

Airworthiness Directive Cancellation Notice

AD No.: 2023-0171-CN

Issued: 27 September 2023

Note: This Airworthiness Directive (AD) Cancellation Notice (CN) 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.

Design Approval Holder's Name: Type/Model designation(s):

ELBE FLUGZEUGWERKE GmbH Passenger to Freighter conversion

Effective Date: 27 September 2023

TCDS Number(s): EASA Supplemental Type Certificate (STC) 10071994

Foreign AD: Not applicable

Cancellation: This Notice cancels EASA AD 2023-0171 dated 12 September 2023.

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

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers, which have been modified in accordance with ELBE Flugzeugwerke GmbH EASA STC 10071994 (Passenger to freighter conversion).

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 Airbus Single Aisle family, a new stress calculation was accomplished for the CWB and slanted junction areas at FR42. Results of stress analyses 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 inspection instructions for A321 Current Engine Option (CEO) CWB rear lower spar junction area using rototest and high-frequency eddy-current (HFEC) inspection methods; and for A321 CEO FR42 slanted beam connection using rototest inspection method. Prompted by this development, ELBE Flugzeugwerke GmbH, holder of EASA STC 10071994 (A321 passenger-to-freighter conversion), assessed the impact of the load distribution resulted from STC-modification and determined that reduced compliance time is necessary for modified aeroplanes. Prompted by this development, EASA issued AD 2023-0171 to require a one-time inspection of the affected areas and, depending on findings, accomplishment of applicable corrective action(s). That AD also introduced provisions for a single ferry flight.

Since that AD was issued, it was determined that the formula used for determination of the compliance time in EASA AD 2023-0171 was not correct. An additional review triggered by these comments accomplished by ELBE Flugzeugwerke GmbH and Airbus, confirmed that the increased load for modified aeroplanes represents only negligible compliance time reduction in comparison with the values required by EASA AD 2023-0074, and the potential unsafe condition is sufficiently addressed by that AD for affected A321 aeroplanes.

For the reasons described above, this Notice cancels EASA AD 2023-0171.

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

None.

Ref. Publications:

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

Remarks:

- Enquiries regarding this AD-CN should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- For any question concerning the technical content of this AD-CN, please contact: ELBE Flugzeugwerke GmbH, E-mail: <u>airworthiness@efw.aero</u>. AIRBUS – Airworthiness Office – 1IASA; E-mail: <u>account.airworth-eas@airbus.com</u>.

