Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-078
Issued: 04 July 2024

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: DEUTSCHE AIRCRAFT 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: This AD supersedes EASA AD 2023-0137 dated 12 July 2023.

ATA 28 – Fuel – Fuel Tank / Bonding Straps – Inspection

Manufacturer(s): Dornier Luftfahrt GmbH, Fairchild-Dornier GmbH, AvCraft Aerospace GmbH

Applicability: Dornier 328-100 and Dornier 328-300 aeroplanes, all manufacturer serial numbers.

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

The inspection ASB: Deutsche Aircraft GmbH Alert Service Bulletin (ASB) ASB-328-28-047 Revision 1 (for Dornier 328-100 aeroplanes) or ASB-328J-28-023 Revision 1 (for Dornier 328-300 aeroplanes), as applicable.

The modification SB: Deutsche Aircraft GmbH Service Bulletin (SB) SB-328-28-598 (for Dornier 328-100 aeroplanes) or SB-328J-28-355 (for Dornier 328-300 aeroplanes), as applicable.

Affected part: Bonding straps located inside the feeder wing tank (left-hand (LH) and right-hand (RH) sides), outer and inner wing tanks (LH and RH sides).
Reason:
Occurrences were reported of finding damaged affected parts. The extent of the detected damage of the affected parts did not ensure that appropriately low electrical impedance is obtained and maintained through the affected bonding path.

This condition, if not detected and corrected, could lead to loss of bonding function and, in combination with a lightning strike, create a source of ignition in a fuel tank, possibly resulting in a fire or explosion and consequent loss of the aeroplane.

To address this potential unsafe condition, Deutsche Aircraft GmbH issued original issue of the ASB-328-28-047 (for Dornier 328-100 aeroplanes) or ASB-328J-28-023 (for Dornier 328-300 aeroplanes), providing inspection instructions and EASA issued AD 2023-0137 to require a one-time detailed inspection of each affected part and, depending on findings, replacement.

Since that AD was issued Deutsche Aircraft GmbH issued the inspection ASB, as defined in this AD, introducing repetitive inspections of the affected part. Additionally, Deutsche Aircraft GmbH developed modification replacing all the existing bonding straps with parts of the same cross section and length but with nickel-plated surface protection and issued the modification SB.

For the reasons described above, this AD retains the requirement of EASA AD 2023-0137, which is superseded, introduces repetitive inspections of the affected part and optional modification allowing to terminate the repetitive inspections.

Required Action(s) and Compliance Time(s):
Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection:
(1) Within 160 days after 26 July 2023 [the effective date of EASA AD 2023-0137], inspect each affected part in accordance with the instructions of the Deutsche Aircraft GmbH ASB ASB-328-28-047 (for Dornier 328-100 aeroplanes) or ASB-328J-28-023 (for Dornier 328-300 aeroplanes) at any issue.

(2) Within the compliance time as defined in Table 1 of this AD and, thereafter, at interval not to exceed 12 months, inspect each affected part in accordance with the instructions of the inspection ASB.

Table 1 – Compliance Time

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Corrective Action(s):
(3) If, during any inspection as required by paragraph (1) or (2) of this AD, any damage is detected as defined in the inspection ASB, before next flight, replace the damaged affected part with a new part or contact Deutsche Aircraft GmbH for corrective action instructions and accomplish those instructions accordingly.
Optional Modification:
(4) Modification of an aeroplane in accordance with the instructions of the modification SB constitutes terminating action for the inspections required by paragraph (2) of this AD for that aeroplane.

Acceptable Method:
(5) Modification of an aeroplane in accordance with the instructions of the modification SB is an acceptable method to comply with the requirement of paragraph (1) of this AD for that aeroplane.

Credit:
(6) Replacement of the damaged affected part(s), accomplished on an aeroplane before the effective date of this AD in accordance with the original issue of Deutsche Aircraft GmbH ASB ASB-328-28-047 (for Dornier 328-100 aeroplanes) or ASB-328J-28-023 (for Dornier 328-300 aeroplanes), as applicable, is an acceptable method to comply with the requirement of paragraph (3) of this AD for that aeroplane.

Ref. Publications:
Deutsche Aircraft GmbH ASB ASB-328-28-047 original issue dated 25 May 2023, or Revision 1 dated 19 June 2024.

Deutsche Aircraft GmbH ASB ASB-328J-28-023 original issue dated 25 May 2023, or Revision 1 dated 19 June 2024.

Deutsche Aircraft GmbH SB SB-328-28-598 original issue dated 22 May 2024.

Deutsche Aircraft GmbH SB SB-328J-28-355 original issue dated 22 May 2024.

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

Remarks:
1. This Proposed AD will be closed for consultation on 01 August 2024.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. 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. This may include reporting on the same or similar components, other than those covered by the design to which this PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: Deutsche Aircraft GmbH, Oberpfaffenhofen Airport, D-82234 Wessling, Federal Republic of Germany; Telephone: +49 (0)8153 88111 6666; Fax: +49 (0)8153 88111 6565; E-mail gsc.op@deutscheaircraft.com.