

# Airworthiness DirectiveAD No.:2017-0214Issued:25 October 2017

Note: This Airworthiness Directive (AD) 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.

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 (EC) 216/2008, Article 14(4) exemption].

# **Design Approval Holder's Name:** 328 SUPPORT SERVICES GmbH

Type/Model designation(s): Dornier 328 aeroplanes

Effective Date: 08 November 2017

TCDS Number(s): EASA.A.096

Foreign AD: Not Applicable

Supersedure: This AD supersedes EASA AD 2017-0016 dated 31 January 2017.

# ATA 28 – Fuel – Feeder Tank Fuel Lines & Clamps – Inspection / 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 of broken bonding wires on Dornier 328 aeroplanes, equipped with fuel line clamps Part Number (P/N) 14C02-10A, P/N 14C02-12A, or P/N 14C02-16A. The affected fuel line clamps were installed in accordance with the instructions of Dornier 328 Service Bulletin (SB) SB-328-28-490 or SB-328J-28-241, as applicable, to reduce occurrences of fuel line chafing. The results of the investigation did not identify any design deficiency or production failure of the fuel line clamps. The cause was identified as a combination of vibration, misalignment and lack of clearance of spring to connection part.

This condition, if not detected and corrected, could lead to the 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 that unsafe condition, 328 Support Services issued Alert SB (ASB) ASB-328-28-041 (for Dornier 328-100) and ASB-328J-28-018 (for Dornier 328-300), providing inspection instructions.



Consequently, EASA issued AD 2016-0169 to require a one-time inspection of the fuel line clamps and, depending on findings, replacement. That AD also required the reporting of all inspection results to the design approval holder.

After that AD was issued, it was determined that repetitive inspections were necessary and 328 Support Services revised the applicable ASBs accordingly. Consequently, EASA issued AD 2017-0016, retaining the requirements of EASA AD 2016-0169, which was superseded, and required repetitive inspections of all Hydraflow fuel line clamps and continued reporting to the TC Holder.

Since EASA AD 2017-0016 was issued, an alternative connection of fuel line clamps (bonding straps) was developed, and 328 Support Services issued SB-328-28-553 and SB-328J-28-322, both at Revision 1, for introduction of that modification in service. In addition, Maintenance Review Board (MRB) task 28-00-99-01 was introduced, providing inspection instructions of the new bonding straps.

For the reason described above, this AD retains the requirements of EASA AD 2017-0016, which is superseded, and requires a modification, replacing the affected fuel tube assemblies with new designed fuel tube assemblies, and modifying the electrical bonding of the parts by installing bonding straps and loop type bonding clamps.

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

Required as indicated, unless accomplished previously:

Note 1: 328 Support Services ASB-328-28-041 Revision 1 and ASB-328J-28-018 Revision 1 are hereafter collectively referred to as 'the applicable ASB' in this AD.

Note 2: 328 Support Services SB-328-28-553 Revision 1 and SB-328J-28-322 Revision 1 are hereafter collectively referred to as 'the applicable modification SB' in this AD.

Note 3: Fuel tube assemblies identified in Table 1 of this AD are hereafter collectively referred to as 'affected tube' in this AD. Fittings and clamps identified in Table 1 of this AD are hereafter collectively referred to as 'affected part' in this AD.

| Part Name          | P/N  |
|--------------------|--|
| Fuel tube assembly | 001A282A3099200, 001A282A3190000, 001A282A3190002,<br>001A282A3230001, 001A282A3235000, 001A282A3235001,<br>001A282A7150000, 001D282A3230000, 001D282A3175000<br>and 001D282A3235000 |
| Fitting            | 001D282A1028202 and 001D282A1028208  |
| Clamp              | 14C02-10A, 14C02-12A, 14C02-16A, W991-10DE and W991-12DE   |



#### Re-statement of the requirements of EASA AD 2017-0016:

#### **Repetitive Inspections:**

(1) Within 6 months after 31 August 2016 [the effective date of EASA AD 2016-0169], and, thereafter, at intervals not exceeding 2 500 flight hours, inspect each affected part (see Note 3 of this AD) in accordance with the instructions of the applicable ASB (see Note 1 of this AD).

#### **Corrective Action(s)**:

(2) If, during any inspection as required by paragraph (1) of this AD, any worn or missing bonding wires are found, before next flight, replace the affected bonding wire(s) in accordance with the instructions of the applicable ASB.

#### Reporting:

(3) Within 30 days after each inspection as required by paragraph (1) of this AD, report the inspection results (including no findings) to 328 Support Services, in accordance with the instructions of the applicable ASB.

#### Credit:

(4) Inspection and corrective action on an aeroplane, and reporting, accomplished before 14 February 2017 [effective date of EASA AD 2017-0016] in accordance with the instructions of the original issue of the applicable ASB, is an acceptable method to comply with the initial requirements of paragraphs (1), (2) and (3) of this AD for that aeroplane.

#### New requirements of this AD:

#### Modification:

(5) Within 30 months after the effective date of this AD, modify the aeroplane in accordance with the instructions of the applicable modification SB (see Note 2 of this AD).

#### **Terminating Action:**

(6) Modification of an aeroplane as required by paragraph (5) of this AD constitutes terminating action for the repetitive inspections and reporting, as required by paragraphs (1) and (3) of this AD for that aeroplane.

#### **Parts Installation:**

(7) After modification of an aeroplane as required by paragraph (5) of this AD, do not install any affected tube or affected part (see Note 3 of this AD) on that aeroplane, except clamp P/N 14C02-16A, which remains eligible for (re)installation; and clamp P/N W991-12DE, provided the part is new.

#### **Ref. Publications:**

328 Support Services GmbH SB-328-28-553 Revision 1 dated 10 July 2017.

328 Support Services GmbH SB-328J-28-322 Revision 1 dated 10 July 2017.

328 Support Services GmbH ASB-328J-28-018, original issue dated 03 June 2016, or Revision 1 dated 13 October 2016.



328 Support Services GmbH ASB-328-28-041, original issue dated 14 June 2016, or Revision 1 dated 13 October 2016.

The use of later approved revisions of these 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. This AD was posted on 22 September 2017 as PAD 17-129 for consultation until 20 October 2017. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- For any question concerning the technical content of the requirements in this AD, 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.

