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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-1163; Directorate Identifier 2009-NM-233-AD; Amendment 39-16795; AD 2011-18-13]

RIN 2120-AA64

Airworthiness Directives; 328 Support Services GmbH (Type Certificate Previously Held by AvCraft Aerospace GmbH; Fairchild Dornier GmbH; Dornier Luftfahrt GmbH) Model 328-100 and -300 Airplanes

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

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) that applies to the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

During a routine inspection, cracks have been found on an aeroplane at the lower wing panel rear trailing edge inboard of flap lever arm 1 (rib 5). A subsequent inspection of the other aeroplanes in that operator's fleet revealed several more aeroplanes with cracks at the same location. This condition, if not corrected, could lead to structural failure of the affected wing panel, possibly resulting in the wing separating from the airplane with consequent loss of control.

* * * * *

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective October 25, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 25, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on December 2, 2010 (75 FR 75159), and proposed to supersede AD 2008-10-51, Amendment 39-15535 (73 FR 30752, May 29, 2008). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

During a routine inspection, cracks have been found on an aeroplane at the lower wing panel rear trailing edge inboard of flap lever arm 1 (rib 5). A subsequent inspection of the other aeroplanes in that operator's fleet revealed several more aeroplanes with cracks at the same location. This condition, if not corrected, could lead to structural failure of the affected wing panel, possibly resulting in the wing separating from the airplane with consequent loss of control.

To correct this unsafe condition, EASA [European Aviation Safety Agency] issued Emergency AD 2008-0087-E [dated May 8, 2008] to require detailed visual inspections (DVI) of both the left (LH) and right (RH) wing panel rear trailing edge around rib 3 and rib 5 and a subsequent Eddy Current inspection (NDI) [non-destructive inspection] of the same area to detect cracks, follow-up repair actions when cracks are found, and the reporting of all findings. The TC [type certificate] holder has now developed a modification, consisting of the cold expansion of the former lower wing panel CAMLOC holes together with the installation of new attachment material that will prevent the onset of cracks in the affected wing panel.

For the reasons described above, this [EASA] AD retains the inspection and repair requirements of AD 2008-0087-E, which is superseded, adds repetitive inspections and a requirement to modify both the LH and RH wing panel rear trailing edges from rib 3 to rib 9. Modification does not constitute terminating action for the new repetitive inspection requirements of this AD.

The new inspections are eddy current inspections. The modification includes cold expansion of the former lower wing panel CAMLOC holes and installation of new attachment material. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

MCAI Reference Updates

EASA issued AD 2009-0194R1 on March 10, 2011, which was corrected on March 22, 2011. References have been updated in Note 1 and paragraph (p) of this AD to include this revision.

Request to Remove Repetitive Inspection Interval From Paragraph (h) of This AD

Garner CAD Technic Design Organization (GCT DO) Airworthiness Office requested that the 400-flight-cycle repetitive inspection interval be removed from paragraph (h) of the NPRM (75 FR 75159, December 2, 2010). GCT DO Airworthiness Office stated that, based on fatigue data, this repetitive inspection is not required, and is not specified in revised EASA AD 2009-0194R1, dated March 10, 2011, and corrected on March 22, 2011.

We agree. Based on fatigue data, we have determined that the 400-flight-cycle repetitive inspection interval should be removed from paragraph (h) of this AD. The repetitive inspection was removed from revised EASA AD 2009-0194R1, dated March 10, 2011, and corrected on March 22, 2011. Paragraph (h) of this AD has been changed accordingly. References to the 400-flight-cycle repetitive inspections also were removed from paragraphs (i) and (j) of this AD.

To ensure that operators get credit for the most recent inspection done in accordance with Dornier Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 1, both dated May 8, 2008; or 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008; we have clarified paragraph (g) of this AD. We have replaced the phrase, "in accordance with the requirements of paragraph (h) of this AD," with the phrase, "in accordance with Dornier Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 1, both dated May 8, 2008; or 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008."

Request for Extended Inspection Interval in Paragraph (i) of This AD

GCT DO Airworthiness Office requested that the initial compliance time and repetitive inspection interval defined in paragraph (i) of the NPRM (75 FR 75159, December 2, 2010) be extended from 800 flight cycles to 1,500 flight cycles. GCT DO Airworthiness Office stated that this extension has been allowed based on fatigue data, and was specified in revised EASA AD 2009-0194R1, dated March 10, 2011, and corrected on March 22, 2011.

We agree to extend the initial compliance time and repetitive inspection intervals for the reasons given by the commenter. Paragraph (i) of this AD has been changed accordingly.

Request To Extend Threshold for Post-Modification Inspections

GCT DO Airworthiness Office requested that based on fatigue data, the threshold for the post-modification initial inspection be extended from 800 flight cycles to 25,000 flight cycles for the Model 328-100 airplane, and from 800 flight cycles to 20,000 flight cycles for Model 328-300 airplanes, and that the repetitive inspections be extended from 800 flight cycles to 1,500 flight cycles.

