



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2014-0447; Directorate Identifier 2014-NM-019-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 Model DHC-8-400 series airplanes. This proposed AD was prompted by a report of several cracks found on the forward passenger airstair door step assembly. This proposed AD would require an inspection to determine the serial number of the airstair step assembly, and if necessary, an electronic tap test, re-identification of the airstair step assembly, and replacement of the airstair step assembly. We are proposing this AD to detect and correct cracks in the forward passenger airstair door step assembly, which could propagate and result in the structural failure of the steps and impede the evacuation of passengers in the event of an emergency egress situation.

**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 proposed 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](mailto: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-2014-0447; 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:** Jeffrey Zimmer, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7306; 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-2014-0447; Directorate Identifier 2014-NM-019-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-2013-20R1, dated December 30, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products.

The MCAI states:

There has been one in-service report of several cracks being found on the forward passenger airstair door step assembly between the steps and the sidewall panels. The investigation revealed that the application of potting compound may have been omitted during the bonding at the joint of the airstair door steps and the sidewalls. The omission of potting compound could cause the bonding sealant to crack. The cracks, if not detected, could propagate to result in the structural failure of the steps.

In the event of an emergency egress situation, the failure of the airstair step assembly could impede the evacuation of passengers.

This [Canadian] AD mandates the replacement of the affected forward passenger airstair step assembly with a new or reworked step assembly.

Revision 1 of this [Canadian] AD provides additional instructions for performing an electronic tap test of the airstair step assembly if the Serial Number (S/N) of the airstair step assembly cannot be found.

The actions in this AD include an inspection to determine the serial number of the airstair step assembly, and if necessary, an electronic tap test, re-identification of the airstair step assembly, and replacement of the airstair step assembly. 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-2014-0447.

### **Relevant Service Information**

Bombardier has issued Service Bulletin 84-52-77, Revision B, dated October 31, 2013. 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.

### **“Contacting the Manufacturer” Paragraph in this Proposed AD**

Since late 2006, we have included a standard paragraph titled “Airworthy Product” in all MCAI ADs in which the FAA develops an AD based on a foreign authority’s AD.

The MCAI or referenced service information in an FAA AD often directs the owner/operator to contact the manufacturer for corrective actions, such as a repair. Briefly, the Airworthy Product paragraph allowed owners/operators to use corrective actions provided by the manufacturer if those actions were FAA-approved. In addition,

the paragraph stated that any actions approved by the State of Design Authority (or its delegated agent) are considered to be FAA-approved.

In another NPRM, Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013), we proposed to prevent the use of repairs that were not specifically developed to correct the unsafe condition, by requiring that the repair approval provided by the State of Design Authority or its delegated agent specifically refer to the FAA AD. This change was intended to clarify the method of compliance and to provide operators with better visibility of repairs that are specifically developed and approved to correct the unsafe condition. In addition, we proposed to change the phrase “its delegated agent” to include a design approval holder (DAH) with State of Design Authority design organization approval (DOA), as applicable, to refer to a DAH authorized to approve required repairs for the proposed AD.

One commenter to the other NPRM, Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013), stated the following: “The proposed wording, being specific to repairs, eliminates the interpretation that Airbus messages are acceptable for approving minor deviations (corrective actions) needed during accomplishment of an AD mandated Airbus service bulletin.”

This comment has made the FAA aware that some operators have misunderstood or misinterpreted the Airworthy Product paragraph to allow the owner/operator to use messages provided by the manufacturer as approval of deviations during the accomplishment of an AD-mandated action. The Airworthy Product paragraph does not approve messages or other information provided by the manufacturer for deviations to the

requirements of the AD-mandated actions. The Airworthy Product paragraph only addresses the requirement to contact the manufacturer for corrective actions for the identified unsafe condition and does not cover deviations from other AD requirements. However, deviations to AD-required actions are addressed in 14 CFR 39.17, and anyone may request the approval for an alternative method of compliance to the AD-required actions using the procedures found in 14 CFR 39.19.

To address this misunderstanding and misinterpretation of the Airworthy Product paragraph, we have changed that paragraph and retitled it “Contacting the Manufacturer.” This paragraph now clarifies that for any requirement in this proposed AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the FAA, TCCA, or Bombardier’s TCCA Design Approval Organization (DAO).

The Contacting the Manufacturer paragraph also clarifies that, if approved by the DAO, the approval must include the DAO-authorized signature. The DAO signature indicates that the data and information contained in the document are TCCA-approved, which is also FAA-approved. Messages and other information provided by the manufacturer that do not contain the DAO-authorized signature approval are not TCCA-approved, unless TCCA directly approves the manufacturer’s message or other information.

This clarification does not remove flexibility previously afforded by the Airworthy Product paragraph. Consistent with long-standing FAA policy, such flexibility was never intended for required actions. This is also consistent with the

recommendation of the Airworthiness Directive Implementation Aviation Rulemaking Committee to increase flexibility in complying with ADs by identifying those actions in manufacturers' service instructions that are "Required for Compliance" with ADs. We continue to work with manufacturers to implement this recommendation. But once we determine that an action is required, any deviation from the requirement must be approved as an alternative method of compliance.

### **Costs of Compliance**

We estimate that this proposed AD affects 76 airplanes 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. Required parts would cost about \$0 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$6,460, or \$85 per product.

In addition, we estimate that any necessary follow-on actions would take up to 9 work-hours and require parts costing \$206,175, for a cost of \$206,940 per product. We have no way of determining the number of aircraft that might 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 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-2014-0447; Directorate Identifier 2014-NM-019-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 series airplanes, certificated in any category, serial numbers 4001 and subsequent.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 52, Doors.

**(e) Reason**

This AD was prompted by a report of several cracks found on the forward passenger airstair door step assembly. We are issuing this AD to detect and correct cracks in the forward passenger airstair door step assembly, which could propagate and result in the structural failure of the steps and impede the evacuation of passengers in the event of an emergency egress situation.

**(f) Compliance**

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

**(g) Inspection, Electronic Tap Test, Re-Identification, and Replacement of the Airstair Step Assembly**

For airplanes having serial numbers 4001 through 4393: Within 320 days after the effective date of this AD, do an inspection to determine the serial number of the airstair step assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

(1) If the serial number of the airstair step assembly cannot be found, or if the serial number is illegible: Before further flight, do an electronic tap test to determine the existence of epoxy compound, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

(i) If the existence of epoxy compound is confirmed, before further flight, re-identify the airstair step assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

(ii) If the existence of epoxy compound is not confirmed: Within 6,000 flight hours after the effective date of this AD, replace the airstair step assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

(2) If the serial number of the airstair step assembly is in the affected range specified in paragraph 1.A. “Effectivity” of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013: Within 6,000 flight hours after the effective date of this AD, replace the airstair step assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

**(h) Parts Installation Prohibition**

As of the effective date of this AD, no person may install on any airplane an airstair step assembly with part number 85217008-001 containing a serial number in the affected range specified in paragraph 1.A. “Effectivity” of Bombardier Service Bulletin 84-52-77, Revision B, dated October 31, 2013.

**(i) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD if the serial number is known, and if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-52-77, Revision A, dated April 24, 2013, which is not incorporated by reference in this AD.

**(j) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office (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 If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. 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 Airworthiness Directive CF-2013-20R1, dated December 30, 2013, 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-2014-0447.

(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](mailto: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 July 3, 2014.

Dionne Palermo,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2014-16811 Filed 07/16/2014 at 8:45 am; Publication Date: 07/17/2014]