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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0995; Directorate Identifier 2009-NM-123-AD; Amendment 39-16336; AD 2010-13-05]

Airworthiness Directives; Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700 & 701) Airplanes, Model CL-600-2D15 (Regional Jet Series 705) Airplanes, and Model CL-600-2D24 (Regional Jet Series 900) Airplanes

Correction

In rule document 2010-14979 beginning on page 35613 in the issue of Wednesday, June 23, 2010, make the following correction:

On page 35613, in the second column under the "DATES:" heading, in the first line, "June 23, 2010" should read "July 28, 2010".

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DEPARTMENT OF TRANSPORTATION

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RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700 & 701) Airplanes, Model CL-600-2D15 (Regional Jet Series 705) Airplanes, and Model CL-600-2D24 (Regional Jet Series 900) Airplanes

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Investigation into a landing gear retraction problem on a production test flight revealed that, during aircraft pressurization and depressurization cycles, the pressure floor in the main landing gear bay deflects to a small extent. This causes relative misalignment between the [alternate-extension system] AES bypass valve, the downlock assist valve and the summing lever which, in turn, can result in damage to and potential failure of the respective clevis attached to one or both of the valves. Such a clevis failure could remain dormant and, in the subsequent event that use of the AES was required, full landing gear extension may not be achievable.

* * * * *

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective July 28, 2010.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of July 28, 2010.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, 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) 228-7318; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on October 28, 2009 (74 FR 55493). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Investigation into a landing gear retraction problem on a production test flight revealed that, during aircraft pressurization and depressurization cycles, the pressure floor in the main landing gear bay deflects to a small extent. This causes relative misalignment between the [alternate-extension system] AES bypass valve, the downlock assist valve and the summing lever which, in turn, can result in damage to and potential failure of the respective clevis attached to one or both of the valves. Such a clevis failure could remain dormant and, in the subsequent event that use of the AES was required, full landing gear extension may not be achievable.

This directive gives instructions to replace the clevis, with a new part, for both the bypass and the downlock assist valves. It also gives instructions to install new support brackets for both valves, in order to increase the stiffness of the installations and thus prevent future relative misalignment and potential clevis failure.

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

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Support for the NPRM

The Air Line Pilots Association, International (ALPA), supports the NPRM.

Request To Allow Repetitive Clevis Replacements in Lieu of Support Bracket Replacement

Comair, Inc., requests that we revise the NPRM to allow repetitive replacement of the bypass valve clevis and downlock assist valve clevis at 6,000-flight-cycle intervals, until the new support brackets have been installed instead of requiring installation of the support brackets at the compliance times specified in paragraph (f)(3) of this AD. Comair, Inc., explains that Bombardier Alert Service Bulletin A670BA-32-022, dated November 8, 2007, established an initial replacement of the clevises along with a repetitive replacement every 6,000 flight cycles. But with the introduction of Part C of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009, Comair, Inc., asserts that the repetitive interval was removed.

Comair, Inc., states that it initiated the compliance with Parts A and B of Bombardier Alert Service Bulletin A670BA-32-022, dated November 8, 2007, in early 2008. Since the initial compliance time, Comair, Inc., states that nearly 2,900 flight cycles have passed and reasons that by the time the NPRM becomes a final rule, 500 or more flight cycles might pass. Comair, Inc., also explains that because of the proposed compliance times specified in paragraphs (f)(3)(ii) and (f)(3)(iii) of the NPRM, the installation of the new support brackets will be required within approximately 2,600 flight cycles (6,000 flight cycles minus 3,400 cycles).

Comair, Inc., asserts that limiting installation of the new support brackets to 2,600 flight cycles instead of 4,500 flight cycles, as proposed by paragraph (f)(3)(i) of the NPRM, penalizes those operators who have taken early action to comply with Bombardier Alert Service Bulletin A670BA-32-022. To compensate for the loss of flight cycles, Comair, Inc., suggests that we revise paragraphs (f)(1) and (f)(2) of the NPRM to state: "* * * Replacement of the clevises each 6,000 flight cycles from the initial replacement, in order to extend the compliance schedule in paragraph (f)(3) is acceptable."

We do not agree to allow repetitive replacements of the bypass valve clevis and downlock assist valve clevis until the new support bracket is installed. Comair, Inc., noted that the compliance time in paragraph (f)(3)(i) of the NPRM is 4,500 flight cycles; however, the compliance time is 4,500 flight hours. Operators that do the clevis replacement and operators that are not required to replace the clevis both have to comply with the 4,500 flight-hour compliance time to install the support brackets if that compliance time occurs first.

However, we recognize the concern of Comair, Inc., in that the compliance time specified in paragraphs (f)(3)(ii) and (f)(3)(iii) of the NPRM (within 6,000 flight cycles after doing the clevis replacement or within 600 flight cycles after the effective date of this AD) penalizes those operators who have taken early action to comply with replacing the clevis in accordance with Bombardier Alert Service Bulletin A670BA-32-022, dated November 8, 2007. Therefore, we have increased the grace period specified in paragraphs (f)(3)(ii) and (f)(3)(iii) of this AD to allow operators that did the clevis replacement before the effective date of this AD additional time to do the installation of the bracket. We have determined that extending the grace period will not adversely affect safety and meets the intent of the MCAI, Canadian Airworthiness Directive CF-2009-22, dated May 14, 2009. We have coordinated this change with Transport Canada Civil Aviation (TCCA).

