification of the stringer joint couplings at Rib 18, on both wings.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, Group 1 aeroplanes are defined as models A300B4-603, A300B4-605R, A300B4-620, A300B4-622 and A300B4-622R. Group 2 aeroplanes are defined as models A300C4-605R variant F, A300C4-620 and A300F4-605R, if in pre-mod 12699 configuration.

Note 2: For the purpose of this AD, 'short range' (SR) is defined as aeroplanes with an average flight time (AFT) of less than 1,5 flight hours (FH) per flight cycle (FC), while 'long range' (LR) is defined as aeroplanes with an AFT equal or higher than 1,5 FH per FC.

(1) Not before exceeding the lower thresholds as defined in Table 1 of this AD, as applicable, <u>and</u> within the compliance times as specified in Table 2, Table 3, or Table 4 of this AD, as applicable, accomplish a DVI of the upper wing skin and the top stringer joints at Rib 18, and, depending on findings, accomplish all applicable corrective actions and modify the stringer joint couplings at Rib 18 on both wings, in accordance with the instructions of Airbus SB A300-57-6118.

Table 1 – Lower Threshold

Affected aeroplanes	Compliance Time (FC or FH, whichever occurs first since aeroplane first flight)
Group 1, LR	Not before exceeding 30 900 FC or 66 700 FH
Group 1, SR	Not before exceeding 28 700 FC or 43 000 FH
Group 2, LR	Not before exceeding 28 600 FC or 61 700 FH
Group 2, SR	Not before exceeding 34 400 FC or 51 600 FH

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Table 2 - Group 1 Aeroplanes - LR

Compliance Time (whichever occurs later, A or B)		
Α	Before exceeding 32 500 FC or 70 300 FH, whichever occurs first since aeroplane first flight	
В	Within 700 FC, or 1 500 FH, or 12 months, whichever occurs first after the effective date of this AD	

Table 3 - Group 1 Aeroplanes - SR

Compliance Time (whichever occurs later, A or B)		
Α	Before exceeding 35 100 FC or 52 600 FH, whichever occurs first since aeroplane first flight	
В	Within 700 FC, or 1 000 FH, or 12 months, whichever occurs first after the effective date of this AD	

Table 4 - Group 2 Aeroplanes

AFT	Compliance Time
(see Note 2 of this AD)	(FC or FH, whichever occurs first since aeroplane first flight)
LR	Before exceeding 35 000 FC or 75 700 FH
SR	Before exceeding 37 800 FC or 56 700 FH

Ref. Publications:

Airbus SB A300-57-6118 original issue dated 30 June 2015 and Revision 1 dated 31 January 2017.

The use of later approved revisions of this document 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 31 May 2016 as PAD 16-082 for consultation until 28 June 2016. No comments were received during the consultation period.
- 3. 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: continued.airworthiness-wb.external@airbus.com.

