



Airworthiness Directive

AD No.: 2022-0022

Issued: 02 February 2022

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: 16 February 2022

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2021-0285 dated 21 December 2021.

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 Vendor 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.



Groups: Group 1 aeroplanes are those that have at least one affected part installed. Group 2 aeroplanes are those that do not have any affected part installed. 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 other method of identification remains subject to agreement by the competent authority.

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 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. Consequently, EASA issued AD 2021-0285 to require removal from service of each affected part. That AD also prohibited (re)installation of affected parts on any aeroplane.

Since that AD was issued, the need for clarification of the requirements was determined.

For the reasons described above, this AD retains the requirements of EASA AD 2021-0285, which is superseded, and introduces 'Groups' definition to specify and separate the requirements for the various aeroplanes, depending on configuration.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 aeroplanes: 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.

Part(s) Installation:

- (2) Do not install an affected part on an aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.
 - (2.1) For Group 1 aeroplanes: After replacement of each affected part on an aeroplane, as required by paragraph (1) of this AD.
 - (2.2) For Group 2 aeroplanes: From the effective date of this AD.



Ref. Publications:

Airbus SB A380-27-8071 original issue dated 18 October 2021.

Airbus SB A380-27-8072 original issue dated 18 October 2021.

Goodrich Actuation Systems SB 31132-27-07 original issue dated 08 October 2021.

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. 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. 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.

