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[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-0200; Product Identifier 2019-NM-185-AD]

**RIN 2120-AA64**

**Airworthiness Directives;** De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to supersede Airworthiness Directive (AD) 2015-14-01, which applies to certain Bombardier, Inc., Model DHC-8-400 series airplanes. AD 2015-14-01 requires a detailed inspection for loose bolts on the aft translating door crank assembly, and removal and reinstallation of the bolts. Since AD 2015-14-01 was issued, the FAA received a report that additional airplanes may be subject to the unsafe condition. In addition, the design of the translating door crank handle has been improved. This proposed AD would retain the inspections of AD 2015-14-01 and add airplanes to the applicability. For all airplanes, this proposed AD would also require a modification of the door crank handle, which would terminate the inspections. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA 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 <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact De Havilland Aircraft of Canada Limited, Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email [thd@dehavilland.com](mailto:thd@dehavilland.com); Internet <https://dehavilland.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0200; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above.

Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0200; Product Identifier 2019-NM-185-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. The FAA will consider all comments received by the closing date and may amend this proposed AD based on those comments.

The FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this proposed AD.

## **Discussion**

The FAA issued AD 2015-14-01, Amendment 39-18199 (80 FR 38615, July7, 2015) (“AD 2015-14-01”), for certain Bombardier, Inc., Model DHC-8-400 series airplanes. AD 2015-14-01 requires a detailed inspection for loose bolts on the aft translating door crank assembly, and removal and reinstallation of the bolts. AD 2015-14-01 resulted from a report of loose bolts that are intended to secure the translating door crank assembly to the outside handle shaft. The FAA issued AD 2015-14-01 to prevent loose bolts from falling out. If both bolts become loose or fall out after the door is closed and locked, the door cannot be opened from inside or outside, which could impede evacuation in the event of an emergency.

## **Actions Since AD 2015-14-01 was Issued**

Since AD 2015-14-01 was issued, the FAA received a report that loose bolts were found on airplane serial numbers that were outside the applicability range. Further, the manufacturer reclassified the forward baggage door on some airplanes as an emergency exit, which is not subject to AD 2015-14-01. The FAA also received a report that the manufacturer has modified the design of the translating door crank handle to improve retention of the bolts.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2014-08R1, dated July 30, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.) Model DHC-8-400 series airplanes.

You may examine the MCAI in the AD docket on the Internet at  
<https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0200.

This proposed AD was prompted by reports of loose bolts that are intended to secure the translating door crank assembly to the outside handle shaft, and of sealant missing from these bolts on another translating door. The FAA is issuing this AD to address the potential for both bolts to become loose or fall out after the door is closed and locked, which would prevent the door from being opened from inside or outside and impede evacuation in the event of an emergency. See the MCAI for additional background information.

### **Related Service Information under 1 CFR Part 51**

De Havilland Aircraft of Canada Limited has issued the following service information.

- Bombardier Service Bulletin 84-52-89, Revision A, dated January 29, 2018.
- Bombardier Service Bulletin 84-52-92, Revision A, dated January 24, 2018.
- Bombardier Service Bulletin 84-52-94, Revision A, dated January 24, 2018.

This service information describes procedures for modifying the door crank handle with an improved bolt retention design on the type 1 emergency door, the aft entry door, and the aft service door, as necessary. These documents are distinct since they apply to different airplane configurations.

De Havilland Aircraft of Canada Limited has also issued Bombardier Service Bulletin 84-52-96, dated February 26, 2019, which describes procedures for a detailed visual inspection of the translating door crank assembly for any loose bolts.

De Havilland Aircraft of Canada Limited has also issued Modification Summary Package IS4Q5200101, Revision A, dated July 5, 2019, which describes a deviation to the actions specified in certain service information.

This proposed AD would also require Bombardier Service Bulletin 84-52-75, Revision A, dated July 11, 2013, which the Director of the Federal Register approved for incorporation by reference as of August 11, 2015 (80 FR 38615, July7, 2015).

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**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to a bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed Requirements of this NPRM**

This proposed AD would retain the inspections of AD 2015-14-01. This proposed AD would require accomplishing the actions specified in the service information described previously.

## **Explanation of Change to Manufacturer's Name Specified in AD 2015-14-01**

This NPRM identifies the manufacturer's name as published in the most recent type certificate data sheet for the affected models.

### **Costs of Compliance**

The FAA estimates that this proposed AD affects 59 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

#### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 13 work-hours X \$85 per hour = \$1,105	Up to \$677	Up to \$1,782	Up to \$105,138

### **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.

The FAA is 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**

The FAA 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) Will not affect intrastate aviation in Alaska, 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.

## **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 removing Airworthiness Directive (AD) 2015-14-01, Amendment 39-18199 (80 FR 38615, July 7, 2015), and adding the following new AD:

**De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.) Airplanes:** Docket No. FAA-2020-0200; Product Identifier 2019-NM-185-AD.

### **(a) Comments Due Date**

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

### **(b) Affected ADs**

This AD replaces AD 2015-14-01, Amendment 39-18199 (80 FR 38615, July 7, 2015) (“AD 2015-14-01”).

