



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3073; Directorate Identifier 2015-CE-017-AD; Amendment 39-18334; AD 2015-24-02]

RIN 2120-AA64

Airworthiness Directives; Viking Air Limited Airplanes

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

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Viking Air Limited Model DHC-3 Airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued 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 corrugation cracking found at various wing stations and on the main spar lower cap. We are issuing this AD to require actions 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 the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3073; or in person at Document Management Facility, 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 service information identified in this AD, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; Fax: 250-656-0673; telephone: (North America) 1-800-663-8444; email: technical.support@vikingair.com; Internet: <http://www.vikingair.com/support/service-bulletins>. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the Internet at <http://www.regulations.gov> by searching for Docket No. FAA-2015-3073.

FOR FURTHER INFORMATION CONTACT: Aziz Ahmed, Aerospace Safety Engineer, FAA, New York Aircraft Certification Office (ACO), 1600 Steward Avenue, suite 410, Westbury, New York 11590; telephone: (516) 228-7329; fax: (516) 794-5531; email: aziz.ahmed@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to add an AD that would apply to Viking Air Limited Model DHC-3 airplane. The NPRM was published in the *Federal Register* on July 28, 2015 (80 FR 44892). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. The MCAI states:

An operator found cracks on the upper inner wing skin corrugations emanating from the rib attachment points. As a result, Viking Air Limited released Service Bulletin (SB) V3/0002, Revision NC to inspect for possible corrugation cracking between wing stations 34 and 110. Subsequently, operators discovered additional corrugation cracking at multiple wing stations and on the main spar lower cap.

These cracks, if not detected and rectified, may compromise the structural integrity of the wing. In order to address this potentially unsafe condition, Viking Air Limited has issued SB V3/0002, Revision C, specifying repetitive internal borescope and visual inspections. This AD is issued to mandate compliance with that SB.

The MCAI can be found in the AD docket on the Internet at:

<http://www.regulations.gov/#!documentDetail;D=FAA-2015-3073-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA's response to the comment.

Request from Viking

Viking has reviewed the FAA NPRM (80 FR 44892, July 28, 2015) and found that paragraph (f)(4) is not applicable or relevant to Viking SB V3/0002 Revision C. All cycle information is with respect to the wing. Viking noted that it is important to make the distinction between the airplane and the wings. The possibility has come to Viking's attention that some operators may rotate wings within their airplane fleet. Additionally, the Model DHC-3 airplane nominal cycles to hours ratio used by Viking is 1.33 cycles per hour. In most cases, Viking would consider an average flight length to be 45 minutes. Therefore, Viking recommends that the calculation of the proposed AD paragraph (f)(4) not be part of the mandated actions.

We agree and will remove paragraph (f)(4) of the proposed AD and state in paragraph (f)(1) of this AD that the operator may contact Viking to help determine wing flight cycles. We will also change all reference of "flight cycles" to "wing flight cycles." We redesignated paragraph (f)(5) of the proposed AD as paragraph (f)(4) of this AD.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD 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 (80 FR 44892, July 28, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 44892, July 28, 2015).

Related Service Information under 1 CFR part 51

We reviewed Viking DHC-3 Otter Service Bulletin No. V3/0002, Revision “C”, dated April 30, 2014; and Viking DHC-3 Otter Service Bulletin 3-STC (03-50)-001, Revision “NC”, dated July 3, 2013. The service information describes procedures for installing additional wing inspection access panels and inspecting the wings using borescope and visual methods. 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 of this AD.

Costs of Compliance

We estimate that this AD will affect 38 products of U.S. registry. We also estimate that it would take about 36 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$5,000 per product.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$306,280, or \$8,060 per product.

The scope of damage found in the required inspection could vary significantly from airplane to airplane. We have no way of determining how much damage may be found on each airplane or the cost to repair damaged parts on each airplane.

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),
- (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.

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-2015-3073; or in person at the Docket Management Facility 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 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 adding the following new AD:

2015-24-02 **Viking Air Limited:** Amendment 39-18334; Docket No. FAA-2015-3073; Directorate Identifier 2015-CE-017-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Viking Air Limited DHC-3 airplanes, all serial numbers, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by 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 corrugation cracking found at various wing stations and on the main spar lower cap. We are issuing this proposed AD to detect cracking and correct as necessary to address the unsafe condition on these products.

(f) Actions and Compliance

Unless already done, do the following actions in paragraphs (f)(1) through (f)(4) of this AD:

(1) Within 30 days after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), determine the accumulated wing flight cycles or wing flight hours for each wing by contacting Technical Support at Viking Air Limited. You can find contact information for Viking Air Limited in paragraph (i) of this AD.

(2) Within 30 days after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), determine all installed supplemental type certificates (STC) or modifications affecting the wings. Based on the accumulated air time determined from paragraph (f)(1) of this AD and before the initial inspection required in paragraph (f)(3) of this AD, install access panels as follows:

(i) If the airplane is free of STCs or any other modifications affecting the wings, install additional inspection access panels following the Accomplishment Instructions Part A of Viking DHC-3 Otter Service Bulletin No. V3/0002, Revision “C”, dated April 30, 2014.

