



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 17-150

Issued: 24 October 2017

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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:

328 SUPPORT SERVICES GmbH

Type/Model designation(s):

Dornier 328 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.096

Foreign AD: Not Applicable

Supersedure: None

ATA 55 – Stabilizers – Horizontal Stabilizer Rear Bearing Supports – Inspection / Replacement / Rear Spar Modification

Manufacturer(s):

Dornier Luftfahrt GmbH, Fairchild-Dornier GmbH, AvCraft Aerospace GmbH

Applicability:

Dornier 328-100 aeroplanes, all serial numbers (s/n), and
Dornier 328-300 aeroplanes, all s/n.

Reason:

Occurrences were reported on horizontal stabilizer bearing supports being found corroded at the contact surface to the horizontal stabilizer rear spar. The corroded area was at the lower flange position, which is connected to the stabilizer rear spar and not visible without detachment of the fitting. Investigation determined that the corrosion is triggered by galvanic effect, due to a direct contact between the horizontal stabilizer rear spar, made from CFRP (carbon fibre reinforced plastic), and the aluminium rear attachment fitting.

This condition, if not detected and corrected, could lead to failure of the fitting and loss of one load path of the horizontal stabilizer attachment, possibly resulting in reduced control of the aeroplane.



To address this potential unsafe condition, 328 Support Services GmbH (328 SSG) issued Service Bulletin (SB) SB-328-55-557 and SB-328J-55-324 to provide instructions for inspection of the affected area, replacement of the parts, and modification to improve corrosion behaviour by incorporating of glass fibre layer.

For the reasons described above, this AD requires a one-time inspection of the horizontal stabilizer rear bearing supports and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires a modification of the horizontal stabilizer rear spar, irrespective of findings.

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

Required as indicated, unless accomplished previously:

Note 1: 328 SSG SB-328-55-557 and SB-328J-55-324 are hereafter collectively referred to as ‘the applicable SB’ in this AD.

Note 2: Group 1 aeroplanes are those with s/n 1005 to 1031 inclusive, which have rear bearing supports Part Number (P/N) 001B551A1441000 installed. This part exhibits insufficient corrosion resistance and static strength, resulting in reduced fatigue performance in the low cycle range. Group 2 aeroplanes are those with s/n 1032 to s/n 3224 inclusive, which have rear bearing supports P/N 001B551A1441002 (328-100) or P/N 001D551A1441000 (328-300) installed, having improved properties.

Inspection:

- (1) For Group 1 aeroplanes: Within 1 000 flight cycles (FC) or 8 months, whichever occurs first after the effective date of this AD, inspect horizontal stabilizer rear bearing supports in accordance with the instructions of the applicable SB.
- (2) For Group 2 aeroplanes: Within 5 000 flight hours (FH) or 30 months, whichever occurs first after the effective date of this AD, inspect the horizontal stabilizer rear bearing supports in accordance with the instructions of the applicable SB.

Corrective Action(s):

- (3) If, during the inspection as required by paragraphs (1) or (2) of this AD, as applicable, corrosion or any other damage is detected, before next flight, replace the affected horizontal stabilizer rear bearing supports in accordance with the instructions of the applicable SB.

Modification:

- (4) Group 1 aeroplanes: Within 1 000 FC or 8 months, whichever occurs first after the effective date of this AD, replace (unless already done as required by paragraph (3) of this AD) the horizontal stabilizer rear bearing supports with new supports, and modify the horizontal stabilizer rear spar in accordance with the instructions of the applicable SB.
- (5) Group 2 aeroplanes: Within 5 000 FH or 30 months, whichever occurs first after the effective date of this AD, modify the horizontal stabilizer rear spar in accordance with the instructions of the applicable SB.



Reporting:

- (6) Within 30 days after the inspection as required by paragraph (1) or (2) of this AD, as applicable, report the inspection results (including no findings) to 328 SSG, in accordance with the instructions of the applicable ASB.

Parts Installation:

- (7) Do not install on any aeroplane a horizontal stabilizer rear bearing support P/N 001B551A1441000, as required by paragraph (7.1) or (7.2) of this AD, as applicable.

(7.1) For Group 1 aeroplanes: After replacement of the horizontal stabilizer rear bearing supports as required by paragraph (3) or (4) of this AD, as applicable.

(7.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

328 Support Services GmbH SB-328-55-557 dated 01 September 2017.

328 Support Services GmbH SB-328J-55-324 dated 01 September 2017.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 21 November 2017.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact: 328 Support Services GmbH, Postfach 1252, D-82231 Wessling, Federal Republic of Germany, Telephone: +49 (0)8153 88111 6666; Fax: +49 (0)8153 88111 6565, E-mail gsc.op@328support.de.

