

Airworthiness Directive

AD No.: 2019-0017

Issued: 29 January 2019

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):

AIRBUS A300, A310, A300-600, and A300-600ST

aeroplanes

Effective Date: 12 February 2019

TCDS Number(s): TCDS EASA.A.172 and TCDS EASA.A.014

Foreign AD: Not applicable

Supersedure: This AD supersedes DGAC France AD F-2004-063 dated 12 May 2004, and AD

F-2004-092 (EASA approval 2004-6368) dated 23 June 2004.

ATA 27, 55 – Flight Controls / Stabilizers – Rudder Servo Control – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A300, A300-600, A300-600ST and A310 aeroplanes, all certified models, all manufacturer serial numbers.

Definitions:

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

The applicable ATA 27 SB: Airbus Service Bulletin (SB) A300-27-0188, SB A300-27-6036, SB A310-27-2082 and SB A300-27-9009, as applicable.

The applicable ATA 55 SB: Airbus SB A300-55-0044 Revision 04, SB A300-55-6023 Revision 08, SB A310-55-2026 Revision 04 and SB A300-55-9007 Revision 01, as applicable.

Affected parts: Fin box and rudder servo control identified by Part Number (P/N) in the applicable ATA 55 SB.



Reason:

Numerous occurrences were reported of rudder servo control de-synchronization, some of which had caused structural damages to the fin or side fittings of the rudder actuator attachments. Analyses revealed that a de-synchronization of the rudder servo control induced by misalignment of the three servo controls, or by thermal expansion, can provoke opposing loads.

This condition, if not detected and corrected, could induce failure of rudder-associated systems, possibly resulting in reduced control of the aeroplane.

Previously, DGAC France issued AD F-2004-063 for A300-600ST aeroplanes, and AD F-2004-092 (EASA approval 2004-6368) for A300, A310 and A300-600 aeroplanes, to require repetitive inspections of rudder servo controls, fin box and rudder structures, and, depending on findings, accomplishment of applicable corrective action(s).

Since those ADs were issued, analyses of the inspection results indicate that the assumptions made in 2004 to establish the survey campaign were not adequate. This determination induced new investigation and ATA 55 SBs revision with new inspection instructions and new compliance times, depending on aeroplane configuration.

For the reason described above, this AD retains partially the requirements of DGAC France AD F-2004-063 and AD F-2004-092 (EASA approval 2004-6368), which are superseded, and requires the new inspections (latest SB revision) at new intervals.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 1 300 flight hours (FH) after the last inspection as previously required by DGAC France AD F-2004-092 or AD F-2004-063, as applicable, or within 700 FH after the 03 July 2004 (effective date of DGAC France AD F-2004-092) or within 700 FH after the 22 May 2004 (effective date of DGAC France AD F-2004-063), as applicable, whichever occurs later, and, thereafter, at intervals not to exceed 1 300 FH, accomplish inspection of the rudder servo controls in accordance with the instructions of the applicable ATA 27 SB.
- (2) If, during any inspection as required by paragraph (1) of this AD, rudder servo controls damage exceeds the limits as specified in the applicable ATA 27 SB, before next flight, and thereafter, at interval not to exceed the value defined in ATA 55 SBs, accomplish inspections of the affected parts in accordance with the instructions of the applicable ATA 55 SB.
- (3) For aeroplanes for which operators could not demonstrate, through the inspection and maintenance reports, that rudder servo controls have never been identified as having exceeded the limits as defined in the applicable ATA 27 SB, within 3 000 FC or 30 months, whichever occurs first after the effective date of this AD, accomplish inspections of the affected parts in accordance with the instructions of the applicable ATA 55 SB.



Corrective Action(s):

(4) If, during any inspection as required by paragraph (2) of this AD, discrepancy is found (identification placard missing or cracks), before next flight, contact Airbus for approved repair instructions and, within the compliance time(s) specified therein, accomplish those instructions accordingly.

Terminating Action:

(5) None.

Ref. Publications:

Airbus SB A300-27-0188 Revision 05 dated 16 April 2004, or Revision 06 dated 23 January 2006, or Revision 07 dated 06 May 2010.

Airbus SB A310-27-2082 Revision 05 dated 16 April 2004, or Revision 06 dated 23 December 2004, or Revision 07 dated 23 January 2006, or Revision 08 dated 06 May 2010.

Airbus SB A300-27-6036 Revision 08 dated 16 April 2004, or Revision 09 dated 23 January 2006, or Revision 10 dated 01 August 2007, or Revision 11 dated 01 October 2007, or Revision 12 dated 06 May 2010.

Airbus SB A300-27-9009 original issue dated 16 April 2004, or Revision 01 dated 23 January 2006, or Revision 02 dated 11 June 2010.

Airbus SB A300-55-0044 Revision 04 dated 14 December 2017.

Airbus SB A300-55-6023 Revision 08 dated 14 December 2017.

Airbus SB A310-55-2026 Revision 04 dated 14 December 2017.

Airbus SB A300-55-9007 Revision 01 dated 04 January 2018.

The use of later approved revisions of the above-mentioned documents 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 03 December 2018 as PAD 18-165 for consultation until 31 December 2018. The Comment Response Document can be found in the <u>EASA Safety 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 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 <u>EU aviation safety</u> 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.