Under the provisions of paragraph (g) of the final rule, we will consider requests for approval of an extension of the compliance time for the installation of the new support brackets if sufficient data are submitted to substantiate that the new compliance time would provide an acceptable level of safety. We have not changed the AD in this regard.

Explanation of Change to This AD

We have revised this AD to identify the legal name of the manufacturer as published in the most recent type certificate data sheet for the affected airplane models.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the change described previously. We determined that this change will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not

intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Explanation of Change to Costs of Compliance

Since issuance of the NPRM, we have increased the labor rate used in the Costs of Compliance from \$80 per work-hour to \$85 per work-hour. The Costs of Compliance information, below, reflects this increase in the specified hourly labor rate.

Costs of Compliance

We estimate that this AD will affect 203 products of U.S. registry. We also estimate that it will take about 12 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 \$939 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. Based on these figures, we estimate the cost of this AD to U.S. operators to be \$397,677, or \$1,959 per product.

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 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); 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.

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 the NPRM, 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.

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 AD:



CORRECTION: [*Federal Register: July 1, 2010 (Volume 75, Number 126)*]; Page 38019;
www.access.gpo.gov/su_docs/aces/aces140.html]

2010-13-05 Bombardier, Inc.: Amendment 39-16336. Docket No. FAA-2009-0995; Directorate Identifier 2009-NM-123-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective July 28, 2010.

Affected ADs

- (b) None.

Applicability

- (c) 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) airplanes, serial numbers 10003 through 10216 inclusive.

- (2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15039 inclusive.

Subject

- (d) Air Transport Association (ATA) of America Code 32: Landing Gear.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Investigation into a landing gear retraction problem on a production test flight revealed that, during aircraft pressurization and depressurization cycles, the pressure floor in the main landing gear bay deflects to a small extent. This causes relative misalignment between the [alternate-extension system] AES bypass valve, the downlock assist valve and the summing lever which, in turn, can result in damage to and potential failure of the respective clevis attached to one or both of the valves. Such a clevis failure could remain dormant and, in the subsequent event that use of the AES was required, full landing gear extension may not be achievable.

This directive gives instructions to replace the clevis, with a new part, for both the bypass and the downlock assist valves. It also gives instructions to install new support brackets for both valves, in order to increase the stiffness of the installations and thus prevent future relative misalignment and potential clevis failure.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) For any bypass valve having part number (P/N) 53342-3, at the applicable time in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this AD, replace the existing clevis with a new clevis having P/N 2323H037, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. The replacement is not required if paragraph (f)(3) of this AD has already been done.

(i) If the bypass valve has accumulated 9,400 total flight cycles or fewer as of the effective date of this AD, replace the clevis before the accumulation of 10,000 total flight cycles on the valve.

(ii) If the bypass valve has accumulated more than 9,400 total flight cycles as of the effective date of this AD, replace the clevis within 550 flight hours after the effective date of this AD.

(iii) If it is not possible to determine the total flight cycles accumulated on the bypass valve, replace the clevis within 550 flight hours after the effective date of this AD.

(2) For any downlock assist valve having P/N 53341-5, at the applicable time in paragraph (f)(2)(i), (f)(2)(ii), or (f)(2)(iii) of this AD, replace the existing clevis with a new clevis, having P/N 2323H037, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. The replacement is not required if paragraph (f)(3) of this AD has already been done.

(i) If the valve has accumulated 9,400 total flight cycles or fewer as of the effective date of this AD, replace the clevis before the valve has accumulated 10,000 total flight cycles on the valve.

(ii) If the valve has accumulated more than 9,400 total flight cycles as of the effective date of this AD, replace the clevis within 550 flight hours after the effective date of this AD.

(iii) If it is not possible to determine the total flight cycles accumulated by the downlock assist valve, replace the clevis within 550 flight hours after the effective date of this AD.

(3) At the earliest of the times in paragraphs (f)(3)(i), (f)(3)(ii), and (f)(3)(iii) of this AD, install new support brackets for the bypass valve and downlock assist valve, in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009. Installing the support brackets terminates the requirements of paragraphs (f)(1) and (f)(2) of this AD.

(i) Within 4,500 flight hours after the effective date of this AD.

(ii) Within 6,000 flight cycles after accomplishing the actions specified in paragraph (f)(1) of this AD, or 6,000 flight cycles after the effective date of this AD, whichever occurs later.

(iii) Within 6,000 flight cycles after accomplishing the actions specified in paragraph (f)(2) of this AD, or 6,000 flight cycles after the effective date of this AD, whichever occurs later.

(4) Replacing the clevises for the bypass valve and downlock assist valve before the effective date of this AD, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-32-022, dated November 8, 2007, is considered acceptable for compliance with the corresponding actions specified in paragraphs (f)(1) and (f)(2) of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) 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. Send information 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 on

any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards 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.

(3) **Reporting Requirements:** For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-22, dated May 14, 2009; and Bombardier Alert Service Bulletin A670BA-32-022, Revision A, dated May 1, 2009; for related information.

Material Incorporated by Reference

(i) You must use Bombardier Alert Service Bulletin A670BA-32-022, Revision A, including Appendix A, dated May 1, 2009, to do the actions required by this AD, unless the AD specifies otherwise. (The revision level is not specified on pages A1 and A2, Appendix A, of this document; those pages are Revision A, dated May 1, 2009.)

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

(2) 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; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) You may review copies of the 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.

(4) You may also review copies of the 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/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on June 10, 2010.

Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.