Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 19-028R1

Issued: 07 October 2019

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.
All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:
CEAPR

Type/Model designation(s):
DR 400 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]
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, providing instructions for modification of the air filter attachment fitting and to add an inspection/cleaning task for the air filter in the 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.

This PAD was revised to clarify the applicability (through the addition of affected air induction duct P/N) and content (through introduction of aeroplane groups and identification of required actions per group). Revising the Aircraft Maintenance Programme (AMP) to incorporate the repetitive inspections introduced by this AD is no longer considered a requirement, however, it remains an option under the competence of the State of Registry of the aeroplane.

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.

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.

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.

Ref. Publications:

CEAPR SB 180101 original issue dated 16 February 2018.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 04 November 2019.

2. The original issue of this PAD was posted on 21 February 2019 for consultation until 21 March 2019. The Comment Response Document can be found in the EASA Safety Publications Tool, in the compressed (zipped) file attached to the record for this PAD.

3. Enquiries regarding this PAD 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 PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the EU aviation safety reporting system.

5. For any question concerning the technical content of the requirements in this PAD, 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”.