Airworthiness Directive

AD No.: 2021-0285
Issued: 21 December 2021

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: AIRBUS

Type/Model designation(s): A380 aeroplanes

Effective Date: 04 January 2022
TCDS Number(s): EASA.A.110
Foreign AD: Not applicable
Supersedure: None

ATA 27 – Flight Controls – Aileron Servo Controls – Replacement

Manufacturer(s): Airbus

Applicability:
Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.

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

The SB: Airbus Service Bulletin (SB) A380-27-8072 (removal of affected parts for in-shop correction and installation of serviceable parts), which includes reference to SB A380-27-8071 (identification of the aileron servo controls affected by the limitation due to fatigue issue).

The VSB: Goodrich Actuation Systems SB (VSB) 31132-27-07, which includes the date of embodiment of the modification for each affected part (in accordance with Goodrich Actuation Systems SB 31132-27-05).

Affected part: Aileron servo controls, having Part Number (P/N) 31132-130 or P/N 31132-170, as identified by serial number in the VSB.

Serviceable part: Aileron servo controls, having P/N 31132-140 or P/N 31132-180.
Reason:
Following introduction of a modified rod eye-end locking device on A380 aileron servo controls through Airbus production line modification (mod) 75388 and equivalent in-service mod 75534 (via Goodrich Actuation Systems SB 31132-27-05), analysis indicates that a fatigue issue may exist or develop, reducing the life of the affected post-mod servo controls.

This condition, if not detected and corrected, could lead to failure or detachment of an aileron servo control, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the SB, as defined in this AD, to provide instructions to remove affected parts and install serviceable parts.

Goodrich Actuation Systems issued the VSB, as defined in this AD, to provide instructions for in-shop inspection, rework and re-identification of affected parts.

For the reasons described above, this AD requires removal from service of each affected part. This AD also prohibits (re)installation of affected parts on any aeroplane.

Required Action(s) and Compliance Time(s):
Required as indicated, unless accomplished previously:

Replacement:
(1) Before an affected part exceeds 8 170 flight cycles after its modification embodiment date, as specified in the VSB, remove that affected part from service and replace it with a serviceable part, as defined in this AD, in accordance with the instructions of the SB.

Note 1: Airbus SB A380-27-8071 provides a method to identify affected parts, but a maintenance records check is also acceptable, provided such records are accurate and complete and can be relied upon for the purpose of identification. Any method of identification remains subject to agreement by the competent authority.

Part(s) Installation:
(2) After replacement of all affected parts on an aeroplane, as required by paragraph (1) of this AD, do not install an affected part on that aeroplane.

Ref. Publications:


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 09 November 2021 as PAD 21-165 for consultation until 07 December 2021. 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 SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.