We agree to extend the threshold for post-modification initial inspections as requested. Based on fatigue data, the referenced EASA AD has included these extensions; therefore, we have added paragraph (k) to the AD to include the new compliance times.

Additional Change to NPRM

The NPRM (75 FR 75159, December 2, 2010) would have allowed issuance of a special flight permit if a crack was found that "exceeds" 12.5 mm (0.49 inch). We have changed paragraph (o)(4)(ii) of this AD to change the wording from "exceeds" to "is less than or equal to."

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We

determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD will affect about 49 products of U.S. registry.

The actions that are required by AD 2008-10-51 and retained in this AD take about 2 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$0 per product. Based on these figures, the estimated cost of the currently required actions is \$170 per product.

We estimate that it will take about 8 work-hours per product to comply with the new basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$11,600 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$601,720, or \$12,280 per product.

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.

Regulatory Findings

We determined that 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 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); and
3. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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 removing Amendment 39-15535 (73 FR 30752, May 29, 2008) and adding the following new AD:



2011-18-13 328 Support Services GmbH (Type Certificate Previously Held by AvCraft Aerospace GmbH; Fairchild Dornier GmbH; Dornier Luftfahrt GmbH): Amendment 39-16795. Docket No. FAA-2010-1163; Directorate Identifier 2009-NM-233-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective October 25, 2011.

Affected ADs

(b) This AD supersedes AD 2008-10-51, Amendment 39-15535 (73 FR 30752, May 29, 2008).

Applicability

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

Subject

(d) Air Transport Association (ATA) of America Code 57: Wings.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

During a routine inspection, cracks have been found on an aeroplane at the lower wing panel rear trailing edge inboard of flap lever arm 1 (rib 5). A subsequent inspection of the other aeroplanes in that operator's fleet revealed several more aeroplanes with cracks at the same location. This condition, if not corrected, could lead to structural failure of the affected wing panel, possibly resulting in the wing separating from the airplane with consequent loss of control.

* * * * *

The new inspections are eddy current inspections. The modification includes cold expansion of the former lower wing panel CAMLOC holes and installation of new attachment material.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Restatement of Requirements of AD 2008-10-51 (73 FR 30752, May 29, 2008), With Updated Service Information and Removal of Certain Repetitive Inspections

Repetitive Detailed Visual Inspections for Cracks

(g) Within 10 flight cycles, or 10 flight hours, or 7 days, whichever occurs first after June 3, 2008 (the effective date of AD 2008-10-51 (73 FR 30752, May 29, 2008)): Accomplish a detailed visual inspection of both the left-hand (LH) and right-hand (RH) lower wing panel inboard and outboard of flap lever arm 1 (rib 5) for cracks, in accordance with the Accomplishment Instructions of Dornier Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 1, both dated May 8, 2008, as applicable; or 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008, as applicable. After the effective date of this AD, use only 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008, as applicable. If no crack is detected, repeat the detailed visual inspection thereafter at intervals not to exceed 50 flight hours. If any crack is detected, before further flight, do an eddy current inspection, in accordance with Dornier Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 1, both dated May 8, 2008, as applicable; or 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008, as applicable.

Eddy Current Inspections for Cracks

(h) Except as required by paragraph (g) of this AD, within 400 flight hours or 3 months after June 3, 2008, whichever occurs first: Accomplish an eddy current inspection for cracking of both the LH and RH lower wing panel in the vicinity of rib 3 and inboard and outboard of flap lever arm 1 (rib 5), in accordance with the Accomplishment Instructions of Dornier Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 1, both dated May 8, 2008, as applicable; or 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008, as applicable. After the effective date of this AD, use only 328 Support Services Alert Service Bulletin ASB-328J-57-015 or ASB-328-57-037, both Revision 2, both dated May 20, 2008, as applicable. Accomplishment of the eddy current inspection terminates the detailed visual inspection required by paragraph (g) of this AD.

New Requirements of This AD

New Repetitive Intervals for Eddy Current Inspections

(i) Within 1,500 flight cycles after the most recent eddy current inspection done in accordance with the applicable service bulletin listed in table 1 of this AD, or within 60 days after the effective date of this AD, whichever occurs later, do an eddy current inspection for cracking of the lower wing panel (outside) around the flap lever arm 1 (rib 5), in accordance with the Accomplishment Instructions of 328 Support Services Alert Service Bulletin ASB-328-57-037 (for Model 328-100 airplanes) or ASB-328J-57-015 (for Model 328-300 airplanes), both Revision 2, both dated May 20, 2008. Repeat the inspection thereafter at intervals not to exceed 1,500 flight cycles, except as provided by paragraph (k) of this AD.

