



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0638; Product Identifier 2018-NM-016-AD; Amendment 39-19552; AD 2019-02-05]

RIN 2120-AA64

Airworthiness Directives; Viking Air Limited (Type Certificate Previously Held by Bombardier, Inc.; Canadair Limited) Airplanes

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

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2013-11-03, which applied to certain Viking Air Limited Model CL-215-1A10 and CL-215-6B11 (CL-215T Variant) airplanes. AD 2013-11-03 required repetitive detailed inspections for cracking of the left-hand (LH) and right-hand (RH) wing lower skin, and repair if necessary. This AD requires repetitive borescope inspections of the LH and RH wing lower skin and repetitive eddy current inspections of the LH and RH wing front and rear lower spar caps. This AD was prompted by reports of a fractured wing lower rear spar cap and reinforcing strap and a report of cracking of the wing lower skin and 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 a certain publication 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 Viking Air Limited, 1959 de Havilland Way, Sidney, British Columbia V8L 5V5, Canada; telephone +1-250-656-7227; fax +1-250-656-0673; email acs-technical.publications@vikingair.com; Internet <http://www.vikingair.com>. You may view this referenced 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-2018-0638.

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-2018-0638; 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: Andrea Jimenez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2013-11-03, Amendment 39-17463 (78 FR 32353, May 30, 2013) (“AD 2013-11-03”). AD 2013-11-03 applied to certain Viking Air Limited Model CL-215-1A10 and CL-215-6B11 (CL-215T Variant) airplanes. The NPRM published in the Federal Register on August 2, 2018 (83 FR 37768). The NPRM was prompted by reports of a fractured wing lower rear spar cap and reinforcing strap and a report of cracking of the wing lower skin and rear spar. The NPRM proposed to require repetitive borescope inspections of the LH and RH wing lower skin and repetitive eddy current inspections of the LH and RH wing front and rear lower spar caps. We are issuing this AD to address cracked wing structure, which could result in failure of the wing.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2013-11R1, dated October 16, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Viking Air Limited Model CL-215-1A10 and CL-215-6B11 (CL-215T Variant) airplanes. The MCAI states:

While performing modifications on a CL-215-1A10 aeroplane, an operator discovered that the wing lower rear

spar cap and reinforcing strap were fractured at Wing Stations (WS) 49.5 and 50 respectively and the rear spar web and wing lower skin were also cracked. It is suspected that a crack initiated at the wing lower spar cap, leading to its failure, the subsequent failure of the reinforcing strap and cracking of the spar web and wing lower skin. The damage was outside of the area addressed by the repetitive ultrasonic inspections required by [Canadian] AD CF-1992-26R2 [which corresponds to FAA AD 2012-11-04, Amendment 39-17067 (77 FR 32892, June 4, 2012)] and was found 95 hours air time after the last ultrasonic inspection.

Failure and cracking of the above-noted wing structure, if not detected, could result in failure of the wing.

In order to mitigate the unsafe condition, [Canadian] AD CF-2013-11 [which corresponds to FAA AD 2013-11-03] was released. However, further analysis has indicated the need for repetitive eddy current and borescope inspections. Therefore, Revision 1 of this [Canadian] AD mandates a repetitive detailed inspection of the wing lower skin using a borescope, changes the one-time eddy current inspection of the lower front and rear spar caps to a repetitive inspection and eliminates the one-time detailed inspection with fuel bladders removed.

The requirements of [Canadian] AD CF-1992-26R2 remain applicable.

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-2018-0638.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to that comment.

Request to Use Time-in-Service Hours Rather Than Flight Hours

The commenter, Adam Geber, recommended using time-in-service hours instead of flight hours in the proposed AD. The commenter stated that maintenance hourly requirements are based on time-in-service rather than flight time, as defined in 14 CFR 1.1. The commenter further asserted that the term “flight hour” is not defined in 14 CFR 1.1, and that many 14 CFR part 91 regulations prescribe hourly maintenance requirements based on time-in-service, with no requirement to track flight time for maintenance purposes.

We disagree with the commenter’s recommended changes, because flight hours, which are in current use and well understood in the aviation industry, are the most effective way of addressing the unsafe condition identified in this AD. Flight hours were used in the engineering evaluation for this AD, and the required actions of this AD are based on that evaluation. The use of flight hours in this AD is also in keeping with the previous related ADs, which use that measure for compliance times and inspection intervals. Additionally, since flight hours are used in this AD, operators are required to track them. AD requirements are not restricted by the definitions in 14 CFR 1.1 or the part 91 regulations quoted by commenter. We have not changed this AD in this regard.

