



Airworthiness Directive

AD No.: 2014-0164R1

[Correction: 04 August 2016]

Issued: 21 July 2016

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, A300-600 and A310 aeroplanes

Effective Date: Revision 1: 04 August 2016

Original issue: 25 July 2014

TCDS Number(s): EASA.A.0172

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2014-0164 dated 11 July 2014 that superseded EASA AD 2014-0121 dated 14 May 2014.

ATA 53 – Fuselage – Tail Cone / Trimmable Horizontal Stabilizer Support Struts at Frame 91 – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A300, A300-600 and A310 aeroplanes, all certified models, all manufacturer serial numbers (MSN).

Reason:

During scheduled maintenance, several support struts of the trimmable horizontal stabilizer (THS) 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 FR91, 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 high frequency eddy current (HFEC) inspections 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 is considered a temporary solution pending introduction of a re-designed support strut.

Since that AD was issued, it was discovered that the AD appeared to also require HFEC inspections of steel struts, which are not prone to cracking. The unsafe condition exists only on support struts made of aluminium, which were introduced through Airbus modification (mod) 06101, but may also have been installed in service as replacement parts on aeroplanes in pre-mod 06101 configuration.

Consequently, EASA issued AD 2014-0164, superseding AD 2014-0121, to clarify the need for an initial identification of the support struts installed on aeroplanes in pre-mod 06101 configuration. The related Airbus Service Bulletins (SB) remained unchanged.

Since that AD was issued, it was discovered that some Airbus A300F4-608ST aeroplanes are fitted with a strut configuration (SARMA Strut) other than the TAC (Technical Airborne Components Industries) strut, which caused the other strut not to be considered.

For the reason described above, this AD is revised to exclude Airbus A300F4-608ST aeroplanes from the Applicability of this AD. A new AD has been issued to address the THS struts on those aeroplanes.

This AD is republished to correct two typographical errors in the Ref. Publications.

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

Required as indicated, unless accomplished previously:

- (1) For aeroplanes in pre-mod 06101 configuration, within 12 months after 28 May 2014 [the effective date of EASA AD 2014-0121], inspect and identify the part numbers (P/N) of each support strut installed on the THS at FR 91 in accordance with the instructions of Airbus SB A300-53-0395, or SB A300-53-6174, or SB A310-53-2137, as applicable to aeroplane model.

A check of the maintenance records is acceptable in lieu of the inspection, provided those records can be relied upon for that purpose and the support strut P/N can be positively identified from that review.

Note 1: No further action is required for an aeroplane in pre-mod 06101 configuration, provided it is determined that no aluminium support strut P/N R21449, P/N R21449D, P/N R21449G, or P/N R21449H, is installed on that aeroplane.

Note 2: Aeroplanes delivered in pre-mod 06101 configuration are MSN 0001 through MSN 0498 inclusive.

- (2) For aeroplanes in post-mod 06101 configuration, and aeroplanes in pre-mod 06101 configuration equipped with one or more aluminium support strut(s) P/N R21449,



P/N R21449D, P/N R21449G, or P/N R21449H, within the compliance time defined in Table 1 of this AD, as applicable, depending on aeroplane MSN and configuration, and, thereafter, at intervals not to exceed 24 months, accomplish a high frequency eddy current (HFEC) inspection of the THS aluminium support strut ends at FR91 in accordance with the instructions of Airbus SB A300-53-0395, SB A300-53-6174, or SB A310-53-2137, as applicable to aeroplane model.

Table 1 – Initial Inspection of THS Support Strut Ends

MSN / Configuration	Compliance Time (after 28 May 2014, the effective date of EASA AD 2014-0121)
MSN 0499 through MSN 0747 inclusive (post-mod 06101)	Within 12 months
MSN 0748 through MSN 0878 inclusive (post-mod 06101)	Within 18 months
MSN 0001 through MSN 0498 inclusive (pre-mod 06101), if one or more aluminium strut(s) are installed	Within 24 months

- (3) Reinforcing clamps installed on strut ends must be removed before accomplishment of each HFEC inspection as required by paragraph (2) of this AD, and re-installed after the inspection, in accordance with the instructions of Airbus SB A300-53-0395, SB A300-53-6174, or SB A310-53-2137, as applicable to aeroplane model.
- (4) Concurrent with the initial inspection as required by paragraph (2) of this AD, identify aluminium support strut(s) P/N R21449, P/N R21449D, P/N R21449G, or P/N R21449H, as applicable, with no reinforcing clamps previously installed and, before next flight after the inspection, install clamps on each strut end in accordance with the instructions of Airbus SB A300-53-0394, SB A300-53-6172, or SB A310-53-2136, as applicable to aeroplane model.
- (5) If, during any inspection as required by paragraph (2) 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 2 of this AD, in accordance with the instructions of Airbus SB A300-53-0395, or SB A300-53-6174, or SB A310-53-2137, as applicable to aeroplane model.

Table 2 – Corrective Action(s) following THS Strut End Inspection Findings

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

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



- (7) Within 30 days after the initial inspection as required by paragraph (2) of this AD, report the results of the inspection (including no findings) to Airbus.

Ref. Publications:

Airbus SB A300-53-0394 original issue, dated 14 February 2014.

Airbus SB A300-53-0395 original issue, dated 14 February 2014.

Airbus SB A300-53-6172 original issue, dated 14 February 2014.

Airbus SB A300-53-6174 original issue, dated 14 February 2014.

Airbus SB A310-53-2136 original issue, dated 14 February 2014.

Airbus SB A310-53-2137 original issue, dated 14 February 2014.

The use of later approved revisions of these 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. 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.

