Airworthiness Directive

AD No.: 2018-0162

Issued: 25 July 2018

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:
AIRBUS

Type/Model designation(s):
A300-600ST aeroplanes

Effective Date: 08 August 2018

TCDS Number(s): EASA.A.014

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2016-0147 dated 21 July 2016.

ATA 53 – Fuselage – Trimmable Horizontal Stabilizer Support Struts – Inspection

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Manufacturer(s):
Airbus (formerly Airbus Industrie)

Applicability:
Airbus A300F4-608ST aeroplanes, all manufacturer serial numbers.

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

Affected part: Trimmable Horizontal Stabilizer (THS) supports struts, manufactured by SARMA, which can be identified by the diameter of the strut end being less than 43 mm; and support struts manufactured by TAC (Technical Airborne Components Industries), Part Number (P/N) F535-74140-000-00, which are all other support struts.

The inspection SB: Airbus Service Bulletin (SB) SB A300-53-9024. The inspection SB contains a flowchart which can be used for supporting compliance with this AD.

The clamp installation SB: Airbus SB A300-53-9022.

Reason:
During scheduled maintenance, several THS support struts were found cracked at the strut ends. The THS is supported and articulated at frame (FR) 91 in the tail cone. Lateral movement is

prevented by four diagonal support struts. Investigations revealed that the cracks were caused by stress corrosion and propagated from the inside to the outside of the strut.

This condition, if not detected and corrected, could lead to the rupture of all four THS support struts at FR 91, which would make the remaining structure unable to carry limit loads, possibly resulting in loss of the horizontal tailplane.

To address this unsafe condition, EASA issued AD 2014-0121 to require repetitive special detailed inspections (SDI) of the THS support strut ends, installation of reinforcing clamps on strut ends and, depending on findings, replacement of damaged support struts. Installation of reinforcing clamps on strut ends was considered as temporary solution pending introduction of re-designed support strut.

Since that AD was issued, it was discovered that the AD appeared to require SDI of steel struts, which are not prone to cracking. The unsafe condition exists only on support struts made of aluminium. Consequently, EASA issued AD 2014-0164, retaining the requirements of EASA AD 2014-0121, which was superseded, to introduce an initial identification of the support struts installed on aeroplanes in pre-mod 06101 configuration.

Since that AD was issued, it was discovered that some A300F4-608ST aeroplanes are fitted with a strut configuration (SARMA Strut) other than the TAC strut. Consequently, Airbus revised SB A300-53-9024 accordingly in order to inspect also any SARMA strut and, in case of findings, to replace it with a TAC strut with installed clamps and, thereafter, to accomplish repetitive inspections. Consequently, EASA issued AD 2016-0147, taking over the requirements for A300F4-608ST aeroplanes from EASA 2014-0164, which was revised accordingly, reducing the Applicability.

Since EASA AD 2016-0147 was issued, it was determined that installation of a “serviceable part”, which is a part with a certain amount of time on an aeroplane, but which passed (no defect found) an inspection, is not a good option and it was decided that serviceable parts must be replaced by new parts.

For the reason described above, this AD retains the requirement of EASA AD 2016-0147, which is superseded, and allows, whenever an affected part must be replaced, only installation of a new TAC strut.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For aeroplanes equipped with one or more TAC struts, within 18 months after 28 May 2014 [the effective date of EASA AD 2014-0121], and, thereafter, at intervals not to exceed 24 months, accomplish an SDI of the strut end at FR91 of each affected part in accordance with the instructions of the inspection SB at Revision 01.

(2) For aeroplanes equipped with one or more SARMA struts: Within 18 months after 28 May 2014 [the effective date of EASA AD 2014-0121] and, thereafter, at intervals not to exceed 12

months, accomplish an SDI of the strut end at FR91 of each SARMA struts affected part in accordance with the instructions of the inspection SB Revision 01.

Concurrent action(s):

(3) Concurrent with each SDI as required by paragraph (1) of this AD, remove the reinforcing clamps installed on strut ends and re-install it/them after the inspection, in accordance with the instructions of the inspection SB Revision 01.

(4) Concurrent with the initial SDI as required by paragraph (1) of this AD, identify with the affected part(s) that have no reinforcing clamps installed and, before next flight after the inspection, install clamps on each strut end in accordance with the instructions of the clamp installation SB.

Corrective Action(s):

(5) If, during any inspection as required by paragraph (1) of this AD, any crack is found, before next flight, accomplish the applicable corrective action(s), depending on the inspection results, as specified in Table 1 of this AD, in accordance with the instructions of the inspection SB Revision 01.

Table 1 – Corrective action(s) following TAC THS Strut end inspection findings

Inspection Result	Corrective Action(s)
One crack of more than 15 mm length, or more than four cracks of 15 mm or less, were found on one strut end	Replace the affected THS support strut with a new TAC strut and install clamps on each strut end
No more than four cracks of 15 mm or less were found on a strut end	Install clamps on each strut end

(6) If, during any inspection as required by paragraph (2) of this AD, a crack on at least one strut end is detected, before next flight, replace each cracked strut with a new TAC strut and install clamps in accordance with the instructions of the clamp installation SB.

Credit:

(7) Inspections and corrective actions on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of the inspection SB at original issue, are acceptable to comply with the initial requirements of this AD for that aeroplane. After the effective date of this AD, the repetitive inspections and applicable corrective actions must be accomplished in accordance with the instructions of the inspection SB at Revision 01.

Reporting:

(8) Within 30 days after the initial inspection as required by paragraph (1) or (2) of this AD, as applicable, report the results of the inspection (including no finding) to Airbus.

Terminating Action:

(9) Installation on an aeroplane of reinforcing clamps as required by paragraph (4) or (6) of this AD, as applicable, or replacement of support struts and/or clamp installation as required by paragraph (5) or (6) of this AD, as applicable, do not constitute terminating action for the repetitive inspections as required by paragraph (1) or (2) for TAC struts, or (2) for SARMA strut, of this AD, as applicable, for that aeroplane.

Ref. Publications:

Airbus SB A300-53-9022 original issue dated 05 February 2014.

Airbus SB A300-53-9024 original issue dated 05 February 2014, or Revision 01 dated 18 September 2015.

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.

2. This AD was posted on 18 June 2018 as PAD 18-084 for consultation until 16 July 2018. 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.

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.

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.