



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6148; Directorate Identifier 2015-NM-154-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This proposed AD was prompted by a malfunctioning No. 2 engine intake heater with corrosion on the thermostats and the fuselage skin where the thermostats made contact with the aircraft fuselage skin. This proposed AD would require a general visual inspection for corrosion of the thermostats' mounting surfaces and fuselage skin surface, corrective actions if necessary, and relocating the existing thermostats. We are proposing this AD to prevent corrosion within the thermostats that may cause the switch mechanism to seize in the open position and prevent the activation of the associated engine air intake heater. An inactive engine air intake heater could lead to an engine failure.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, 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 W12-140, 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 NPRM, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone: 416-375-4000; fax: 416-375-4539; email: thd.qseries@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. 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> by searching for and locating Docket No. FAA-2016-6148; 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 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: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE 172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7301; 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-2016-6148; Directorate Identifier 2015-NM-154-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 AD CF-2015-24, dated August 24, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct

an unsafe condition for certain Bombardier, Inc. Model DHC-8-400 series airplanes. The MCAI states:

A malfunctioning Engine Air Intake Heater has been discovered with corrosion on the thermostats and the aeroplane skin where the thermostats are installed. The two thermostats are installed directly under the flight compartment floor along the aeroplane centre line where moisture accumulation and/or migration may occur, which can cause corrosion of the thermostats. Corrosion within the thermostats may seize the switch mechanism open, preventing the activation of the associated Engine Air Intake Heater. Failure of the Engine Air Intake Heater to activate may pose a safety risk to the aeroplane in icing conditions.

Bombardier has issued Service Bulletin (SB) 84-30-10 to inspect, replace if required and relocate the thermostat assembly to rectify this problem. [An inactive engine air intake heater could lead to an engine failure.]

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-2016-6148.

Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014. The service information describes procedures for a general visual inspection for corrosion of the thermostats' mounting surfaces and fuselage skin surface, corrective actions if necessary, and relocating the existing thermostats from a lower position on the aircraft skin at X-54.00 between stringers 31P and 32P (next to the centerline) to a higher position at X-54.00 between stringers 26P and 27P. 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.

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.

Costs of Compliance

We estimate that this proposed AD affects 76 airplanes of U.S. registry.

We also estimate that it would take about 12 work-hours 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 this proposed AD on U.S. operators to be \$77,520, or \$1,020 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);
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.

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 airworthiness directive

(AD):

Bombardier, Inc.: Docket No. FAA-2016-6148; Directorate Identifier
2015-NM-154-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF
PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes,
certificated in any category, serial numbers 4001 through 4184 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and rain protection.

(e) Reason

This AD was prompted by a malfunctioning No. 2 engine intake heater with
corrosion on the thermostats and the fuselage skin where the thermostats made contact
with the aircraft fuselage skin. We are issuing this AD to prevent corrosion within the
thermostats that may cause the switch mechanism to seize in the open position and
prevent the activation of the associated engine air intake heater. An inactive engine air
intake heater could lead to an engine failure.

(f) Compliance

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

(g) Inspection of the Thermostats and Replacement

Within 2,000 flight hours or 12 months, whichever occurs first after the effective date of this AD, do a general visual inspection of the thermostats' exterior for any signs of corrosion, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014. If any thermostat is corroded, replace the thermostat before further flight in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014.

(h) Inspection of the Fuselage Skin Surface and Corrective Action

Within 2,000 flight hours or 12 months, whichever occurs first after the effective date of this AD, do a general visual inspection of the fuselage skin surface for skin corrosion, and modify the engine air intake heater thermostat installation, in accordance with Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014.

(1) If the skin corrosion is 0.001 inch deep or less, before further flight remove the corrosion and treat bare metal in accordance with Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014.

(2) If the skin corrosion is greater than 0.001 inch deep, before further flight, repair using a method approved by the Manager, New York Aircraft Certification Office (ACO), ANE-170, Transport Airplane Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO).

(i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using the

service information identified in paragraphs (i)(1) through (i)(5) of this AD. This service information is not incorporated by reference in this AD.

(1) Bombardier Service Bulletin 84-30-10, dated September 07, 2007, provided that the thermostat location label is replaced in accordance with the accomplishment instruction of Bombardier Service Bulletin 84-30-10, Revision E, dated October 10, 2014, within the compliance times specified in paragraph (g) of this AD.

(2) Bombardier Service Bulletin 84-30-10, Revision A, dated April 07, 2008.

(3) Bombardier Service Bulletin 84-30-10, Revision B, dated January 20, 2010.

(4) Bombardier Service Bulletin 84-30-10, Revision C, dated July 14, 2011.

(5) Bombardier Service Bulletin 84-30-10, Revision D, dated December 20, 2011.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO, ANE-170, 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 ACO, send it to ATTN: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE 172, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7301; fax: 516-794-5531. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight

standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(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, ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2015-24, dated August 24, 2015, 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-2016-6148.

(2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone: 416-375-4000; fax: 416-375-4539; email: thd.qseries@aero.bombardier.com; Internet: <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on April 20, 2016.

John P. Piccola, Jr.,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-10116 Filed: 4/29/2016 8:45 am; Publication Date: 5/2/2016]