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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2005–22632; Directorate Identifier 2005–NM–158–AD; Amendment 39–14486; AD 2006–04–05]

RIN 2120–AA64

Airworthiness Directives; Bombardier 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

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier 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 requires repetitive inspections for cracking or fracturing of the output links of the power control unit (PCU) for the ailerons, and related investigative and corrective actions if necessary. This AD results from reports of fractured output links of the aileron PCU. We are issuing this AD to prevent failure of an output link of the aileron PCU, which, if both links on one aileron fail, could result in reduced lateral control of the airplane.

DATES: This AD becomes effective March 22, 2006.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of March 22, 2006.

ADDRESSES: You may examine the AD docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, room PL–401, Washington, DC.

Contact Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Daniel Parrillo, Aerospace Engineer, Systems and Flight Test Branch, ANE–172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York 11590; telephone (516) 228–7305; fax (516) 794–5531.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the airworthiness directive (AD) docket on the Internet at *http://dms.dot.gov* or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647–5227) is located on the plaza level of the Nassif Building at the street address stated in the **ADDRESSES** section.

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain Bombardier 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. That NPRM was published in the **Federal Register** on October 7, 2005 (70 FR 58631). That NPRM proposed to require repetitive inspections for cracking or fracturing of the output links of the power control unit (PCU) for the ailerons, and related investigative and corrective actions if necessary.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Request for Method of Tracking Output Links of the Aileron PCUs

The commenter, the National Transportation Safety Board (NTSB), supports the proposed AD, except that the NTSB suggests that we require the airplane manufacturer to develop and use a method for serializing and tracking individual output links of the aileron PCUs. The commenter observes that the output links do not have any identifying part number or serial number markings. The commenter states that this makes tracking an individual link difficult, especially since the proposed AD would require repetitive inspections.

We do not agree with the commenter's request. The output links of the aileron PCU are neither principal structural elements nor life-limited parts. Therefore, the Federal Aviation Regulations do not require each link to be marked with a serial number. The output links are marked with a part number and the manufacturing lot number of the top assembly (link and balls). These numbers are sufficient for tracking the output links in order to address potential issues with quality assurance.

Also, we note that the repetitive inspection interval of 1,000 flight hours is intended to be flight hours on the airplane, not on an individual output link. If a link is replaced with a new link between inspection cycles, the new link will be inspected at the next required inspection cycle. Thus, each link will always be inspected as required by this AD after no more than 1,000 flight hours. We find that tracking the output links by serial number would not add any additional level of safety. We have not changed the final rule in this regard.

Request To Explain Inspection Interval

The commenter also requests that we explain the rationale for establishing a repetitive inspection interval of 1,000 flight hours. The commenter notes that neither the proposed AD nor the referenced service bulletin (Bombardier Alert Service Bulletin A670BA–27–023, including Appendix A, Revision A, dated May 18, 2005) explains the rationale for this interval. The commenter is concerned that the interval may need to be reduced.

We agree to provide the clarification that the commenter requests, although we note that such a rationale is not normally stated in an AD unless we are disagreeing with the compliance time recommended by the cognizant airworthiness authority. (In this case, the proposed repetitive interval of 1,000 flight hours is consistent with the repetitive interval that Transport Canada Civil Aviation (TCCA), the

airworthiness authority for Canada, recommends in its parallel airworthiness directive.)

In developing an appropriate compliance time for this AD, we considered the manufacturer's recommendation and the degree of urgency associated with the subject unsafe condition, as well as the following:

• Data from failures of the output link in service on Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes. There have been no link failures reported on Bombardier Model CL–600–2C10 (Regional Jet Series 700, 701, & 702), CL–600–2D15 (Regional Jet Series 705), or CL–600–2D24 (Regional Jet Series 900) airplanes, although the design of the aileron control system on these airplanes is the same as that on Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes. A total of seven fractured output links have been reported in more than 12,000,000 flight hours accumulated on Bombardier Model CL–600–2B19 (Regional Jet Series 100 & 440) airplanes. Analysis of the data from the failed links reveals that the in-service failure rate is slightly in excess of the certification requirements. However, of the fractured links, the one with the lowest amount of time had accumulated approximately 6,000 flight hours.

• Laboratory analysis of failed links. Two of the fractured links were submitted to a laboratory for examination to determine the failure mode of the fracture, the metallurgical characteristics of the links and other components of the assembly, and the probable cause of the failure. The laboratory could not determine the cause of the failure or the crack growth rate. Based on this analysis, it was determined that an interim action—repetitive inspections for cracking or fracturing of the aileron PCU output links, and related investigative and corrective actions—was necessary.

• Maintenance and operational checks that are currently required to identify any failure in the aileron control system:

○ An operational test for PCU disconnect every A-check (approximately every 500 flight hours).

○ An aileron backlash check every 4,000 flight hours (currently in the process of being reduced to every 2,000 flight hours).

○ A test for PCU stiffness, and a detailed inspection of the PCU and flutter damper attachments for condition, safety of installation, and signs of leakage, and a detailed inspection of the PCU for signs of leakage, every C-check (approximately every 5,000 flight hours).

In light of all of these factors, we agree with TCCA that a 1,000-flight-hour repetitive interval represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety. We have not changed the final rule in this regard.

Conclusion

We have carefully reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD as proposed.

Interim Action

We consider this AD interim action. The inspection reports that are required by this AD will enable the manufacturer to obtain better insight into the nature, cause, and extent of the cracking, and eventually to develop final action to address the unsafe condition. Once final action has been identified, we may consider further rulemaking.

