



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9575; Directorate Identifier 2016-NM-168-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 supersede Airworthiness Directive (AD) 2014-20-09 for certain Bombardier, Inc. Model DHC-8-400 series airplanes. AD 2014-20-09 currently requires an inspection for missing clamps that are required to provide positive separation between the alternating current (AC) feeder cables and the hydraulic line of the landing gear alternate extension, and related investigative and corrective actions if necessary. Since we issued AD 2014-20-09, it was determined that certain airplane serial numbers are not subject to the identified unsafe condition. This proposed AD would remove airplanes from the AD applicability. We are proposing this AD to address the unsafe condition on these products.

**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: 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 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-2016-9575; 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-2016-9575; Directorate Identifier 2016-NM-168-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**

On September 23, 2014, we issued AD 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014) (“AD 2014-20-09”), for certain Bombardier, Inc. Model DHC-8-400 series airplanes. AD 2014-20-09 was prompted by reports of missing clamps that are required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension. AD 2014-20-09 requires an inspection for missing clamps that are required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension, and

related investigative and corrective actions if necessary. We issued AD 2014-20-09 to detect and correct chafing of the AC feeder cable. A chafed and arcing AC feeder cable could puncture the adjacent hydraulic line, which, in combination with the use of the alternate extension system, could result in an in-flight fire.

Since we issued AD 2014-20-09, it was determined that certain airplane serial numbers are in a Pre-modification MS 4M153025 configuration, which allows sufficient space between the AC feeder cables and the landing gear alternate extension hydraulic line do not pose an in-flight fire risk. Therefore, these airplanes are not subject to the identified unsafe condition.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-16R1, effective July 26, 2016 (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:

During production checks, it was found that the appropriate clamps required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension were omitted. The AC feeder cable could sag and be in direct contact with the swage fitting of the landing gear alternate extension hydraulic line, resulting in chafing of the AC feeder cable. The chafed and arcing AC feeder cable could puncture the adjacent hydraulic line. In combination with the use of the alternate extension system, this could result in an in-flight fire.

The original issue of this [Canadian] AD was issued to mandate the incorporation of [Bombardier] service bulletin (SB) 84-24-53 to \*\*\* [do a general visual inspection for the presence of correctly installed clamps] and rectify, as necessary, for proper clamp installation.

Bombardier, Inc. has revised SB 84-24-53 to remove serial numbers 4001 through 4034 from the Effectivity section, as it was determined that these serial numbers are Pre-Mod MS 4M153025, which allowed sufficient space between the AC feeder cables and the landing gear alternate extension hydraulic line to not pose an in-flight fire risk. Accordingly, revision 1 of this [Canadian] AD is issued to revise the Applicability section to reflect the Effectivity changes in [Bombardier Service Bulletin] SB 84-24-53 Revision B, dated 10 September 2015.

The related investigative action is a general visual inspection of the AC power feeder cables and the hydraulic line for damage due to chafing. The corrective actions include repair of chafed parts and replacement of missing clamps. 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-2016-9575.

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

We reviewed Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015. The service information describes procedures for a general visual inspection for installation of clamps between the AC feeder cables and hydraulic line, and related investigative and corrective actions. 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 52 airplanes of U.S. registry.

The actions required by AD 2014-20-09, and retained in this proposed AD, take about 2 work-hours per product, at an average labor rate of \$85 per work-hour. Required parts cost about \$170 per product. Based on these figures, the estimated cost of the actions that are required by AD 2014-20-09 is \$17,680 per product.

This proposed AD merely removes certain airplanes and, therefore, adds no new actions or economic burden.

### **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 removing Airworthiness Directive (AD) 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014), and adding the following new AD:

**Bombardier, Inc.:** Docket No. FAA-2016-9575; Directorate Identifier 2016-NM-168-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**

This AD replaces AD 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014) (“AD 2014-20-09”).

**(c) Applicability**

This AD applies to Bombardier, Inc. Model DHC-400, -401, and -402 airplanes, certificated in any category, serial numbers 4035 through 4347 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 24, Electrical power.

**(e) Reason**

This AD was prompted by reports of missing clamps that are required to provide positive separation between the alternating current (AC) feeder cables and the hydraulic line of the landing gear alternate extension. We are issuing this AD to detect and correct chafing of the AC feeder cable. A chafed and arcing AC feeder cable could puncture the adjacent hydraulic line, which, in combination with the use of the alternate extension system, could result in an in-flight fire.

**(f) Compliance**

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

**(g) Retained Clamp Inspection, Related Investigative Actions, and Corrective Actions, with Revised Service Information Having Reduced Effectivity**

This paragraph restates the requirements of paragraph (g) of AD 2014-20-09, with revised service information having reduced Effectivity. Within 6,000 flight hours or 36 months after November 7, 2014 (the effective date of AD 2014-20-09), whichever occurs earlier: Do a general visual inspection for correctly installed clamps between the AC feeder cables and hydraulic line, and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015. Do all applicable related investigative and corrective actions before further flight. After the effective date of this AD, only Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015, may be used.

**(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before November 7, 2014 (the effective date of AD 2014-20-09), using Bombardier Service Bulletin 84-24-53, dated May 11, 2012; or Bombardier Service Bulletin 84-24-53, Revision A, dated May 16, 2013.

**(i) 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 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.

**(2) Contacting the Manufacturer:** As of the effective date of this AD, 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, 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.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-16R1, effective July 26, 2016, 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-2016-9575.

(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 February 3, 2017.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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