

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0072; Product Identifier 2017-NM-082-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) 2014-05-28, for certain Bombardier, Inc., Model DHC-8-400 series airplanes. AD 2014-05-28 requires revising the maintenance or inspection program, as applicable. Since we issued AD 2014-05-28, we have determined that the interval from maintenance review board (MRB) task number 323100-202 should not be escalated, and that Certification Maintenance Requirements (CMR) task number 323100-102 should be applicable to all Model DHC-8-400 series airplanes, regardless of which main landing gear (MLG) up-lock assembly is installed. This proposed AD would require revising the maintenance or inspection program, as applicable. 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; Internet: http://www.bombardier.com. You may view this referenced service information at the FAA, Transport Standards Branch, 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-2018-0072; 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: Erin Hulverson, Aerospace Engineer, FAA, Boston ACO Branch, 1200 District Avenue, Burlington, MA 01803; telephone: 781-238-7655.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite 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-2018-0072; Product Identifier 2017-NM-082-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

We issued AD 2014-05-28, Amendment 39-17800 (79 FR 18611, April 3, 2014) ("AD 2014-05-28"), for certain Bombardier, Inc., Model DHC-8-400 series airplanes.

AD 2014-05-28 resulted from reports of excessive wear on the lower latch surface of the MLG up-lock hook. AD 2014-05-28 requires revising the maintenance or inspection program, as applicable. We issued AD 2014-05-28 to detect and correct up-lock hooks worn beyond the wear limit, which could prevent the successful extension of the MLG using the primary landing gear extension system, which in combination with an alternate extension system failure could result in the inability to extend the MLG.

Since we issued AD 2014-05-28, we have determined that the interval from MRB task number 323100-202 should not be escalated, and that MRB task number 323100-202 should be applicable to all Model DHC-8-400 series airplanes, regardless of which MLG up-lock assembly is installed.

This revised applicability has resulted in CMR task number 323100-102 also being made applicable to all Model DHC-8-400 series airplanes, regardless of MLG uplock assembly part number installation.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2017-15, dated May 29, 2017 (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:

[Canadian] AD CF-2012-21 [which corresponds to FAA AD 2014-05-28] was issued to mandate the incorporation of Maintenance Review Board (MRB) task number 323100-202. As in-service experience has shown that the interval for MRB task number 323100-202 should not be escalated, Bombardier has introduced one-star CMR task number 323100-102 to prevent task escalation. Bombardier has also revised the applicability of MRB task number

323100-202 to be applicable to the entire DHC-8-400/-401/-402 fleet, regardless of which main landing gear (MLG) up-lock assembly part number is installed. This revised applicability has resulted in CMR task number 323100-102 also being made applicable to the entire DHC-8-400/-401/-402 fleet, regardless of MLG up-lock assembly part number installation.

This [Canadian] AD mandates the incorporation of CMR task number 323100-102 [into the maintenance or inspection program, as applicable].

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-2018-0072.

Related Service Information under 1 CFR part 51

Bombardier, Inc., has issued Q400 Dash 8 Temporary Revision ALI-0168, dated October 31, 2016, to Section 1-32, Landing Gear Maintenance Program, of Maintenance Review Board (MRB) Report Part 2, Bombardier Q400 Dash 8 Maintenance Requirements Manual, Product Support Manual (PSM) 1-84-7. The service information describes CMR task number 323100-102, "Functional Check of the Main Landing Gear Uplock Assembly Latch." 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 69 airplanes of U.S. registry.

We 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. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$5,865, or \$85 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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance

and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

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) 2014-05-28, Amendment 39-17800 (79 FR 18611, April 3, 2014), and adding the following new AD:

Bombardier, Inc.: Docket No. FAA-2018-0072; Product Identifier 2017-NM-082-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 2014-05-28, Amendment 39-17800 (79 FR 18611, April 3, 2014).

