DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0492; Directorate Identifier 2014-NM-232-AD; Amendment 39-18237; AD 2015-17-04]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes. This AD was prompted by reports of a disconnect between the elevator lever and control rod. This AD requires replacement of left and right fixed control rods and lever assemblies of the elevator control system. We are issuing this AD to prevent a disconnect between the elevator lever and control rod, which could lead to un-commanded elevator movement of the associated control surface, a large difference between the position of the left and the right elevator control surfaces, and consequent reduced controllability of the airplane and degradation of the structural integrity of the horizontal stabilizer.

DATES: This AD becomes effective September 24, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 24, 2015.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2015-0492; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: thd.crj@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. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0492.
SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the Federal Register on March 24, 2015 (80 FR 15528).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2014-44, dated December 9, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes. The MCAI states:

During an engineering review of the Elevator Control system, it was discovered that a disconnect between the elevator lever and control rod could lead to uncommanded elevator movement of the associated control surface. This uncommanded movement may cause a large difference between the position of the left and the right elevator control surface resulting in reduced controllability of the aeroplane and degradation of the structural integrity of the horizontal stabilizer.

This [Canadian] AD mandates the replacement of the existing elevator lever assemblies and control rods with newly designed ones, which will prevent a disconnect between the components of the elevator control system should a failure occur.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2015-0492-0002.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 15528, March 24, 2015), and the FAA's response to each comment.

Request To Include Latest Revision of the Service Information in This AD

SkyWest Airlines and Mesa Airlines Inc. requested that we include Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015, in paragraph (g) of this AD. Both commenters also requested that we revise paragraph (h) of this AD to include credit for actions performed before the effective date of this AD using Bombardier Service Bulletin 670BA-27-062, Revision B, dated October 10, 2014. SkyWest Airlines indicated that Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015, includes changes to some steps and addition of others that deal with the rigging pins P2 and P3. SkyWest Airlines pointed out that Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015, also makes a change to Sheet 1 of 1 of Figure 4, which consists of adding part numbers to the item descriptions.

We agree with the request to include Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015, in paragraph (g) of this AD and revise paragraph (h) of this AD to include
credit for actions performed before the effective date of this AD using Bombardier Service Bulletin 670BA-27-062, Revision B, dated October 10, 2014. Although some steps have changed, the procedures remain the same in both revisions of the service information. We have revised paragraphs (g) and (h) of this AD accordingly.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 15528, March 24, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 15528, March 24, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information Under 1 CFR Part 51

Bombardier, Inc. has issued Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015. The service information describes procedures for replacing the elevator lever assemblies and control rods. 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 of this AD.

Costs of Compliance

We estimate that this AD affects 400 airplanes of U.S. registry. We also estimate that it will take about 14 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $85 per work-hour. Required parts will cost about $6,712 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be $3,160,800, or $7,902 per product.

Authority for This Rulemaking


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 AD will not have federalism implications under Executive Order 13132. This AD will 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 that this AD:
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.

**Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2015-0492; 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 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.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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):

(a) Effective Date

This AD becomes effective September 24, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers (S/N) 10002 through 10337 inclusive.

(2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, S/Ns 15001 through 15298 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by reports of a disconnect between the elevator lever and control rod. We are issuing this AD to prevent a disconnect between the elevator lever and control rod, which could lead to un-commanded elevator movement of the associated control surface, a large difference between the position of the left and the right elevator control surfaces, and consequent reduced controllability of the airplane and degradation of the structural integrity of the horizontal stabilizer.

(f) Compliance

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

(g) Replacement of Elevator Lever Assemblies and Control Rods

Within 9,200 flight hours or 5 years, whichever occurs first, after the effective date of this AD: Replace the left and right fixed control rods and lever assemblies of the elevator control system with newly designed control rods and lever assemblies, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-062, Revision C, dated February 13, 2015.
(h) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-27-062, dated December 12, 2013; Bombardier Service Bulletin 670BA-27-062, Revision A, dated April 1, 2014; or Bombardier Service Bulletin 670BA-27-062, Revision B, dated October 10, 2014. This service information is not incorporated by reference in this AD.

(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. 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, 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


2. Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(k) Material Incorporated by Reference

1. The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

2. You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.


   ii. Reserved.

3. For service information identified in this AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone: 514-855-5000; fax: 514-855-7401; email: thd.crj@aero.bombardier.com; Internet http://www.bombardier.com.

4. 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.
(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on August 10, 2015.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.