

Proposed Rules

Federal Register

Vol. 73, No. 33

Tuesday, February 19, 2008

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

[Docket No. FAA-2008-0178; Directorate Identifier 2007-NM-366-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-400 Series 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:

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank safety standards * * *.

[A]ssessment showed that supplemental maintenance tasks [inspections of various fuel system components such as shields, harnesses, sleeves, and sealant] are required to prevent potential ignition sources inside 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 March 20, 2008.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- 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.

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:

Rocco Viselli, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7331; fax (516) 794-5531.

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-2008-0178; Directorate Identifier 2007-NM-366-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 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

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2007-33, dated December 17, 2007 (referred to

after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank 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 [inspections of various fuel system components such as shields, harnesses, sleeves, and sealant] are required to prevent potential ignition sources inside the fuel system, which could result in a fuel tank explosion. Revision has been made to Part 2 "Airworthiness Limitation Items" of the DHC-8-400 Maintenance Requirements Manual 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.

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 tanks. 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 intend 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.

Relevant Service Information

Bombardier has issued Temporary Revision ALI-69, dated February 9, 2007, to Section 4, "Fuel System Limitations," of Part 2, "Airworthiness Limitations Items," (AWL) of the Bombardier Dash 8 Q400 Maintenance Requirements Manual Product Support Manual (PSM) 1-84-7. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

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.

This proposed AD would also allow accomplishing the AWL revision in accordance with later revisions of the Maintenance Requirements Manual as an acceptable method of compliance if the limit or interval is part of a later approved Maintenance Requirements

Manual revision or the limit or interval is approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (g) of this proposed AD.

In most ADs, we adopt a compliance time allowing a specified amount of time after the AD's effective date. In this case, however, the FAA has already issued regulations that require operators to revise their maintenance/inspection programs to address fuel tank safety issues. The compliance date for these regulations is December 16, 2008. To provide for coordinated implementation of these regulations and this proposed AD, we are using this same compliance date in this proposed 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 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 38 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 \$80 per work-hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$3,040, or \$80 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, 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:

Bombardier, Inc. (Formerly de Havilland, Inc.): Docket No. FAA-2008-0178; Directorate Identifier 2007-NM-366-AD.

Comments Due Date

- (a) We must receive comments by March 20, 2008.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to all Bombardier Model DHC-8-400, DHC-8-401, and DHC-8-402 airplanes, certificated in any category, all serial numbers.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (g) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

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

Reason

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

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank 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 [inspections of various fuel system components such as shields, harnesses, sleeves, and sealant] are required to prevent potential ignition sources inside the fuel system, which could result in a fuel tank explosion. Revision has been made to Part 2 "Airworthiness Limitation Items" of the DHC-8-400 Maintenance Requirements Manual 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.

Actions and Compliance

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

(1) Within 60 days after the effective date of this AD, or before December 16, 2008, whichever occurs first, revise the ALS of the Instructions for Continued Airworthiness to incorporate the inspection requirements of Bombardier Temporary Revision ALI-69, dated February 9, 2007, to Section 4, "Fuel System Limitations," of Part 2, "Airworthiness Limitation Items," of the Bombardier Dash 8 Q400 Maintenance Requirements Manual Product Support Manual (PSM) 1-84-7 ("the TR to the MRM"). For all fuel system limitations tasks contained in the TR to the MRM, the initial compliance times start from the later of the times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, and the repetitive inspections must be accomplished thereafter at the interval specified in the TR to the MRM, except as provided by paragraphs (f)(2) and (g)(1) of this AD.

Note 2: The actions required by paragraph (f)(1) of this AD may be done by inserting a copy of Bombardier TR ALI-69 into the Airworthiness Limitations section of the Dash 8 Q400 MRM 1-84-7. When this TR has been included in general revisions of the MRM, the general revisions may be inserted in the PSM, provided the relevant information in the general revision is identical to that in Bombardier TR ALI-69.

(i) The effective date of this AD.
 (ii) The date of issuance of the original Canadian standard airworthiness certificate or the date of issuance of the original Canadian export certificate of airworthiness.
 (2) After accomplishing the actions specified in paragraph (f)(1) of this AD, no alternative inspections or inspection intervals may be used unless the inspections or inspection intervals are part of a later revision of Bombardier Dash 8 Q400 MRM, PSM 1-84-7, Revision 4, dated October 30, 2003, that is approved by the Manager, New York Aircraft Certification Office (ACO), FAA, or Transport Canada Civil Aviation (TCCA) (or its delegated agent); or unless the inspections or inspection intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (g)(1) of this AD.

FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, 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: Rocco Viselli, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7331; 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, 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 Canadian Airworthiness Directive CF-2007-33, dated December 17,

2007, and Temporary Revision ALI-69, dated February 9, 2007, to Section 4, "Fuel System Limitations," of Part 2, "Airworthiness Limitation Items" (AWL), of the Bombardier Dash 8 Q400 Maintenance Requirements Manual Product Support Manual (PSM) 1-84-7.

Issued in Renton, Washington, on February 11, 2008.

Stephen P. Boyd,

Assistant Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-2997 Filed 2-15-08; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0179; Directorate Identifier 2007-NM-367-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, and DHC-8-315 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:

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank safety standards * * *.

[A]ssessment showed that supplemental maintenance tasks [inspections of fuel tank bonding jumpers, wiring harnesses, and drain valve components, among other items and actions; and applicable corrective actions] are required to prevent potential ignition sources inside 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 March 20, 2008.

ADDRESSES: You may send comments by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.