



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-5463; Directorate Identifier 2016-NM-013-AD; Amendment 39-18598; AD 2016-15-07]

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), Model CL-600-2D15 (Regional Jet Series 705), Model CL-600-2D24 (Regional Jet Series 900), and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. This AD was prompted by reports of corrosion found on the slat and flap torque tubes in the slat and flap control system. This AD requires replacement of the slat and flap torque tubes in the slat and flap control system. We are issuing this AD to prevent rupture of a corroded slat or flap torque tube. This condition could result in an inoperative slat or flap system and consequent reduced controllability of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone: 1-866-538-1247 or direct-dial telephone: 1-514-855-2999; fax: 514-855-7401; email: ac.yul@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-2016-5463.

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-2016-5463; 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 Office (telephone: 800-647-5527) is 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 20590.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7318; fax: 516-794-5531.

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), Model CL-600-2D15 (Regional Jet Series 705), Model CL-600-2D24 (Regional Jet Series 900), and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The NPRM published in the Federal Register on April 12, 2016 (81 FR 21503) (“the NPRM”). The NPRM was prompted by reports of corrosion found on the slat and flap torque tubes in the slat and flap control system. The NPRM proposed to require replacement of the slat and flap torque tubes in the slat and flap control system. We are issuing this AD to prevent rupture of a corroded slat or flap torque tube. This condition could result in an inoperative slat or flap system and consequent reduced controllability of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2016-03R1, dated February 18, 2016 (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), Model CL-600-2D15 (Regional Jet Series 705), Model

CL-600-2D24 (Regional Jet Series 900), and Model CL-600-2E25 (Regional Jet Series 1000) airplanes. The MCAI states:

There have been a number of reports of corrosion found on the torque tubes in the slat and flap control system. Investigation revealed that the current design of the flap and slat torque tubes do not have proper corrosion protection and are not entirely sealed which leads to moisture ingress and internal corrosion. A corroded tube may rupture resulting in an inoperative slat or flap system, or in a worst case scenario, could result in reduced controllability of the aeroplane. This [Canadian] AD mandates the replacement of affected slat and flap system torque tubes with [new or] modified torque tubes.

This [Canadian] AD was revised to add the statement that accomplishment of the initial Service Bulletin (SB) 670BA-27-067, dated 15 January 2015 also meets the requirements of this AD and to correct the editorial error for the release date of SB 670BA-27-067, Revision A.

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-2016-5463.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The commenter supported the NPRM.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Bombardier Service Bulletin 670BA-27-067, Revision A, dated February 23, 2015. This service information describes procedures for replacement of the slat and flap torque tubes in the slat and flap control system. 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.

Costs of Compliance

We estimate that this AD affects 509 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replacement of the slat and flap torque tubes	34 work-hours X \$85 per hour = \$2,890	\$105,000	\$107,890	\$54,916,010

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

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 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.

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):

2016-15-07 Bombardier, Inc.: Amendment 39-18598; Docket No. FAA-2016-5463; Directorate Identifier 2016-NM-013-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD.

(1) Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10002 through 10342 inclusive.

(2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) airplanes, serial numbers 15001 through 15361 inclusive.

(3) Bombardier, Inc. Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15361 inclusive.

(4) Bombardier, Inc. Model CL-600-2E25 (Regional Jet Series 1000) airplanes, serial numbers 19001 through 19041 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of corrosion found on the slat and flap torque tubes in the slat and flap control system. We are issuing this AD to prevent rupture of a corroded slat or flap torque tube. This condition could result in an inoperative slat or flap system and consequent reduced controllability of the airplane.

(f) Compliance

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

(g) Replace Slat and Flap Torque Tubes in the Slat and Flap Control System

Within the compliance times specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD, as applicable: Replace the slat and flap torque tubes in the slat and flap control system with new or modified slat and flap torque tubes, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-067, Revision A, dated February 23, 2015.

(1) For airplanes that have accumulated 28,000 total flight hours or less as of the effective date of this AD, or 137 months or less since the date of issuance of the original Canadian certificate of airworthiness or date of issuance of the original Canadian export certificate of airworthiness as of the effective date of this AD: Before the accumulation of 34,000 total flight hours or within 167 months since the date of issuance of the original Canadian certificate of airworthiness or date of issuance of the original Canadian export certificate of airworthiness, whichever occurs first.

(2) For airplanes that have accumulated more than 28,000 total flight hours but not more than 36,000 total flight hours as of the effective date of this AD, and more than 137 months but not more than 176 months since the date of issuance of the original Canadian certificate of airworthiness or date of issuance of the original Canadian export certificate of airworthiness as of the effective date of this AD: At the earlier of the times specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this AD.

(i) Within 6,000 flight hours or 30 months, whichever occurs first, after the effective date of this AD.

(ii) Before the accumulation of 38,000 total flight hours, or within 186 months since the date of issuance of the original Canadian certificate of airworthiness or date of issuance of the original Canadian export certificate of airworthiness, whichever occurs first.

(3) For airplanes that have accumulated more than 36,000 total flight hours as of the effective date of this AD, or more than 176 months since the date of issuance of the original Canadian certificate of airworthiness or date of issuance of the original Canadian export certificate of airworthiness as of the effective date of this AD: Within 2,000 flight hours or 10 months, whichever occurs first, after the effective date of this AD.

(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-27-067, dated January 15, 2015.

(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

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2016-03R1, dated February 18, 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-2016-5463.

(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.

(i) Bombardier Service Bulletin 670BA-27-067, Revision A, dated February 23, 2015.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone: 1-866-538-1247 or direct-dial telephone: 1-514-855-2999; fax: 514-855-7401; email: ac.yul@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 July 21, 2016.

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

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