



## Airworthiness Directive

**AD No.:** 2018-0145R2

**Issued:** 23 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):

A350 aeroplanes

**Effective Date:** 24 July 2018 (same as original issue)

**TCDS Number(s):** EASA.A.151

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2018-0145R1 dated 13 July 2018.

## ATA 27 – Flight Controls – Elevators and Rudder Servocontrols – Replacement / Modification

### Manufacturer(s):

Airbus

### Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers.

### Definitions:

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

**The AOT:** Airbus Alert Operators Transmission (AOT) A27P012-18.

**Affected part:** Servocontrols, having a Part Number (P/N) and serial number (s/n) as listed in Appendix 2 of the AOT at Revision 01.

**Serviceable part:** Servocontrols, having a combination of P/N and s/n not listed in Appendix 2 of the AOT at Revision 01; or an affected part that has been reworked/modified in-shop, identifiable by the SB N° 27-06 marked after the s/n of the servocontrol; or an affected part that has been modified on-aircraft by replacing the servo module (SVM) in accordance with the instructions of the AOT.



**Groups:** Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed.

**Reason:**

Two occurrences were reported of flight control actuator uncommanded motion on Airbus A350 aeroplanes. Further investigations performed by the servocontrol manufacturer (MOOG Aircraft Group) revealed that both events were caused by foreign object debris blocking a receiver port inside the Electro Hydraulic Servo Valve (EHSV), which is a component fitted on the servocontrol. In both cases, materials found in the EHSV first stage were consistent with debris generated by rework activity during manufacturing process.

This condition, if not corrected, could lead to an uncommanded flight control actuator movement, or an unresponsive flight control actuator while in active mode, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the AOT, identifying the affected parts and providing instructions to remove the affected parts from service.

For the reasons described above, EASA issued AD 2018-0145 (later revised) to require replacement of the affected parts with serviceable parts.

Sine EASA AD 2018-0145R1 was issued, it was determined that the information concerning the 'R' marked after the P/N of the servocontrol following in-shop rework/modification is actually incorrect. Consequently, this AD is further revised to correctly specify the markings on a servocontrol after in-shop rework/modification (see [Definitions](#), serviceable part). This revised AD also allows on-aircraft modification of an affected part, by replacement of the SVM.

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

Required as indicated, unless accomplished previously:

**Replacement:**

- (1) For Group 1 aeroplanes: Within the compliance time specified in Table 1 of this AD, as applicable, for each affected part installed on the aeroplane, replace the part with a serviceable part, or modify the part, in accordance with the instructions of the AOT.

Table 1 – Servocontrols Replacement

Flight Hours (FH) Accumulated	Compliance Time
Less than 1 200 FH	Before exceeding 1 200 FH, or within 30 days after the effective date of this AD, whichever occurs later
1 200 FH or more	Within 9 months after the effective date of this AD

Note 1: Unless otherwise specified, the FH indicated in Table 1 of this AD are those accumulated by the affected part since its first installation on an aeroplane. In case these FH are unknown, the FH accumulated by the affected elevator or rudder since its first installation on an aeroplane apply.



**Part Installation:**

- (2) For Group 1 and Group 2 aeroplanes: From the effective date AD, do not install an affected part on any aeroplane, unless it is a serviceable part, as defined in this AD.

**Ref. Publications:**

Airbus AOT A27P012-18 original issue dated 16 May 2018, or Revision 01 dated 29 May 2018.

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. 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](mailto: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 XWB, E-mail: [continued-airworthiness.a350@airbus.com](mailto:continued-airworthiness.a350@airbus.com).

