



Airworthiness Directive

AD No.: 2024-0170

Issued: 26 August 2024

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS S.A.S.

Type/Model designation(s):

A300-600 aeroplanes

Effective Date: 09 September 2024

TCDS Number(s): EASA.A.172

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0023 dated 10 February 2017.

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

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A300B4-603, A300B4-605R, A300B4-622, A300B4-622R, A300C4-605R variant F, A300C4-620, A300F4-605R and A300F4-622R aeroplanes, all manufacturer serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A300-57-6118 Revision 2.

Groups:

Group 1 aeroplanes are Airbus A300B4-603, A300B4-605R, A300B4-622 and A300B4-622R aeroplanes.

Group 2 aeroplanes are Airbus, A300C4-620, A300F4-605R (pre- or post-modification (mod) 12699), A300F4-622R and A300C4-605R variant F aeroplanes.

LR aeroplanes: Long range (LR) aeroplanes are defined as aeroplanes with an average flight time (AFT) equal or higher than 1,5 flight hours (FH) per flight cycle (FC).



SR aeroplanes: Short range (SR) aeroplanes are defined as aeroplanes with an AFT of less than 1,5 FH per FC.

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 subject of a MED WFD analysis, which showed that cracking could occur from several 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.

Prompted by the conclusion of the WFD analysis, Airbus issued SB A300-57-6118 at original issue to provide modification instructions. The modification included oversizing and inspection via non-destructive testing of a defined number of stringer joint fastener holes at Rib 18. This modification aimed at delaying the onset of cracking at the stringer joint, providing it is completed at the specified time (accomplished within the embodiment window), and delaying the requirement for subsequent inspections. Consequently, EASA issued AD 2017-0023 to require 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.

Since that AD was issued, Airbus updated the MSB A300-57-6118 by adding A300F4-605R aeroplanes in post-mod 12699 configuration and A300F4-622R aeroplanes, even though the introduced models are below the lower threshold of the embodiment window, ensuring that their structures remain resistant against WFD within the established Limit of Validity applicable to these aeroplanes. Prompted by this development, Airbus issued the SB, as defined in this AD, expanding its effectivity.

For the reasons described above, this AD retains the requirements of EASA AD 2017-0023, which is superseded and expands the Applicability to A300F4-605R aeroplanes in post-mod 12699 configuration and A300F4-622R aeroplanes.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection / Corrective Action(s):

- (1) Not before exceeding the lower thresholds as defined in Table 1 of this AD, as applicable, **and** 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 the SB.



Table 1 – Lower Threshold

Affected Aeroplanes and AFT (see LR and SR definitions)	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

Table 2 - Group 1 Aeroplanes - LR

Compliance Time (whichever occurs later, A or B)	
A	Before exceeding 32 500 FC or 70 300 FH, whichever occurs first since aeroplane first flight
B	Within 700 FC, or 1 500 FH, or 12 months, whichever occurs first after 24 February 2017 [the effective date of EASA AD 2017-0023]

Table 3 - Group 1 Aeroplanes - SR

Compliance Time (whichever occurs later, A or B)	
A	Before exceeding 35 100 FC or 52 600 FH, whichever occurs first since aeroplane first flight
B	Within 700 FC, or 1 000 FH, or 12 months, whichever occurs first after 24 February 2017 [the effective date of EASA AD 2017-0023]

Table 4 – Group 2 Aeroplanes

AFT (see LR and SR definitions)	Compliance Time (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

Credit:

- (2) Inspections, corrective actions, and modification of the affected structures on an aeroplane accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A300-57-6118 at original issue or Revision 1 are acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.



Ref. Publications:

Airbus SB A300-57-6118 original issue dated 30 June 2015, or Revision 1 dated 31 January 2017, or Revision 2 dated 15 July 2024.

The use of later approved revisions of the above-mentioned document 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 July 2024 as PAD 24-095 for consultation until 22 August 2024. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), 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: ADs@easa.europa.eu.
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 [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. 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.