Explanation of Change to Manufacturer Name Specified in AD 2013-11-03

We have revised references to the aircraft manufacturer name specified in AD 2013-11-03 throughout this final rule to identify the aircraft manufacturer name as published in the most recent type certificate data sheet (TCDS) for the affected models.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the change 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

Bombardier has issued Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016. This service information describes procedures for detecting cracks using repetitive borescope inspections of the LH and RH wing lower skin and repetitive eddy current inspections of the LH and RH wing front and rear lower spar caps. 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 4 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Borescope and eddy current inspections	8 work-hours X \$85 per hour = \$680 per inspection cycle	\$0	\$680 per inspection cycle	\$2,720 per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions 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

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 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 removing Airworthiness Directive (AD) 2013-11-03, Amendment 39-17463 (78 FR 32353, May 30, 2013), and adding the following new AD:

2019-02-05 Viking Air Limited (Type Certificate Previously Held by Bombardier, Inc.; Canadair Limited): Amendment 39-19552; Docket No. FAA-2018-0638; Product Identifier 2018-NM-016-AD.

(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2013-11-03, Amendment 39-17463 (78 FR 32353, May 30, 2013) (“AD 2013-11-03”).

(c) Applicability

This AD applies to the Viking Air Limited (Type Certificate previously held by Bombardier, Inc.; Canadair Limited) airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Model CL-215-1A10 airplanes, serial numbers (S/Ns) 1001 through 1125 inclusive.

(2) Model CL-215-6B11 (CL-215T Variant) airplanes, S/Ns 1056 through 1125 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of a fractured wing lower rear spar cap and reinforcing strap and a report of cracking of the wing lower skin and rear spar. We are issuing this AD to address cracked wing structure, which could result in failure of the wing.

(f) Compliance

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

(g) Repetitive Borescope Inspection

Within 50 flight hours after the effective date of this AD: Using a borescope, do a detailed inspection for cracking of the left-hand (LH) and right-hand (RH) wing lower skin between wing station (WS) 45.00 and 51.00, in accordance with Part A of Bombardier Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016. Repeat the inspection thereafter at intervals not to exceed 50 flight hours until the initial eddy current inspection required by paragraph (h) of this AD has been accomplished. After accomplishment of the initial eddy current inspection required by paragraph (h) of this AD, the borescope inspection interval required by this paragraph may be extended to 300 flight hours.

(h) Repetitive Eddy Current Inspections

Within 300 flight hours after the effective date of this AD: Do an eddy current inspection for cracking of the LH and RH wing front and rear lower spar caps, in accordance with Parts C-1 and C-2 of Bombardier Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016. Repeat the inspection thereafter at intervals not to exceed 300 flight hours.

(i) Corrective Actions

If any crack, as defined in Bombardier Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016, is found during any inspection required by paragraph (g) or paragraph (h) of this AD: Before further flight, repair using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Viking Air Limited's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Credit for Previous Actions

This paragraph provides credit for the initial inspections required by paragraphs (g) and (h) of this AD if those actions were performed before the effective date of this AD using Bombardier Alert Service Bulletin 215-A558, Revision 1, dated January 10, 2014; or Bombardier Alert Service Bulletin 215-A558, Revision 2, dated January 17, 2014.

(k) No Reporting Requirement

Although Bombardier Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(l) Other FAA AD Provisions

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO 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 manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch.

(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, New York ACO Branch, FAA; or TCCA; or Viking Air Limited's TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2013-11R1, dated October 16, 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-2018-0638.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; fax 516-794-5531.

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

(n) 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.

(i) Bombardier Alert Service Bulletin 215-A558, Revision 3, dated June 3, 2016.

(ii) [Reserved]

(3) For service information identified in this AD, contact Viking Air Limited, 1959 de Havilland Way, Sidney, British Columbia V8L 5V5, Canada; telephone +1-250-656-7227; fax +1-250-656-0673; email acs-technicalpublications@vikingair.com; Internet <http://www.vikingair.com>.

(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 February 1, 2019.

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

[FR Doc. 2019-02162 Filed: 2/14/2019 8:45 am; Publication Date: 2/15/2019]