### **(c) Applicability**

This AD applies to De Havilland Aircraft of Canada Limited (Type Certificate Previously Held by Bombardier, Inc.) Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers (S/Ns) 4001 through 4530 inclusive.

### **(d) Subject**

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

### **(e) Reason**

This proposed AD was prompted by reports of loose bolts that are intended to secure the translating door crank assembly to the outside handle shaft, and of sealant

missing from these bolts on another translating door. The FAA is issuing this AD to address the potential for both bolts to become loose or fall out after the door is closed and locked, which would prevent the door from being opened from inside or outside and impede evacuation in the event of an emergency.

**(f) Compliance**

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

**(g) Inspection and Corrective Actions for S/Ns 4001 through 4411 Inclusive**

For airplane S/Ns 4001 through 4411 inclusive: Within 600 flight hours or 100 days, whichever occurs first after August 11, 2015 (the effective date of AD 2015-14-01): Perform a detailed inspection for loose bolts of the aft translating door crank assembly, in accordance with paragraph 3.B., “Procedure,” of Part A – INSPECTION of the Accomplishment Instructions of Bombardier Service Bulletin 84-52-75, Revision A, dated July 11, 2013.

(1) If the detailed inspection was done before the effective date of this AD and the corrective action was done in accordance with 3.B., “Procedure,” and steps 3.C.(4) and 3.C.(5) of paragraph 3.C., “Close Out,” of Part B – RECTIFICATION, of the Accomplishment Instructions of Bombardier Service Bulletin 84-52-75, dated July 27, 2012; or Bombardier Service Bulletin 84-52-75, Revision A, dated July 11, 2013: No further work is required by paragraph (g) of this AD.

(2) If the detailed inspection is done on or after the effective date of this AD, and any loose bolt is found: Before further flight, do the modification in paragraph (i) of this AD.

**(h) Inspection and Modification for S/Ns 4412 through 4491 Inclusive**

For airplane S/Ns 4412 through 4491 inclusive: Within 800 flight hours or 120 days, whichever occurs first after the effective date of this AD, perform a detailed inspection for loose bolts of the translating door crank assembly, in accordance with paragraph 3.B., "Procedure," of the Accomplishment Instructions of Bombardier Service Bulletin 84-52-96, dated February 26, 2019.

(1) If any loose bolt is found, before further flight do the modification specified in paragraph (i) of this AD.

(2) If no loose bolt is found, at the compliance time specified in paragraph (i) of this AD, do the modification specified in paragraph (i) of this AD.

**(i) Modification for S/Ns 4001 through 4530 Inclusive**

For airplane S/Ns 4001 through 4530 inclusive: Except as required by paragraphs (g)(2) and (h)(1) of this AD, within 8,000 flight hours or 48 months, whichever occurs first after the effective date of this AD, modify the door crank handle with an improved bolt retention design on the type 1 emergency door, the aft entry door, and the aft service door, as applicable, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (i)(1) through (3) of this AD.

(1) For the aft entry door: Bombardier Service Bulletin 84-52-89, Revision A, dated January 29, 2018.

(2) For the aft service door: Bombardier Service Bulletin 84-52-92, Revision A, dated January 24, 2018.

(3) For the type 1 emergency door: Bombardier Service Bulletin 84-52-94, Revision A, dated January 24, 2018.

**(j) Alternative Modification**

For airplanes with de Havilland Modification Summary Package 4Q459324 incorporated for the cargo combi configuration: Accomplishing the modification in paragraph (i) of this AD using Bombardier Service Bulletin 84-52-89, Revision A, dated January 29, 2018; and Bombardier Service Bulletin 84-52-92, Revision A, dated January 24, 2018; as applicable; in combination with de Havilland Modification Summary Package IS4Q5200101, Revision A, dated July 5, 2019, also meets the requirement specified in paragraph (i) of this AD for the aft entry and aft service doors.

**(k) Terminating Actions**

Accomplishing the action required by paragraph (i) of this AD terminates the requirements of paragraphs (g) and (h) of this AD.

**(l) Credit for Previous Actions**

(1) This paragraph provides credit for actions required by the introductory text to paragraph (g) of this AD, if those actions were performed before August 11, 2015 (the effective date of AD 2015-14-01) using Bombardier Service Bulletin 84-52-75, dated July 27, 2012, which is not incorporated by reference in this AD.

(2) This paragraph provides credit for the modification of the applicable doors in paragraph (i) of this AD, if the modification was performed before the effective date of this AD using the applicable service information specified in paragraphs (l)(2)(i) through (iii) of this AD.

(i) Bombardier Service Bulletin 84-52-89, dated April 13, 2017.

(ii) Bombardier Service Bulletin 84-52-92, dated April 18, 2017.

(iii) Bombardier Service Bulletin 84-52-94, dated April 13, 2017.

**(m) Other FAA AD Provisions**

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, 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 manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 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.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or De Havilland Aircraft of Canada Limited's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2014-08R1, dated July 30, 2019, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0200.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(3) For service information identified in this AD, contact De Havilland Aircraft of Canada Limited, Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd@dehavilland.com; Internet <https://dehavilland.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued on March 13, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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