

[Federal Register: February 19, 2009 (Volume 74, Number 32)]  
[Rules and Regulations]  
[Page 7641-7643]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]  
[DOCID:fr19fe09-1]

---

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2008-1267; Directorate Identifier 2008-CE-069-AD; Amendment 39-15815; AD 2009-04-09]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Viking Air Limited Model DHC-6-1, DHC-6-100, DHC-6-200, and DHC-6-300 Airplanes**

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

**ACTION:** Final rule.

---

**SUMMARY:** We are superseding an existing airworthiness directive (AD) for the products listed above. 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:

There have been reports of inter-rivet cracking on several wing front spar adapter assemblies (P/N C6WM1027-1) on the horizontal and vertical flanges. It was determined that the cracking was caused by stress corrosion in the short transverse grain initiated by local riveting induced stresses.

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

**DATES:** This AD becomes effective March 26, 2009.

As of August 5, 2008 (73 FR 37353, July 1, 2008), the Director of the Federal Register approved the incorporation by reference of Viking DHC-6 Twin Otter Service Bulletins No. V6/540, dated October 1, 2007; No. V6/541, dated October 1, 2007; and No. V6/542, dated October 1, 2007; and R.W. Martin, Inc. Service Bulletin No. 00160/2, Revision A, dated November 15, 2007, listed in this AD.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket 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 FURTHER INFORMATION CONTACT:** Pong Lee, Aerospace Engineer, FAA, New York Aircraft Certification Office, ANE-171, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: (516) 228-7324; fax: (516) 794-5531.

## **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 3, 2008 (73 FR 73618), and proposed to supersede AD 2008-11-10, Amendment 39-15532 (73 FR 37353, July 1, 2008). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states that:

There have been reports of inter-rivet cracking on several wing front spar adapter assemblies (P/N C6WM1027-1) on the horizontal and vertical flanges. It was determined that the cracking was caused by stress corrosion in the short transverse grain initiated by local riveting induced stresses. This directive mandates modification and inspection of the wing front spar adapter fitting and replacement of cracked fittings.

Since we issued AD 2008-11-10, Amendment 39-15532 (73 FR 37353, July 1, 2008), we have added to the Applicability section additional wing box part numbers that may incorporate a P/N C6WM1027-1 front spar adapter assembly with 10 or more years of service.

### **Comments**

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

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

### **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 FAA policies. Any such differences are highlighted in a NOTE within the AD.

### **Costs of Compliance**

We estimate that this AD will affect 157 products of U.S. registry. We also estimate that it will take about 18 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$80 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$226,080 or \$1,440 per product.

In addition, we estimate that any necessary follow-on actions would take about 200 work-hours and require parts costing \$3,696, for a cost of \$19,696 per product. We have no way of determining the number of products that may need these actions.

### **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 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 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 removing Amendment 39-15532 (73 FR 37353, July 1, 2008) and adding the following new AD:



**2009-04-09 Viking Air Limited:** Amendment 39-15815; Docket No. FAA-2008-1267; Directorate Identifier 2008-CE-069-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective March 26, 2009.

**Affected ADs**

- (b) This AD supersedes AD 2008-11-10, Amendment 39-15532 (73 FR 37353, July 1, 2008).

**Applicability**

(c) This AD applies to the following Models DHC-6-1, DHC-6-100, DHC-6-200, and DHC-6-300 airplanes, all serial numbers, that are certificated in any category:

(1) Group 1: Equipped with wing boxes, part numbers (P/Ns) C6W1002-1, C6W1002-3, WR6-1002-59 or WR6-1002-61 that incorporate a P/N C6WM1027-1 front spar adapter assembly with 10 or more years of service; and

(2) Group 2: Equipped with wing boxes, P/Ns C6W1002-5, C6W1002-7, C6W1002-9, C6W1002-11, C6W1002-13, C6W1002-15, C6W1002-17, C6W1002-19, C6W1002-21, C6W1002-23, C6W1002-51, C6W1002-53, C6W1002-55, C6W1002-57 or C6W1002-61 that incorporate a P/N C6WM1027-1 front spar adapter assembly with 10 or more years of service.

**Subject**

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

**Reason**

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

"There have been reports of inter-rivet cracking on several wing front spar adapter assemblies (P/N C6WM1027-1) on the horizontal and vertical flanges. It was determined that the cracking was caused by stress corrosion in the short transverse grain initiated by local riveting induced stresses. This directive mandates modification and inspection of the wing front spar adapter fitting and replacement of cracked fittings."

Since we issued AD 2008-11-10, Amendment 39-15532 (73 FR 37353, July 1, 2008), we have added to the Applicability section additional wing box part numbers that may incorporate a P/N C6WM1027-1 front spar adapter assembly with 10 or more years of service.

## **Actions and Compliance**

(f) Unless already done, do the following actions:

(1) For Group 1 airplanes, within the next 180 days after August 5, 2008 (the effective date of AD 2008-11-10), install inspection holes in the left-hand (LH) and right-hand (RH) lower wing skins following Viking DHC-6 Twin Otter Service Bulletin Number V6/541, dated October 1, 2007.

