

Emergency Airworthiness Directive AD No.: 2021-0043-E

Issued: 02 February 2021

Note: This Emergency 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:

CEAPR

Type/Model designation(s): DR400 aeroplanes

Effective Date: 04 February 2021 TCDS Number(s): EASA.A.367

Foreign AD: Not applicable

Supersedure: None

ATA 21 – Air Conditioning – Cabin Heater and Carburettor Heater Ducts – Operational Restriction / Inspection

Manufacturer(s):

Centre Est Aéronautique; Avions Pierre Robin; CAB (Construction Aéronautique de Bourgogne); APEX Industries; Robin Aircraft

Applicability:

DR 400/100 and DR 400/120 aeroplanes, serial numbers (s/n) 2212 to 2746 inclusive, if equipped with a 4 in 1 exhaust (Standard 01).

Definitions:

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

The SB: CEAPR Mandatory Service Bulletin (SB) N°210101

Groups: Group 1 aeroplanes are those having s/n 2653 to s/n 2746 inclusive. Group 2 aeroplanes are those having s/n 2212 to s/n 2652 inclusive.

Reason:

An in-service occurrence has been reported of the inversion of the cabin heater and carburettor heater ducts on a DR400/120 aeroplane. Investigation has determined that this inversion (erroneous installation) was done on the production line. However, it cannot be excluded that the



same error was made during maintenance on an aeroplane with a 4 in 1 exhaust (Standard 01) installed.

This condition, if not corrected, could lead to carbon monoxide (CO) intoxication of the pilot(s), possibly resulting in loss of control of the aeroplane.

To address this potential unsafe condition, CEAPR issued the SB, introducing an operational limitation and providing inspection instructions.

For the reason described above, this AD requires, for certain aeroplanes, implementation of Airplane Flight Manual (AFM) limitations, pre-flight checks, a one-time inspection of the cabin heater and carburettor heater ducts and, depending on findings, accomplishment of applicable corrective action(s) to restore the installation to its approved design configuration.

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

Required as indicated, unless accomplished previously:

AFM Change / Operational Limitations:

- (1) For Group 1 aeroplanes: Before next flight after the effective date of this AD, amend the applicable AFM by implementing the operational limitations in accordance with the instructions of the SB, inform all pilots and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM by incorporating the page containing paragraph §10 of the SB is an acceptable method to comply with the requirements of paragraph (1) of this AD. Amending the AFM may be accomplished by a licensed pilot.

Inspection:

(3) Within the compliance time(s) specified in Table 1 of this AD, as applicable, inspect the cabin heater and carburettor heater duct installation in accordance with the instructions of paragraph § 11 of the SB.

Group	Compliance Time(s)
1	Within 60 flight hours (FH) or 30 days, whichever occurs first after the effective date of this AD
2	Within 60 FH, or during the next scheduled annual inspection, whichever occurs first after the effective date of this AD

Corrective Action(s):

(4) If, during the inspection as required by paragraph (3) of this AD, any discrepancies are found, as defined in the SB, before next flight, accomplish all applicable corrective actions to restore the installation to its approved design configuration, in accordance with the instructions of the SB.

Removal or AFM Change / Operational Limitations:

(5) For Group 1 aeroplanes: If, during the inspection of an aeroplane as required by paragraph (3) of this AD, no discrepancies are detected and the cabin heater and carburettor heater ducts are



installed in conformance with the approved design, the limitations and pre-flight check imposed by paragraph (1) of this AD may be removed from the AFM of that aeroplane.

(6) For Group 1 aeroplanes: Following correction of an aeroplane as required by paragraph (4) of this AD, the limitations and pre-flight check imposed by paragraph (1) of this AD may be removed from the AFM of that aeroplane.

Ref. Publications:

CEAPR Mandatory Service Bulletin N°210101 dated 18 January 2021.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> 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.
- For any question concerning the technical content of the requirements in this AD, please contact: CEAPR, Bureau de Navigabilité, 1 Route de Troyes 21121 Darois, France, Telephone: +33 (3) 80 35 25 22, E-mail: <u>info@ceapr.com</u>, Website: <u>www.ceapr.com</u>.

