



Airworthiness Directive

AD No.: 2023-0074

Issued: 05 April 2023

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS S.A.S.

Type/Model designation(s):

A321 aeroplanes

Effective Date: 19 April 2023

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Centre Wing Box Rear Lower Spar and Slanted Beam – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.

Definitions:

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

Affected areas: Centre wing box (CWB) rear lower spar junction area at fuselage frame (FR) 42 and slanted beam connection with rear spar and lower panel.

The AOT: Airbus Alert Operators Transmission (AOT) A57N020-22.

Airbus date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.



Reason:

In the frame of A321 XLR certification and fatigue and damage tolerance harmonization of the Single Aisle family, a new stress calculation has been accomplished in the CWB and slanted junction areas at FR42. Stress analyses results have highlighted high fatigue stress in the affected areas where cracks may appear with the current inspection regime.

This condition, if not detected and corrected, could affect the structural integrity of the fuselage.

To address this potential unsafe condition, Airbus issued the AOT to provide instructions for a one-time inspection of A321 CEO CWB rear lower spar junction area using rototest and High Frequency Eddy Current inspection methods; and of A321 CEO FR42 slanted beam connection using rototest inspection method.

For the reasons described above, this AD requires a one-time inspection of the affected areas and, depending on findings, accomplishment of applicable corrective action(s). This AD also introduces a provision for a ferry flight allowing repositioning the aeroplane to a location where the maintenance action required by this AD can be accomplished.

This AD is considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance time as defined in Table 1 of this AD, accomplish an inspection of the affected areas in accordance with the instructions of the AOT.

Table 1 – Affected Areas Inspection

Flight Cycles (FC) (see Note 1 of this AD)	Compliance Time
Less than 31 000 FC	Before exceeding 31 000 FC since Airbus date of manufacture or within 6 months after the effective date of this AD, whichever occurs later
31 000 FC or more, but less than 49 000 FC	Within 6 months after the effective date of this AD without exceeding 3 months after having accumulated 49 000 FC since Airbus date of manufacture
49 000 FC or more	Within 3 months after the effective date of this AD

Note 1: Unless specified otherwise, the FC indicated in Table 1 of this AD are those accumulated on the effective date of this AD by the aeroplane since its Airbus date of manufacture.



Ferry flight:

- (2) Beyond the compliance time as defined in paragraph (1) of this AD, a single ferry flight not exceeding 2 FC without passengers is allowed to position an aeroplane to a maintenance location where the action required by this AD can be accomplished on that aeroplane.

Corrective Action(s):

- (3) If, during the inspection as required by paragraph (1) of this AD, any crack is found, before next flight, contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Reporting

- (4) Within 90 days after the inspection as required by paragraph (1) of this AD, report the results (including no findings) to Airbus. Using the instructions of the AOT is an acceptable method to comply with this reporting requirement.

Ref. Publications:

Airbus AOT A57N020-22 original issue dated 07 December 2022.

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.
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 – Airworthiness Office – 1IASA; E-mail: account.airworth-eas@airbus.com.