(2) For Group 2 airplanes, within the next 180 days after the effective date of this AD, install inspection holes in the LH and RH lower wing skins following Viking DHC-6 Twin Otter Service Bulletin Number V6/541, dated October 1, 2007.

(3) For Group 1 and Group 2 airplanes, before further flight after installing the inspection holes required in paragraph (f)(1) or (f)(2) of this AD, initially inspect the LH and RH front spar adapter assemblies for cracks, and repetitively thereafter inspect all affected wing box P/Ns at intervals not to exceed 1,200 hours time-in-service or 12 months, whichever occurs first, until the replacement required in paragraph (f)(4) of this AD is done.

(i) For wing box P/Ns C6W1002-1, C6W1002-3, C6W1002-5, C6W1002-7, C6W1002-9, C6W1002-11, C6W1002-13, C6W1002-15, C6W1002-17, C6W1002-19, C6W1002-21, C6W1002-23, C6W1002-51, C6W1002-53, C6W1002-55, C6W1002-57, C6W1002-59, and C6W1002-61, inspect following Viking DHC-6 Twin Otter Service Bulletin Number V6/540, dated October 1, 2007.

(ii) For wing box P/Ns WR6-1002-59 or WR6-1002-61, inspect following R.W. Martin, Inc. Service Bulletin No. 00160/2, Revision A, dated November 15, 2007.

(4) For Group 1 and 2 airplanes, before further flight after doing any inspection required in paragraph (f)(3) of this AD where cracks are found, replace the cracked front spar adapter assembly with a front spar adapter assembly, P/N C6WM1027-3. Do the replacement following Viking DHC-6 Twin Otter Service Bulletin Number V6/542, dated October 1, 2007. This replacement terminates the repetitive inspections required in paragraph (f)(3) of this AD for the replaced front spar adapter assembly.

(5) As a terminating action for the repetitive inspections required in paragraph (f)(3) of this AD, at any time after the initial inspection required in paragraph (f)(3) of this AD, you may replace P/N C6WM1027-1 with P/N C6WM1027-3, except it must be replaced prior to further flight as required by paragraph (f)(4) of this AD.

## **FAA AD Differences**

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

(1) MCAI Transport Canada AD No. CF-2007-31, dated December 17, 2007, is applicable to airplane models with front spar adapter assembly P/N C6WM1027-3 that incorporate task C57-10-18 of the DHC-6 Corrosion Prevention and Control Manual (CPCM), PSM 1-6-5.

(2) The applicability of this AD does not include airplane models with front spar adapter assembly P/N C6WM1027-3 that incorporate task C57-10-18 of the DHC-6 CPCM, PSM 1-6-5, which is required in the Transport Canada AD No. CF-94-12R1, dated April 13, 1999, and AD No. CF-99-11, dated May 28, 1999. We have addressed the Corrosion Prevention and Control Program in AD 2008-13-11 (73 FR 37355, July 1, 2008), which identifies specific areas that must be inspected to ensure the structural integrity of the DHC-6 fleet.

## **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification 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: Pong Lee, Aerospace Engineer, FAA, New York Aircraft Certification Office, ANE-171, 1600 Stewart Avenue, Suite 410, Westbury,

New York 11590; telephone: (516) 228-7324; fax: (516) 794-5531. 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, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

## **Related Information**

(h) Refer to MCAI Transport Canada AD No. CF-2007-31, dated December 17, 2007; Viking DHC-6 Twin Otter Service Bulletins No. V6/540, dated October 1, 2007; No. V6/541, dated October 1, 2007; and No. V6/542, dated October 1, 2007; and R.W. Martin, Inc. Service Bulletin No. 00160/2, Revision A, dated November 15, 2007, for related information.

## **Material Incorporated by Reference**

(i) You must use Viking DHC-6 Twin Otter Service Bulletins No. V6/540, dated October 1, 2007; No. V6/541, dated October 1, 2007; and No. V6/542, dated October 1, 2007; and R.W. Martin, Inc. Service Bulletin No. 00160/2, Revision A, dated November 15, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) On August 5, 2008 (73 FR 37353, July 1, 2008), the Director of the Federal Register previously approved the incorporation by reference of Viking DHC-6 Twin Otter Service Bulletins No. V6/540, dated October 1, 2007; No. V6/541, dated October 1, 2007; and No. V6/542, dated October 1, 2007; and R.W. Martin, Inc. Service Bulletin No. 00160/2, Revision A, dated November 15, 2007.

(2) For service information identified in this AD, contact Viking Air Limited, 9574 Hampden Road, Sidney, B.C., Canada V8L 5V5; telephone: (250) 656-7227; fax: (250) 656-0673; Internet: <http://www.vikingair.com>; or R.W. Martin, Inc., 37552 Winchester Road, Hangar 20, Murrieta, California 92563; telephone: (951) 600-0009; fax: (951) 600-1005; Internet: <http://www.rwmi.net>.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on February 6, 2009.

Kim Smith,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.