

Emergency Airworthiness Directive

AD No.: 2023-0048-E

Issued: 07 March 2023

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, or Annex Vb Part M.L.A.301, as applicable, 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 Annex Vb Part M.L.A.303, as applicable] 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: 09 March 2023

TCDS Number(s): EASA.A.367

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA Emergency AD 2022-0267-E dated 27 December 2022.

ATA 57 – Wings – Main Wing Spar

ATA 11 – Placards and Markings – Interior Placards – Installation

ATA – Aircraft Flight Manual / Operational Limitations – Amendment

Manufacturer(s):

Centre Est Aéronautique, Avion Pierre Robin, Construction Aéronautique de Bourgogne, APEX Industries, Finch Aircraft, Robin Aircraft

Applicability:

CEAPR DR 400/100, DR 400/120, DR 400/120 A, DR 400/120 D, DR 400/125, DR 400/125i, DR 400/140, DR 400/140B, DR 400/160, DR 400/160 D, DR 400/180, DR 400/180 R, DR 400/180 S, DR 400/200 I, DR 400/200 R, DR 400/2+2, DR 400 RP, DR 400 NGL and DR400/500 aeroplanes, all serial numbers (s/n).

Definitions:

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

The SB: CEAPR Service Bulletin (SB) 221201 Revision 2.

Affected part: Main wing spars, having s/n 2114, 2149, 2158, 2160, 2165, 2174, 2180, 2182, 2186, 2189, 2190, 2193, 2194, 2198, 2201, 2209, 2220, 2223, 2226, s/n 2228 to 2237 inclusive, s/n 2239

to 2632 inclusive, or s/n 2639 to 2645 inclusive, and any main wing spar on which, after 31 December 1973 but before the effective date of this AD, a repair, identified in the SB (as defined in this AD) as an “affected repair”, has been embodied by the maintenance organisation of the design approval holder; except: all main wing spars on which, either APEX AIRCRAFT / CEAPR approved modification (mod) No. 020903 has been embodied in production, or which (after delivery of the aeroplane) have been reinforced in accordance with the instructions of APEX AIRCRAFT / CEAPR modification instruction No. 1001047 Issue H.

Groups: Group 1 aeroplanes are those which have an affected part installed. Group 2 aeroplanes are those which do not have an affected part installed.

Reason:

During a sample check of a main wing spar on the production line, a discrepant bonding was identified. Following investigations, it was determined that other (batches of) main wing spars, installed on other production aeroplanes as well as on already delivered in-service aeroplanes, were potentially affected.

This condition, if not corrected, could lead to reduced structural strength of the wing, possibly resulting in structural failure thereof and consequent loss of the aeroplane.

To address this potential unsafe condition, CEAPR issued SB 221201 (at original issue) to provide information about possibly affected parts and to recommend flight prohibition for certain aeroplanes. Consequently, EASA issued Emergency AD 2022-0267-E, prohibiting further flight for certain aeroplanes and requiring operational limitations for the other (potentially) affected aeroplanes and amendment of the applicable aircraft flight manuals (AFM).

Since that AD was issued, further investigation results determined that possibly more aeroplanes than initially identified are affected by the unsafe condition addressed by this AD, and that the required operational limitations need adjustment and/or some additional clarification. It was also determined that the aeroplanes which had been prohibited to fly can be allowed to resume safe operation, provided the new defined (amended) limitations are implemented. CEAPR revised SB 221201 accordingly and published the SB, as defined in this AD.

For the reasons described above, this AD supersedes EASA Emergency AD 2022-0267-E and requires amendment of the AFM to introduce new (amended) operational limitations, installation of a placard indicating the reduced maximum structural cruising speed (VNO), and removes the prohibition to fly.

This AD is still considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Operational Limitations:

- (1) For Group 1 aeroplanes: From the effective date of this AD, it is allowed to operate the aeroplane with the following limitations:



- All flight manoeuvres shall be executed with care and only by smooth action on the flight controls;
- Turns with more than 60° bank (inclination), lazy eights, chandelles and any other aerobatic manoeuvres are prohibited;
- Intentional stalls are allowed, provided performed with an instructor on board who has direct access to the flight controls, to ensure that limitations are not exceeded;
- VNO is reduced to 230 km/h (124 Kts).

AFM Amendment:

- (2) For Group 1 aeroplanes: Before next flight after the effective date of this AD, amend the applicable AFM by incorporating the limitations as required by paragraph (1) of this AD, which can be accomplished by inserting a copy of this AD in the limitations section of the AFM, inform all pilots and, thereafter, operate the aeroplane accordingly.

Placard installation:

- (3) For Group 1 aeroplanes: Within 30 flight hours or 30 days, whichever occurs first after the effective date of this AD, install in the cockpit of the aeroplane, next to the airspeed indicator, a placard with the reduced VNO in accordance with the instructions of the SB. This placard must be manufactured in accordance with the specifications and instructions of the SB. Installation of the placard can be accomplished by a licenced pilot.

Part installation:

- (4) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, do not install an affected part on any aeroplane.

Ref. Publications:

CEAPR SB 221201 original issue (Edition 1) dated 23 December 2022, or Revision 1 dated 28 December 2022, or Revision 2 dated 06 March 2023.

APEX AIRCRAFT / CEAPR mod No. 020903 (approved 20 January 2003) and associated modification instruction No. 1001047 original issue (Issue H) dated 19 May 2003.

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. 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: 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: CEAPR, Bureau de Navigabilité, 1 Route de Troyes – 21121 Darois, France, Telephone: +33 (3) 80 35 25 22, E-mail: info@ceapr.com, website: www.ceapr.com.

