



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 20-157**

**Issued: 06 October 2020**

Note: This Proposed Airworthiness Directive (PAD) 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

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

AIRBUS

**Type/Model designation(s):**

A330 aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.A.004

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2019-0093 dated 26 April 2019.

## ATA 27 – Flight Controls – Slat Geared Rotary Actuators – Repair / Replacement

**Manufacturer(s):**

Airbus

**Applicability:**

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, A330-343, A330-743L, A330-841 and A330-941 aeroplanes, all manufacturer serial numbers (MSN).

**Definitions:**

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

**The SB:** Airbus Service Bulletin (SB) A330-27-3233.

**The Liebherr SB:** Liebherr-Aerospace Lindenberg GmbH (Liebherr) SB 926C-27-01.

**Affected part:** Slat geared rotary actuators (SGRA), having Part Number 926C0000-01 and a serial number as identified in the SB, except those that have passed (no defects found) an inspection, or have been repaired, as applicable, in accordance with the instructions of the Liebherr SB.



**Serviceable part:** An SGRA that is not an affected part.

**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:**

An occurrence was reported of finding cracks within the ring gears of an SGRA. Investigation result identified that this was due to a change in the manufacturing process of the 300M steel raw material in conjunction with inadequate post-production non-destructive testing for potential cracks. A batch of SGRA was identified as having been subject to this manufacturing process.

This condition, if not detected and corrected, could, in combination with an independent failure on the second SGRA of the same slat surface, lead to an uncontrolled movement of the affected slat surface in flight, or detachment of the slat surface, possibly resulting in damage to the stabilizers, or reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the SB to provide instructions to identify and replace the affected parts, referencing the Liebherr SB for in-shop correction. Consequently, EASA published AD 2019-0093 to require identification and replacement of each affected part with a serviceable part.

Since that AD was published, it was confirmed that the affected parts were still installed on the identified aeroplanes. However, it was also determined that the requirements of that AD may not ensure the permanent removal from service of these parts. Therefore, it cannot be excluded that an affected part, removed from an affected aeroplane, would later be installed on another aeroplane.

For the reason described above, this AD partially retains the requirements of EASA AD 2019-0093, which is superseded, and expands the Applicability to all aeroplanes for which the affected part is eligible for installation. This AD also prohibits (re)installation of an affected part on any aeroplane.

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

Required as indicated, unless accomplished previously:

**Replacement:**

- (1) For Group 1 aeroplane: Within 20 000 flight hours (FH) after 10 May 2019 [the effective date of EASA AD 2019-0093], replace each affected part with a serviceable part in accordance with the instructions of the SB.

**Part(s) Installation:**

- (2) Do not install on any aeroplane an affected part, as required by paragraph (2.1) or (2.2) of this AD, as applicable.

(2.1) For Group 1 aeroplanes: After removal of all affected parts from the 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 A330-27-3233 original issue dated 07 March 2019.

Liebherr SB 926C-27-01 original issue dated 18 December 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 03 November 2020.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – IIAL (Airworthiness Office), E-mail: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com).