(ii) If the airplane is fitted with STC SA2009NY (which can be found on the internet at: http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/F7309B7D9B008C588625734F00730144?OpenDocument&Highlight=sa02009ny), incorporate additional inspection access panels following the Accomplishment Instructions of Viking Air Limited SB 3-STC (03-50)-001, Revision “NC”, dated July 3, 2013.

Note 1 to paragraph (f)(2)(ii) of this AD: STC SA03-50 would be the Canadian equivalent of the United States (FAA) STC SA2009NY.

(iii) If there are other STCs or modifications affecting the wings the operator must contact the FAA to request an FAA-approved alternative method of compliance using the procedures in paragraph (g)(1) of this AD and 14 CFR 39.19. To develop these procedures, we recommend you contact the STC holder for guidance in developing substantiating data.

(3) Based on the accumulated air time on the wings determined in paragraph (f)(1) of this AD, perform initial and repetitive borescope and visual inspections of both the left-hand and right-hand wing box following Part B of the Accomplishment Instructions of Viking DHC-3 Otter Service Bulletin V3/0002, Revision “C”, dated April 30, 2014, using the inspection schedules specified in Table 1 of paragraph (f)(3) of this AD:

Table 1 of paragraph (f)(3) of this AD – Inspection Schedule

Effectivity	Initial Inspection	Repetitive Inspection
<p>If Viking Air Limited SB V3/0002, Revision “A”, dated February 22, 2013; or Viking Air Limited SB V3/0002, Revision “B”, dated July 3, 2013; were complied with prior to [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD)</p>	<p>The initial inspection is not required since the inspection was accomplished while complying with Revision “A” or “B” of Viking Air Limited SB V3/0002.</p>	<p>Repetitively inspect not to exceed every 1,600 wing flight hours accumulated after the last inspection or 2,100 wing flight cycles after the last inspection, whichever occurs first.</p>
<p>If, as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), the airplane has less than 31,200 wing flight hours</p>	<p>Inspect within 800 wing flight hours after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), or within 6 months [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first.</p>	<p>Repetitively inspect not to exceed every 1,600 wing flight hours accumulated after the last inspection or 2,100 wing flight cycles after the last inspection, whichever occurs first.</p>
<p>If, as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), the airplane has 31,200 wing flight hours or more but less than 31,600 wing flight hours</p>	<p>Inspect upon or before accumulating 32,000 wing flight hours or within 6 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first.</p>	<p>Repetitively inspect not to exceed every 1,600 wing flight hours accumulated after the last inspection or 2,100 wing flight cycles after the last inspection, whichever occurs first.</p>

<p>If, as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), the airplane has 31,600 wing flight hours or more</p>	<p>Inspect within 400 wing flight hours accumulated after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or 3 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first.</p>	<p>Repetitively inspect not to exceed every 1,600 wing flight hours accumulated after the last inspection or 2,100 wing flight cycles after the last inspection, whichever occurs first.</p>
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(4) If any cracks are found, contact Technical Support at Viking Air Limited for an FAA-approved repair and incorporate the repair before further flight. You can find contact information for Viking Air Limited in paragraph (i) of this AD. The FAA-approved repair must specifically reference this AD.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Aziz Ahmed, Aerospace Safety Engineer, FAA, New York Aircraft Certification Office (ACO), 1600 Steward Avenue, suite 410, Westbury, New York 11590; telephone: (516) 228-7329; fax: (516) 794-5531; email: aziz.ahmed@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(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:** For any reporting requirement in this AD, 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.

(h) **Related Information**

Refer to MCAI Transport Canada AD No. CF-2015-05, dated March 18, 2015, for related information. The MCAI can be found in the AD docket on the Internet at: <http://www.regulations.gov/#!documentDetail;D=FAA-2015-3073-0002>.

(i) **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 the AD specifies otherwise.

(i) Viking DHC-3 Otter Service Bulletin No. V3/0002, Revision “C”, dated April 30, 2014.

(ii) Viking DHC-3 Otter Service Bulletin 3-STC (03-50)-001, Revision “NC”, dated July 3, 2013.

(3) For Viking Air Limited service information identified in this AD, contact Viking Air Limited Technical Support, 1959 De Havilland Way, Sidney, British Columbia, Canada, V8L 5V5; Fax: 250-656-0673; telephone: (North America) 1-800-663-8444; email: technical.support@vikingair.com; Internet: <http://www.vikingair.com/support/service-bulletins>.

(4) You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(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 Kansas City, Missouri, on November 16, 2015.

Melvin Johnson,

*Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.*

[FR Doc. 2015-29855 Filed: 11/25/2015 8:45 am; Publication Date: 11/27/2015]