This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Viking Air Limited (Type Certificate Previously Held by Bombardier, Inc.) Model DHC–7 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed 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:

Viking Air Limited has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002–043. The identified noncompliances were then assessed using Transport Canada Policy Letter No. 525–001, to determine if mandatory corrective action is required.

The assessment showed that supplemental maintenance tasks would be required to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion. * * *

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by September 7, 2010.

ADDRESSES: You may send comments by any of the following methods:
- Fax: (202) 493–2251.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–40, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Viking Air Limited, 9574 Hampden Road, Sidney, British Columbia V8L 8V5, Canada; telephone 250–656–7227; fax 250–656–0673; e-mail technical.publications@vikingair.com; Internet http://www.vikingair.com. You may review copies of the referenced 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.

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 this proposed AD, 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.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2010–0699; Directorate Identifier 2009–NM–236–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We have lengthened the 30-day comment period for proposed ADs that address MCAI originated by aviation authorities of other countries to provide adequate time for interested parties to submit comments. The comment period for these proposed ADs is now typically 45 days, which is consistent with the comment period for domestic transport ADs.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The FAA has examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, we issued a regulation titled “Transport Airplane Fuel Tank System Design Review, Flammability Reduction and Maintenance and Inspection Requirements” (66 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, this rule included Special Federal Aviation Regulation No. 88 (“SFAR 88,” Amendment 21–78, and subsequent Amendments 21–82 and 21–83).

Among other actions, SFAR 88 requires certain type design (i.e., type certificate (TC) and supplemental type certificate (STC)) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tank. This requirement applies to type design holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the rule, we intended to adopt
airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, we have established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: Single failures, single failures in combination with a latent condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

We have determined that the actions identified in this AD are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF–2009–15, dated April 17, 2009 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Viking Air Limited has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002–403. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525–001, to determine if mandatory corrective action is required.

The assessment showed that supplemental maintenance tasks would be required to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion. Viking Air Limited has revised Chapter 5 of the DHC–7 Maintenance Manual, PSM 1–7–2, to introduce the required maintenance tasks.

The corrective action is revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate new limitations for fuel tank systems. You may obtain further information by examining the MCAI in the AD docket.

**Relevant Service Information**


**FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

**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 proposed 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 proposed AD.

**Costs of Compliance**

Based on the service information, we estimate that this proposed AD would affect about 11 products of U.S. registry. We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $935, or $85 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

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 proposed AD and placed it in the AD docket.

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

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

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:


**Comments Due Date**

(a) We must receive comments by September 7, 2010.

**Affected AIDs**

(b) None.
Applicability
(c) This AD applies to Viking Air Limited (Type Certificate previously held by Bombardier, Inc.) Model DHC–7–1, DHC–7–100, DHC–7–101, DHC–7–102, and DHC–7–103 airplanes; certificated in any category.

Subject
(d) Air Transport Association (ATA) of America Code 28: Fuel.

Reason
(e) The mandatory continuing airworthiness information (MCAI) states:
Viking Air Limited has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002–043. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525–001, to determine if mandatory corrective action is required.

The assessment showed that supplemental maintenance tasks would be required to prevent potential ignition sources within the fuel system, which could result in a fuel tank explosion.

The corrective action is revising the Airworthiness Limitations Section of the

Instructions for Continued Airworthiness to incorporate new limitations for fuel tank systems.

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.

Actions
(g) Within 60 days after the effective date of this AD, incorporate all the fuel system limitation (FSL) tasks as specified in the temporary revisions (TR) listed in Table 1 of this AD, to Chapter 5 of the Viking DHC–7 Dash 7 Maintenance Manual (MM), PSM 1–7–2; and incorporate Section 5–10–30, as specified in Viking Air Limited TR 5–106, dated December 15, 2008, to Chapter 5 of the Viking DHC–7 Dash 7 MM.

Note 1: This may be done by inserting copies of the TRs identified in paragraph (g) of this AD in the MM. When these TRs have been included in general revisions of the MM, the general revisions may be inserted in the MM, provided the relevant information in the general revision is identical to that in the TRs identified in paragraph (g) of this AD.

(h) At the applicable time in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, do the initial inspections in accordance with the applicable TR identified in Table 1 of this AD.

(i) Prior to the accumulation of 18,000 total flight hours.

(ii) Optional the AMOC approval letter must notify your principal maintenance inspector, your local Flight Standards District Office. The AMOC approval letter must specify the approval authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York, 11590; telephone 516–228–7300; fax 516–794–5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMA) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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: For any reporting requirement in this AD, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.

Related Information
(j) Refer to MCAI Canadian Airworthiness Directive CF–2009–15, dated April 17, 2009; and the TRs identified in Table 2 of this AD for related information.

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<td>Viking Air Limited TR—</td>
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The MCAI states:

Some cases of failure of engine oil dipsticks, installed on Pratt & Whitney Canada (P&W) PT6A-66 and PT6A-66B engines, were detected on P.180 aeroplanes; such failures, due to moisture penetration into the dipstick and subsequent corrosion, can cause incorrect reading of the engine oil level on the Refuel/Ground Test Panel. If left uncorrected, this situation could lead to in-flight engine failure(s).

We have reviewed the MCAI and determined the unsafe condition described in the MCAI.

AD Results from Mandatory Continuing Airworthiness Information

ADs are issued to address a specific unsafe condition described in MCAI or service information. In this case, the AD is based on the MCAI and service information referenced above.

The proposed AD requires actions that are intended to address the unsafe condition described in the MCAI.

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The proposed AD requires actions that are intended to address the unsafe condition described in the MCAI.

Relevant Service Information

PIAGGIO AERO INDUSTRIES S.p.A. has issued Service Bulletin (Mandatory) N.: 80–0287, Rev. N. 1, dated March 24, 2010. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

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