



Airworthiness Directive

AD No.: 2021-0173

Issued: 21 July 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 Change Approval Holder's Name:	Modification description:
ELBE FLUGZEUGWERKE GmbH	Passenger to Freighter conversion

Effective Date: 04 August 2021

STC Number: EASA Supplemental Type Certificate (STC) 10063795 and STC 10063798

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0215 dated 04 September 2019.

ATA 35 – Oxygen – Courier Area Oxygen Distribution System Flexible Hoses – Inspection / Replacement

Manufacturer(s):

Airbus

Applicability:

Airbus A330-243, A330-322 and A330-343 aeroplanes, manufacturer serial number 0116, 0127, 0231, 0600, 0610, 0709, 0777 and 0781, which have been modified in accordance with EASA STC 10063798 (Passenger to freighter conversion) and STC 10063795 (Lavatory installation).

Definitions:

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

Affected part: Flexible hoses, having a Part Number (P/N) as listed in Table 1 of this AD, intended for installation on the courier area oxygen system (CAOS).

The inspection SB: Elbe Flugzeugwerke GmbH (EFW) Service Bulletin (SB) EFW-SB-35-0001 and EFW-SB-35-0002, as applicable.



The modification SB: EFW-SB-35-0003 and EFW-SB-35-0006, as applicable.

Serviceable part: An affected part that is new (never previously installed), or that, before next flight after installation into the CAOS, has passed an inspection and functional test (no leakage or damage found) in accordance with the instructions of the inspection SB.

Improved serviceable part: Flexible hoses, having a P/N as listed in Table 1 of this AD.

Reason:

Several occurrences were reported of finding cracked flexible hoses P/N 32209-series of the CAOS on A330 freighter aeroplanes. These flexible hoses are steel braided hoses with polyurethane (PUR) inner tubes and steel inner springs. On A330 freighter aeroplanes, these hoses are located in the courier area and are not pressurized during normal operation. It was identified that the same issue is present on A330 aeroplanes modified with EASA STC 10063798 and STC 10063795.

This condition, if not detected and corrected, could lead to oxygen leakage in the flexible hose of the CAOS, which, in combination with in-flight depressurization or smoke evacuation procedure, could possibly result in injury to occupants of the courier area.

To address this potential unsafe condition, EFW issued the inspection SB to provide inspection instructions. Consequently, EASA published AD 2019-0215 to require repetitive detailed inspections (DET), including functional testing, of the CAOS and, depending on findings, replacement of affected part(s).

Since that AD was issued, improved flexible oxygen hoses have been developed and EFW issued the modification SB, providing instructions for replacement of each affected part.

For the reasons explained above, this AD retains the requirements of EASA AD 2019-0215, which is superseded, and requires replacement of each affected part with an improved serviceable part.

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

Required as indicated, unless accomplished previously:

Table 1

Affected parts P/N	Improved serviceable parts P/N
32209H0136K000	A26157-01
32209E0230C	A26007-01
32209E0314F090	A26008-01
32209E0266C	A26009-01
32209E0190C	32301E0200C

Inspection(s):

- (1) Within 1 600 flight hours (FH) after 18 September 2019 [the effective date of EASA AD 2019-0215] and, thereafter, at intervals not to exceed 1 600 FH, accomplish a DET (including functional testing) of the CAOS in accordance with the instructions of the inspection SB.



Corrective Action(s):

- (2) If, during any DET as required by paragraph (1) of this AD, any leakage or damage of any affected part is found, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the inspection SB, or with an improved serviceable part in accordance with the instructions of the modification SB.

Modification:

- (3) Unless already accomplished as specified in paragraph (2) of this AD, within 42 months after the effective date of this AD, modify the aeroplane by replacing each affected part with an improved serviceable part, as defined in this AD, in accordance with the instructions of the modification SB.

Terminating Action:

- (4) Replacement of an affected part on an aeroplane with a serviceable part in accordance with the instructions of the inspection SB, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.
- (5) Modification of an aeroplane by installing improved serviceable parts as required by paragraph (3) of this AD, or as specified in paragraph (2) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

Part(s) Installation:

- (6) After modification of an aeroplane as required by paragraph (3) of this AD, or as specified in paragraph (2) of this AD, as applicable, do not install an affected part on that aeroplane.

Ref. Publications:

EFW-SB-35-0001 original issue dated 08 March 2019.

EFW-SB-35-0002 original issue dated 02 September 2019.

EFW-SB-35-0003 original issue dated 27 January 2021.

EFW-SB-35-0006 original issue dated 09 June 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. This AD was posted on 21 June 2021 as PAD 21-089 for consultation until 19 July 2021. No comments were received during the consultation period.
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: Elbe Flugzeugwerke GmbH, E-mail: airworthiness@efw.aero.