(c) Applicability

This AD applies to Bombardier, Inc., Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001, 4003 and subsequent.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by reports of excessive wear on the lower latch surface of the main landing gear (MLG) up-lock hook. We are issuing this AD to detect and correct up-lock hooks worn beyond the wear limit, which could prevent the successful extension of the MLG using the primary landing gear extension system, which in combination with an alternate extension system failure could result in the inability to extend the MLG.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 30 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the information specified in Certification Maintenance Requirements (CMR) task number 323100-102 of Q400 Dash 8 (Bombardier) Temporary Revision (TR) ALI-0168, dated October 31, 2016 ("Bombardier TR ALI-0168"), to Section 1-32, Landing Gear Maintenance Program, of Maintenance Review Board (MRB) Report Part 2, Bombardier Q400 Dash 8 Maintenance Requirements Manual, Product Support Manual (PSM) 1-84-7. The applicable maintenance or inspection program revision required by this paragraph may be done by inserting a copy of Bombardier TR ALI-0168, to Section 1-32, Landing Gear Maintenance Program, of MRB Report Part 2, Bombardier Q400 Dash 8 Maintenance Requirements Manual, PSM 1-84-7. When this temporary revision has been included in general revisions of the PSM, the general revisions may be inserted in the maintenance or inspection program, as applicable, provided the relevant information in the general revision is identical to that in Bombardier TR ALI-0168.

(h) Initial Functional Check Compliance Times

For MLG up-lock assembly latches that have accumulated flight cycles which exceed the CMR task number 323100-102 interval specified in Bombardier TR ALI-0168: Perform the initial CMR task number 323100-102 functional check as

specified in Bombardier TR ALI-0168, to Section 1-32, Landing Gear Maintenance Program, of MRB Report Part 2, Bombardier Q400 Dash 8 Maintenance Requirements Manual, PSM 1-84-7, using the applicable compliance time specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD.

- (1) For MLG up-lock assembly latches that have 14,200 total flight cycles or more as of the effective date of this AD: The compliance time for doing the initial functional check is within 800 flight cycles after the effective date of this AD.
- (2) For MLG up-lock assembly latches that have 11,600 total flight cycles or more, but fewer than 14,200 total flight cycles, as of the effective date of this AD: The compliance time for doing the initial functional check is within 1,600 flight cycles after the effective date of this AD, but not to exceed 15,000 total flight cycles on the up-lock assembly latch.
- (3) For MLG up-lock assembly latches with fewer than 11,600 total flight cycles as of the effective date of this AD: The compliance time for doing the initial functional check is within 3,000 flight cycles after the effective date of this AD, but not to exceed 13,200 total flight cycles on the up-lock assembly latch.

(i) Method of Compliance for Initial Functional Check

Accomplishing MRB task number 323100-202 of Bombardier TR MRB-66, dated December 7, 2011, to Section 1-32, Landing Gear Maintenance Program, of MRB Report Part 1, Bombardier Q400 Dash 8 Maintenance Requirements Manual, PSM 1-84-7, within 3,000 flight cycles before the effective date of this AD, is a method of compliance for the initial functional check required by CMR task number 323100-102 as specified in

Bombardier TR ALI-0168, to Section 1-32, Landing Gear Maintenance Program, of MRB Report Part 2, Bombardier Q400 Dash 8 Maintenance Requirements Manual, PSM 1-84-7.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

- (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 ACO, 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 corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc., 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-2017-15, dated May 29, 2017, 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-2018-0072.

(2) For more information about this AD, contact Erin Hulverson, Aerospace

Engineer, FAA, Boston ACO Branch, 1200 District Avenue, Burlington, MA 01803;

telephone: 781-238-7655.

(3) 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.gseries@aero.bombardier.com; Internet: http://www.bombardier.com. You may view

this service information at the FAA, Transport Standards Branch, 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 January 25, 2018.

Michael Kaszycki,

Acting Director,

System Oversight Division,

Aircraft Certification Service.

[FR Doc. 2018-02198 Filed: 2/8/2018 8:45 am; Publication Date: 2/9/2018]

12