[Federal Register Volume 83, Number 108 (Tuesday, June 5, 2018)]
[Rules and Regulations]
[Pages 25882-25885]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2018-11414]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-1246; Product Identifier 2017-NM-086-AD; Amendment 39-19297; AD 2018-11-09]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

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

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014-02-01, which applied to certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. AD 2014-02-01 required repetitive inspections of the rudder travel limiter (RTL) return springs and primary actuator, and corrective actions if necessary; and replacement of certain RTL return springs. This AD requires an inspection of the RTL return springs for signs of chafing; an inspection of the casing of the primary actuator for signs of chafing or missing paint; replacement of the RTL return springs; and an inspection of the lugs of the RTL limiter arm assembly for cracks, and modification or replacement, as applicable; and applicable corrective actions. This AD also adds airplanes to the applicability. This AD was prompted by reports that when installing the RTL return springs, the RTL limiter arm assembly lug(s) can become deformed. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective July 10, 2018.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of July 10, 2018.

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 Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-1246.

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-2017-1246; 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 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 Section, FAA, New York ACO Branch, 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 to supersede AD 2014-02-01, Amendment 39-17729 (79 FR 7382, February 7, 2014) ("AD 2014-02-01"). AD 2014-02-01 applied to certain Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702), Model CL-600-2D15 (Regional Jet Series 705), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The NPRM published in the Federal Register on January 16, 2018 (83 FR 2090). The NPRM was prompted by reports that when installing RTL return spring part number BA-670-93468-1, the RTL limiter arm assembly lug(s) can become deformed when the RTL return spring attachment bolt is torqued; and the determination that additional airplanes are affected by the unsafe condition. The NPRM proposed to require an inspection of the RTL return springs for signs of chafing; an inspection of the casing of the primary actuator for signs of chafing or missing paint; replacement of the RTL return springs; and an inspection of the lugs of the RTL limiter arm assembly for cracks, and modification or replacement, as applicable; and applicable corrective actions. The NPRM also proposed to add airplanes to the applicability. We are issuing this AD to prevent deformed RTL limiter arm assembly lug(s), which can lead to failure of the RTL limiter arm assembly lug(s). In combination with failure of the RTL, failure of the RTL limiter arm assembly lug(s) could result in reduced controllability of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2017-19, dated June 6, 2017 (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), and Model CL-600-2D24 (Regional Jet Series 900) airplanes. The MCAI states:

> Transport Canada AD CF-2010-18R1 [which corresponds to FAA AD 2014-02-01] mandated a repetitive inspection and introduced a new rudder travel limiter (RTL) return spring, part number (P/N) BA670-93468-1, to correct the potential dormant RTL spring failure. This [Canadian] AD is issued to supersede the repetitive inspection and the replacement of the RTL spring due to discoveries made after the issuance of [Canadian] AD CF-2010-18R1.
>
> When installing the RTL return spring P/N BA670-93468-1 as mandated by [Canadian] AD CF-2010-18R1, it was found that it is possible for the RTL limiter arm assembly lug to be deformed. The lugs become bent when the RTL return spring attachment bolt is torqued. This condition, if not corrected, can lead to failure of the

limiter arm assembly lug. In combination with failure of the RTL, failure of the limiter arm assembly lug could affect the controllability of the aeroplane.

This [Canadian] AD mandates the inspection for cracked RTL limiter arm lugs and modification of the RTL limiter arm to prevent the RTL limiter arm lugs from bending during RTL assembly.

Required actions include: A detailed visual inspection of the RTL return springs for signs of chafing; a detailed visual inspection of the casing of the primary actuator for signs of chafing or missing paint; replacement of the RTL return springs; an eddy current inspection of the lugs of the RTL limiter arm assembly for cracks, and modification or replacement of the RTL limiter arm assembly, as applicable; and applicable corrective actions. Corrective actions include: replacement of the RTL return springs, repair of the primer and topcoat of the primary actuator, and replacement of the primary actuator. 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-2017-1246.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The Air Line Pilots Association, International supported the NPRM.

Conclusion

We reviewed the available data, including 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

Bombardier has issued Bombardier Service Bulletin 670BA-27-070, Revision B, dated March 31, 2017. This service information describes procedures for an inspection of the RTL return springs for signs of chafing; an inspection of the casing of the primary actuator for signs of chafing or missing paint; replacement of the RTL return springs; and an inspection of the lugs of the RTL limiter arm assembly for cracks, and modification or replacement, as applicable; and applicable 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.

Costs of Compliance

We estimate that this AD affects 544 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs for Required Actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
16 work-hours × $85 per hour = $1,360	$2,960	$4,320	$2,350,080

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

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 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 removing Airworthiness Directive (AD) 2014-02-01, Amendment 39-17729 (79 FR 7382, February 7, 2014) and adding the following new AD:

2018-11-09 Bombardier, Inc.: Amendment 39-19297; Docket No. FAA-2017-1246; Product Identifier 2017-NM-086-AD.

(a) Effective Date

This AD is effective July 10, 2018.

(b) Affected ADs

This AD replaces AD 2014-02-01, Amendment 39-17729 (79 FR 7382, February 7, 2014) ("AD 2014-02-01").

(c) Applicability

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

(1) Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial number 10002 through 10344 inclusive.

(2) Bombardier, Inc., Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15397 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports that when installing the rudder travel limiter (RTL) return springs, the RTL limiter arm assembly lug(s) can become deformed. We are issuing this AD to prevent deformed RTL limiter arm assembly lug(s), which can lead to failure of the RTL limiter arm assembly lug(s). In combination with failure of the RTL, failure of the RTL limiter arm assembly lug(s) could result in reduced controllability of the airplane.

(f) Compliance

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

(g) Inspections, Modification, and Replacement

(1) For airplanes equipped with RTL return spring part number BA-670-93465-1 or E0650-069-02750S: Within 800 flight hours or 4 months after the effective date of this AD, whichever occurs first, do a detailed visual inspection of the casing of the primary actuator for signs of chafing or missing paint, and all applicable corrective actions; replace the RTL return springs; and do an eddy current inspection of the lugs of the RTL limiter arm assembly for cracks, and modify or replace the

RTL limiter arm assembly, as applicable; in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-070, Revision B, dated March 31, 2017. Accomplishment of the actions specified in Bombardier Service Bulletin 670BA-27-059 does not meet the requirements of this paragraph.

(2) For airplanes equipped with RTL return spring part number BA-670-93468-1: Within 8,000 flight hours after the effective date of this AD, do a detailed visual inspection of the RTL return springs for signs of chafing, and applicable corrective actions; a detailed visual inspection of the casing of the primary actuator for signs of chafing or missing paint, and all applicable corrective actions; and do an eddy current inspection of the lugs of the RTL limiter arm assembly for cracks, and modify or replace the RTL limiter arm assembly, as applicable; in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 670BA-27-070, Revision B, dated March 31, 2017. Accomplishment of the actions specified in Bombardier Service Bulletin 670BA-27-059 does not meet the requirements of this paragraph.

(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 the service information specified in paragraph (h)(1) or (h)(2) of this AD.

(1) Bombardier Service Bulletin 670BA-27-070, dated December 17, 2015.

(2) Bombardier Service Bulletin 670BA-27-070, Revision A, dated September 01, 2016.

(i) 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 certification office, 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.'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-2017-19, dated June 6, 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-2017-1246.

(2) For more information about this AD, contact Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7318; fax: 516-794-5531.

(3) 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-27-070, Revision B, dated March 31, 2017.

(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 Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(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 Des Moines, Washington, on May 18, 2018.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.