Airworthiness Directive

AD No.: 2020-0001

Issued: 08 January 2020

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 Approval Holder's Name:

CEAPR

Type/Model designation(s):

DR 400 aeroplanes

Effective Date: 22 January 2020

TCDS Number(s): EASA.A.367

Foreign AD: Not applicable

Supersedure: None

ATA 75 – Air – Air Intake Duct – Modification / Inspection

Manufacturer(s):

Centre est Aéronautique, Avions Pierre Robin, Robin Aviation, Constructions Aéronautiques de Bourgogne, APEX Industries, Robin Aircraft

Applicability:

DR 400/100, DR 400/120, DR 400/120 A, DR 400/120 D, DR 400/140, DR 400/140 B, DR 400/160, DR 400/160 D, DR 400/180, DR 400/180 R, DR 400/180 S and DR 400 NGL aeroplanes, all serial numbers (s/n), if equipped with an air induction duct G type Part Number (P/N) 56.18.68.320, H type P/N 56.18.13.010, or J type P/N 56.18.68.360.

Definitions:

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

The SB: CEAPR Mandatory Service Bulletin (SB) 180101.

Affected part: Air induction ducts, G type P/N 56.18.68.320, H type P/N 56.18.13.010, and J type P/N 56.18.68.360 which have not been modified in accordance with the instructions of the SB.

Serviceable part: Air induction ducts, G type P/N 56.18.68.320, H type P/N 56.18.13.010, and J type P/N 56.18.68.360 which have been modified in accordance with the instructions of the SB.

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 an engine in-flight shut-down (IFSD). The technical investigation results showed the presence of midges (small flying insects) inside the carburettor, blocking the fuel feed to the main nozzle. It was determined that, in this event, the midges managed to bypass the engine air filter because it had not been properly positioned.

This condition, if not detected and corrected, could lead to further events of engine IFSD, prompting an emergency landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, CEAPR published the SB (later revised to amend the applicability), providing instructions for modification of the air filter attachment fitting and to add an inspection/cleaning task for the air filter in the Aircraft Maintenance Programme (AMP), to verify correct positioning and to ensure no space exists between the air filter and the duct over the entire periphery of the filter.

For the reasons described above, this AD requires modification of the air filter attachment fitting for certain aeroplanes, and subsequent repetitive inspections of the air filter for all aeroplanes.

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

Required as indicated, unless accomplished previously:

Modification / Inspection(s):

(1) For Group 1 aeroplanes: Within 50 flight hours (FH) (see Note 1 of this AD), or during the next scheduled maintenance visit, whichever occurs first after the effective date of this AD, modify the air filter attachment fitting in accordance with the instructions of the SB. This modification effectively changes a Group 1 aeroplane into a Group 2 aeroplane.

(2) For Group 2 aeroplanes: Within 50 FH (see Note 1 of this AD), or during the next scheduled annual inspection after the modification as required by paragraph (1) of this AD, whichever occurs first, or, for aeroplanes modified before the effective date of this AD, within 50 FH after the effective date of this AD, as applicable, and thereafter at intervals not to exceed 50 FH, or during the next scheduled annual inspection, whichever occurs first, and after each replacement of the air filter on an aeroplane, inspect and clean the air filter in accordance with the instructions of the SB (see Note 2 of this AD).

Note 1: A non-cumulative maximum tolerance of 10 FH may be applied to the compliance time and interval specified in paragraphs (1) and (2) of this AD.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (2) of this AD, as applicable, the air filter is found to be positioned incorrectly, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the SB (see Note 2 of this AD).

Note 2: The inspection and cleaning as required by paragraph (2) of this AD and the corrective action(s) as required by paragraph (3) of this AD can be accomplished by the pilot-owner in accordance with the provisions of paragraph M.A.801 of Regulation (EU) No 1321/2014.

Part Installation:

(4) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, it is allowed to install on any aeroplane an air induction duct G type P/N 56.18.68.320, H type P/N 56.18.13.010, or J type P/N 56.18.68.360, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

CEAPR SB 180101 original issue dated 16 February 2018 or Revision 1 dated 01 October 2019.

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. This AD was posted on 21 February 2019 as PAD 19-028 for consultation until 21 March 2019, and re-published on 07 October 2019 as PAD 19-028R1 until 04 November 2019. The Comment Response Documents can be found in the EASA Safety Publications Tool, in the compressed (zipped) file attached to the record for this AD.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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.

5. 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: info@ceapr.com or Website: www.ceapr.com, section “My question” and then “I have a question about airworthiness”.