DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120-AA64

Airworthiness Directives; 328 Support Services GmbH (Type Certificate Previously Held by AvCraft Aerospace GmbH; Fairchild Dornier GmbH; Dornier Luftfahrt GmbH) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all 328 Support Services GmbH Model 328-100 and -300 airplanes. This AD was prompted by reports indicating corrosion on the horizontal stabilizer bearing supports at the contact surface to the horizontal stabilizer rear spar. This AD requires inspections for corrosion and any other damage (i.e., cracking and chafing) of the horizontal stabilizer rear bearing supports, replacement of the affected horizontal stabilizer rear bearing supports if necessary, and modification of the horizontal stabilizer rear spar. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact 328 Support Services GmbH, Global Support Center, P.O. Box 1252, D-82231 Wessling, Federal Republic of Germany; telephone +49 8153 88111 6666; fax +49 8153 88111 6565; email gsc.op@328support.de; Internet http://www.328support.de. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0503.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0503; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Todd Thompson, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3228.
SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all 328 Support Services GmbH Model 328-100 and -300 airplanes. The NPRM published in the Federal Register on June 7, 2018 (83 FR 26389). The NPRM was prompted by reports indicating corrosion on the horizontal stabilizer bearing supports at the contact surface to the horizontal stabilizer rear spar. The NPRM proposed to require inspections for corrosion and any other damage (i.e., cracking and chafing) of the horizontal stabilizer rear bearing supports, replacement of the affected horizontal stabilizer rear bearing supports if necessary, and modification of the horizontal stabilizer rear spar.

We are issuing this AD to address corrosion on the horizontal stabilizer rear bearing supports and rear spar, which could lead to failure of the fitting and loss of one load path of the horizontal stabilizer attachment, and possibly result in reduced controllability of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2017-0239, dated November 30, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all 328 Support Services GmbH Model 328-100 and -300 airplanes. The MCAI states:

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 [EASA] AD requires a one-time inspection [detailed visual inspection and an eddy current inspection for chafing and corrosion] of the horizontal stabilizer rear bearing supports, and, depending on findings, accomplishment of applicable corrective action(s) [replacement of the affected horizontal stabilizer rear bearing supports]. This [EASA] AD also requires a modification of the horizontal stabilizer rear spar, irrespective of findings.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0503.

Comments

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

New Service Information

We received 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018; and 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018. We referred to 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 1, dated February 1, 2018; and 328
Support Services GmbH Service Bulletin SB-328J-55-324, Revision 1, dated February 1, 2018; as the appropriate sources of service information for the actions specified in the proposed AD. Revision 2 of the service information corrects spelling errors and adds alternative parts. No additional work is needed if the actions specified in the earlier revisions of the service information have been done.

We have revised this AD to refer to 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018; and 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018, as the appropriate sources of service information for accomplishing the required actions. We have also added 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 1, dated February 1, 2018; and 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 1, dated February 1, 2018, to paragraph (j) of this AD in order to give credit for accomplishing actions specified in Revision 1 of the service information.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.
Related Service Information under 1 CFR part 51

328 Support Services GmbH has issued Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018; and Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018. This service information describes procedures for a detailed visual inspection and an eddy current inspection for corrosion and any other damage (i.e., cracking and chafing) of the horizontal stabilizer rear bearing supports, modification of the horizontal stabilizer rear spar, and replacement of the affected horizontal stabilizer rear bearing supports if necessary. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 27 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed visual inspection and eddy current inspection</td>
<td>4 work-hours X $85 per hour = $340</td>
<td>$0</td>
<td>$340</td>
<td>$9,180</td>
</tr>
<tr>
<td>Modification</td>
<td>16 work-hours X $85 per hour = $1,360</td>
<td>$0</td>
<td>$1,360</td>
<td>$36,720</td>
</tr>
</tbody>
</table>
We estimate the following costs to do any necessary replacement that would be required based on the results of the inspection. We have no way of determining the number of aircraft that might need this replacement:

**On-condition costs**

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement</td>
<td>24 work-hours X $85 per hour = $2,040</td>
<td>*</td>
<td>$2,040</td>
</tr>
</tbody>
</table>

*We have received no definitive data that would enable us to provide parts cost estimates for the on-condition action specified in this AD.

**Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance
and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

**Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866,
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
3. Will not affect intrastate aviation in Alaska, and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

   Authority: 49 U.S.C. 106(g), 40113, 44701.
§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Amendment 39-19413; Docket No. FAA-2018-0503; Product Identifier 2018-NM-048-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all 328 Support Services GmbH (Type Certificate previously held by AvCraft Aerospace GmbH; Fairchild Dornier GmbH; Dornier Luftfahrt GmbH) Model 328-100 and -300 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Reason

This AD was prompted by reports of corrosion on the horizontal stabilizer bearing supports at the contact surface to the horizontal stabilizer rear spar. We are issuing this AD to address corrosion on the horizontal stabilizer rear bearing supports and rear spar,
which could lead to failure of the fitting and loss of one load path of the horizontal stabilizer attachment, and possibly result in reduced controllability of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Modification

(1) At the applicable time specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD, do a detailed visual inspection and an eddy current inspection for corrosion and any other damage (i.e., cracking and chafing) of the horizontal stabilizer rear bearing supports in accordance with the Accomplishment Instructions of 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018 (for Model 328-300 airplanes); as applicable.

(2) At the applicable time specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD, modify the horizontal stabilizer rear spar in accordance with the Accomplishment Instructions of 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018 (for Model 328-300 airplanes); as applicable.

(3) Do the actions in paragraphs (g)(1) and (g)(2) of this AD at the applicable compliance time specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD.

(i) For Group 1 airplanes, serial numbers (S/Ns) 1005 through 1031 inclusive, as identified in 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2,
dated May 24, 2018 (for Model 328-100 airplanes): Within 1,000 flight cycles or 8 months, whichever occurs first after the effective date of this AD.

(ii) For Group 2 airplanes, S/Ns 1032 through 3224 inclusive, as identified in 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018 (for Model 328-300 airplanes); as applicable: Within 5,000 flight hours or 30 months, whichever occurs first after the effective date of this AD.

(h) Corrective Action

If, during the inspections required by paragraph (g) of this AD, corrosion or any other damage (i.e., cracking and chafing) is detected, before further flight, replace the affected horizontal stabilizer rear bearing supports in accordance with the Accomplishment Instructions of 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018 (for Model 328-300 airplanes); as applicable.

(i) Parts Installation Prohibition

As of the applicable time specified in paragraph (i)(1) or (i)(2) of this AD, no person may install a horizontal stabilizer rear bearing support, part number 001B551A1441000, on any airplane.

(1) For Group 1 airplanes, S/Ns 1005 through 1031 inclusive, as identified in 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24,
2018 (for Model 328-100 airplanes): After replacement of the horizontal stabilizer rear bearing supports as specified in paragraph (g)(2) or (h) of this AD.

(2) For Group 2 airplanes, S/Ns 1032 through 3224 inclusive, as identified in 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 2, dated May 24, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 2, dated May 24, 2018 (for Model 328-300 airplanes); as applicable: As of the effective date of this AD.

(j) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using 328 Support Services GmbH Service Bulletin SB-328-55-557, dated September 1, 2017; or 328 Support Services GmbH Service Bulletin SB-328-55-557, Revision 1, dated February 1, 2018 (for Model 328-100 airplanes); or 328 Support Services GmbH Service Bulletin SB-328J-55-324, dated September 1, 2017; or 328 Support Services GmbH Service Bulletin SB-328J-55-324, Revision 1, dated February 1, 2018 (for Model 328-300 airplanes).

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International
Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or 328 Support Services GmbH’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2017-0239, dated November 30, 2017, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0503.

(2) For more information about this AD, contact Todd Thompson, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th Street, Des Moines, WA 98198; telephone and fax 206-231-3228.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (m)(3) and (m)(4) of this AD.
(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.


(3) For service information identified in this AD, contact 328 Support Services GmbH, Global Support Center, P.O. Box 1252, D-82231 Wessling, Federal Republic of Germany; telephone +49 8153 88111 6666; fax +49 8153 88111 6565; email gsc.op@328support.de; Internet http://www.328support.de.

(4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.
(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on September 7, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2018-20357 Filed: 9/25/2018 8:45 am; Publication Date: 9/26/2018]