Costs of Compliance

This AD affects about 205 airplanes of U.S. registry. The required inspection will take about 1 work hour per airplane, per inspection cycle, at an average labor rate of $65 per work hour. Based on these figures, the estimated cost of this inspection for U.S. operators is $13,325, or $65 per airplane, per inspection cycle.

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 have 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 DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

(3) 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 AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

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 Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2006–04–05 Bombardier, Inc. (Formerly Canadair): Amendment 39–14486. Docket No. FAA–2005–22632; Directorate Identifier 2005–NM–158–AD.

Effective Date

(a) This AD becomes effective March 22, 2006.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the Bombardier airplanes identified in Table 1 of this AD, certificated in any category.

TABLE 1.—APPLICABILITY

Bombardier airplane models	Serial numbers
CL–600–2C10 (Regional Jet Series 700, 701, & 702) airplanes.	10003 and subsequent.

TABLE 1.—APPLICABILITY—Continued

Bombardier airplane models	Serial numbers
CL–600–2D15 (Regional Jet Series 705) airplanes.	15001 and subsequent.
CL–600–2D24 (Regional Jet Series 900) airplanes.	15001 and subsequent.

Unsafe Condition

(d) This AD results from reports of fractured output links of the power control unit (PCU) for the ailerons. We are issuing this AD to prevent failure of an output link of the aileron PCU, which, if both links on one aileron fail, could result in reduced lateral control of the airplane.

Compliance

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

Repetitive Inspections, Related Investigative Actions, and Corrective Actions

(f) Prior to the accumulation of 2,000 total flight hours, or within 550 flight hours after the effective date of this AD, whichever is later: Do a detailed inspection for cracking or fracturing of the output links of the aileron PCU and do all related investigative and corrective actions, as applicable, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA–27–023, including Appendix A, Revision A, dated May 18, 2005, except as provided by paragraph (g) of this AD. Thereafter, repeat the inspection and applicable related investigative and corrective actions at intervals not to exceed 1,000 flight hours. Any applicable related investigative and corrective actions must be done before further flight after the inspection.

Note 1: For the purposes of this AD, a detailed inspection is: ''An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.''

Exception to Corrective Action Instructions

(g) If any cracking or other damage is found on an aileron lug or flange bushing during any inspection required by this AD, and the service bulletin recommends contacting Bombardier for appropriate action: Before further flight, disposition and replace the cracked or damaged aileron lug or flange bushing with a new part, in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA; or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

Reporting

(h) Submit a report of the findings (both positive and negative) of the inspections required by paragraph (f) of this AD to Bombardier Aerospace; Attention: Christian Holzl, dept. 508; Location S666 1422 024; 13100 Highway 50; Mirabel, Quebec, J7M 3C6, Canada; fax (450) 476–7321. Submit the report at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD. The report must include the airplane serial number, the total accumulated flight cycles and flight hours on the airplane, the date of the inspection, the total accumulated flight cycles and flight hours at the last ''C'' check, the serial number of each PCU, and the results of all inspections, tests, and measurements done in accordance with paragraph (f) of this AD. Submitting Appendix A of Bombardier Alert Service Bulletin A670BA–27–023, including Appendix A, Revision A, dated May 18, 2005, is an acceptable means of complying with this requirement. Under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget (OMB) has approved the information collection requirements contained in this AD and has assigned OMB Control Number 2120–0056.

(1) If the inspection was done after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was done prior to the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

Actions Accomplished Previously

(i) Inspections and corrective actions done, and reports submitted, before the effective date of this AD in accordance with Bombardier Alert Service Bulletin A670BA–27–023, including Appendix A, dated May 3, 2005, are acceptable for compliance with the corresponding requirements of paragraphs (f) and (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(j)(1) The Manager, New York ACO, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) Before using any AMOC approved in accordance with 14 CFR 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Related Information

(k) Canadian airworthiness directive CF–2005–23, dated June 29, 2005, also addresses the subject of this AD.

Material Incorporated by Reference

(l) You must use Bombardier Alert Service Bulletin A670BA–27–023, including Appendix A, Revision A, dated May 18, 2005, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL–401, Nassif Building, Washington, DC; on the Internet at *http://dms.dot.gov*; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741–6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

Issued in Renton, Washington, on February 1, 2006.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06–1295 Filed 2–14–06; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2005–22398; Airspace Docket No. 05–ASO–7]

RIN 2120–AA66

Establishment of High Altitude Area Navigation Routes; South Central United States

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes 16 high altitude area navigation (RNAV) routes in the South Central United States in support of the High Altitude Redesign (HAR) program. The FAA is taking this action to enhance safety and to facilitate the more flexible and efficient use of the navigable airspace.

DATES: *Effective Date:* 0901 UTC, April 13, 2006.

FOR FURTHER INFORMATION CONTACT: Paul Gallant, Airspace and Rules, Office of System Operations Airspace and AIM, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267–8783.

SUPPLEMENTARY INFORMATION:

History

On September 27, 2005, the FAA published in the **Federal Register** a notice of proposed rulemaking to establish 16 RNAV routes in the South Central United States, within the airspace assigned to the Memphis Air Route Traffic Control Center (ARTCC) (70 FR 56391). The routes were proposed as part of the HAR program to enhance safety and facilitate the more flexible and efficient use of the navigable airspace for en route instrument flight rules (IFR) aircraft