Table 1–Service Bulletins

| Service Bulletin | Revision | Date |
|---|-----------------|--------------|
| Dornier Alert Service Bulletin ASB-328-57-037 | 1 | May 8, 2008 |
| Dornier Alert Service Bulletin ASB-328J-57-015 | 1 | May 8, 2008 |
| 328 Support Services Alert Service Bulletin ASB-328-57-037 | 2 | May 20, 2008 |
| 328 Support Services Alert Service Bulletin ASB-328J-57-015 | 2 | May 20, 2008 |

Inspection and Modification of Lower Wing Panel

(j) Within 24 months after the effective date of this AD, do an eddy current inspection for cracking of the lower wing panel (outside) around the flap lever arm 1 (rib 5). If no cracking is found, within 24 months after the effective date of this AD, modify the lower wing panel by doing a cold expansion of the CAMLOC holes and installing new attachment material from rib 9 LH to rib 9 RH. Do all actions required by this paragraph in accordance with the Accomplishment Instructions of 328 Support Services Service Bulletin SB-328-57-481 (for Model 328-100 airplanes) or SB-328J-57-230 (for Model 328-300 airplanes), both Revision 1, both dated October 15, 2009.

(k) After the modification required by paragraph (j) is done, do the eddy current inspection required by paragraph (i) of this AD at the applicable time specified in paragraph (k)(1) or (k)(2) of this AD. Repeat the inspections thereafter at the intervals specified in paragraph (i) of this AD.

(1) For Model 328-100 airplanes: Within 25,000 flight cycles after accomplishing the modification specified in paragraph (j) of this AD.

(2) For Model 328-300 airplanes: Within 20,000 flight cycles after accomplishing the modification specified in paragraph (j) of this AD.

Repair

(l) If any cracking is found during any inspection required by this AD, before further flight contact 328 Support Services GmbH for repair instructions and do the repair using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or European Aviation Safety Agency (EASA) (or its delegated agent).

Inspections Accomplished According to Previous Issues of Service Bulletins

(m) Inspections accomplished before the effective date of this AD according to Dornier Alert Service Bulletin ASB-328-57-037 or Dornier Alert Service Bulletin ASB-328J-57-015, both Revision 1, both dated May 8, 2008, as applicable, are considered acceptable for compliance with the inspection requirements of paragraphs (i) and (j) of this AD.

Report

(n) At the applicable times specified in paragraphs (n)(1) and (n)(2) of this AD: Send 328 Support Services GmbH a report of findings (both positive and negative) found during each inspection required by paragraphs (g), (h), (i), and (j) of this AD. The report must include the inspection results, a description of any cracks found, the airplane serial number, and the number of landings and flight hours on the airplane. Send the report to 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; e-mail: gsc.op@328support.de.

(1) For any inspection done on or after the effective date of this AD: Within 30 days after the inspection.

(2) For any inspection done before the effective date of this AD: Within 30 days after the effective date of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows:

EASA Airworthiness Directive 2009-0194R1, dated March 10, 2011, corrected March 22, 2011, gives credit for eddy current inspections conducted in accordance with the maintenance review board tasks. We are not giving credit for those inspections.

Other FAA AD Provisions

(o) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, 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 Branch, send it to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Information may be e-mailed 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. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave., SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(4) Special Flight Permits: Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of paragraphs (g), (h), (i), (j), (k), and (l) of this AD can be done if the following conditions are met:

(i) The initial inspection required by paragraph (g) of this AD must be accomplished.

(ii) If a crack indication is less than or equal to 12.5 mm (0.49 inch), the Manager, International Branch, ANM-116, concurs with issuance of the special flight permits.

Related Information

(p) Refer to MCAI EASA Airworthiness Directive 2009-0194R1, dated March 10, 2011, corrected March 22, 2011, and the service bulletins listed in table 2 of this AD, for related information.

Table 2—Related Service Bulletins

| Service Bulletin | Revision | Date |
|---|-----------------|------------------|
| 328 Support Services Alert Service Bulletin ASB-328-57-037 | 2 | May 20, 2008 |
| 328 Support Services Alert Service Bulletin ASB-328J-57-015 | 2 | May 20, 2008 |
| 328 Support Services Service Bulletin SB-328-57-481 | 1 | October 15, 2009 |
| 328 Support Services GmbH Service Bulletin SB-328J-57-230 | 1 | October 15, 2009 |

Material Incorporated by Reference

(q) You must use the service information contained in table 3 of this AD to do the actions required by this AD, as applicable, unless the AD specifies otherwise.

Table 3—All Material Incorporated by Reference

| Service Bulletin | Revision | Date |
|---|-----------------|------------------|
| 328 Support Services Alert Service Bulletin ASB-328-57-037 | 2 | May 20, 2008 |
| 328 Support Services Alert Service Bulletin ASB-328J-57-015 | 2 | May 20, 2008 |
| 328 Support Services Service Bulletin SB-328-57-481 | 1 | October 15, 2009 |
| 328 Support Services GmbH Service Bulletin SB-328J-57-230 | 1 | October 15, 2009 |

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

(2) 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; e-mail gsc.op@328support.de; Internet <http://www.328support.de>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 19, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.