[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1311; Directorate Identifier 2011-NM-204-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-8-102, -103, and -106 airplanes, and Model DHC-8-200, -300, and -400 series airplanes. This proposed AD was prompted by reports of excessive wear found in the clevis (bolt) hole where the rod assembly attaches to the rudder/brake pedal bellcrank, due to prolonged fretting. This proposed AD would require measuring the bellcrank clevis holes, inspecting for cracking of the bellcrank, and re-working the clevis holes with steel bushings, or replacing the bellcrank. We are proposing this AD to detect and correct a worn or cracked clevis hole, which could cause failure of the bellcrank on one side, with subsequent asymmetric braking and consequent runway excursion.

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 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; e-mail thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. 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; or in person at the Docket Operations office 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: Luke Walker, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7363; 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-2012-1311; Directorate Identifier 2011-NM-204-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-2011-32, dated August 15, 2011 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI

states:

> There have been several in-service reports of excessive wear found in the bolt [clevis] hole where the rod assembly, Part Numbers (P/N) 82710795-001 or 82710024-003, is attached to the rudder/brake pedal bellcrank. An investigation revealed that the wear was attributed to prolonged fretting.
>
> Failure of the bellcrank on one side could lead to asymmetric braking and may lead to runway excursion.
>
> This directive mandates [measuring clevis holes for length, and for certain bellcranks doing a liquid penetrant inspection for cracking, and] the re-work [by installing steel bushings] or replacement of each bellcrank, P/N 82710022-001/-002, 82710029-001/-002, 82710813-001/-002 and 82710814-001/-002, found with a worn [or cracked] bolt hole.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Bombardier, Inc. has issued Service Bulletins 8-27-111 and 84-27-55, both dated June 15, 2011. 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.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 178 products of U.S. registry. We also estimate that it would take about 5 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 the proposed AD on U.S. operators to be $75,650, or $425 per product.

In addition, we estimate that any necessary follow-on actions would take about 16 work-hours and require parts costing up to $2,532, for a cost of $3,892 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. We have no way of determining the number of products that may 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.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

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 AD:

Bombardier, Inc.: Docket No. FAA-2012-1311; Directorate Identifier 2011-NM-204-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. airplanes, certificated in any category, as specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes: Serial numbers 003 through 672 inclusive.

(2) Model DHC-8-400, -401 and -402 airplanes: Serial numbers 4003 through 4372 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27: Flight controls.

(e) Reason

This AD was prompted by reports of excessive wear found in the clevis (bolt) hole where the rod assembly attaches to the rudder/brake pedal bellcrank, due to prolonged fretting. We are issuing this AD to detect and correct a worn or cracked clevis hole, which could cause failure of the bellcrank on one side, with subsequent asymmetric braking and consequent runway excursion.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Actions for Model DHC-8-100, -200, and -300 Series Airplanes

For Model DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes: Within 6,000 flight hours or 24 months after the effective date of this AD, whichever occurs first, measure the edge-to-edge length of the clevis holes of each bellcrank; and, if the length is less than or equal to 0.218 inch, inspect for cracking of each bellcrank using liquid penetrant; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-27-111, dated June 15, 2011.

(1) If no cracking is found: Before further flight, rework the bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-27-111, dated June 15, 2011.

(2) If any clevis hole is greater than 0.218 inch, or if any cracking is found:

Before further flight, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-27-111, dated June 15, 2011.

(h) Actions for Certain Model DHC-8-400 Series Airplanes

For Model DHC-8-400, -401, and -402 airplanes that have accumulated less than or equal to 15,000 total flight hours as of the effective date of this AD: Within 6,000 flight hours after the effective date of this AD, but not to exceed 15,600 total flight hours, measure the edge-to-edge length of the clevis holes of each bellcrank, and inspect for cracking of each bellcrank using liquid penetrant; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(1) If no cracking is found, and the edge-to-edge length of all clevis holes is less than or equal to 0.218 inch: Within 6,000 flight hours after the effective date of this AD, but not to exceed 15,600 total flight hours, rework or replace the bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(2) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.218 inch but less than or equal to 0.248 inch: Within 6,000 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(3) If no cracking is found, and any clevis hole edge-to-edge length is greater

than 0.248 inch but less than or equal to 0.278 inch: Within 1,200 flight hours after doing the measurement/inspection required by paragraph (h) of this AD, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(4) If any cracking is found, or if any clevis hole edge-to-edge length exceeds 0.278 inch: Before further flight, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(i) Actions for Certain Other Model DHC-8-400 Series Airplanes

For Model DHC-8-400, -401, and -402 airplanes that have accumulated more than 15,000 total flight hours as of the effective date of this AD: Within 600 flight hours after the effective date of this AD, measure the edge-to-edge length of the clevis holes of each bellcrank, and inspect for cracking of each bellcrank using liquid penetrant; in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(1) If no cracking is found, and the edge-to-edge length of all clevis holes is less than or equal to 0.218 inch: At the later of the compliance times specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD, rework or replace the bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(i) Within 6,000 flight hours after the effective date of this AD, but not to exceed 15,600 total flight hours.

(ii) Within 1,200 flight hours after the effective date of this AD.

(2) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.218 inch but less than or equal to 0.248 inch: Within 6,000 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(3) If no cracking is found, and any clevis hole edge-to-edge length is greater than 0.248 inch but less than or equal to 0.278 inch: Within 1,200 flight hours after the effective date of this AD, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(4) If any cracking is found, or any clevis hole edge-to-edge length exceeds 0.278 inch: Before further flight, replace the bellcrank with a new bellcrank, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(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

ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 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) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

(1) Refer to MCAI Canadian Airworthiness Directive CF-2011-32, dated August 15, 2011, and the service bulletins specified in paragraphs (k)(1) (i) and (k)(1)(ii) of this AD, for related information.

(i) Bombardier Service Bulletin 8-27-111, dated June 15, 2011.

(ii) Bombardier Service Bulletin 84-27-55, dated June 15, 2011.

(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; e-mail thd.qseries@aero.bombardier.com; Internet http://www.bombardier.com. You may review copies of the 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.

Issued in Renton, Washington, on December 17, 2012.

Kalene C. Yanamura,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-30925 Filed 12/21/2012 at 8:45 am; Publication Date: 12/26/2012]