

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2012-0142; Directorate Identifier 2010-NM-275-AD; Amendment 39-17188; AD 2012-18-11]

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 failures of a hydraulic accumulator's screw-cap/end cap while on the ground that resulted in loss of use of that hydraulic system, and in high-energy impact damage to adjacent systems and structures. This AD requires an inspection for part numbers; repetitive inspections for any cracking of certain hydraulic system accumulators, and replacement, if necessary; and revising the maintenance program to include a life limit for certain hydraulic system accumulators. We are issuing this AD to prevent loss of use of a hydraulic system, which could result in reduced controllability of the airplane.

**DATES:** This AD becomes effective October 24, 2012.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 24, 2012.

**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 March 20, 2012 (77 FR 16193). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Seven cases of on-ground hydraulic accumulator screw cap/end cap failure have been experienced on CL-600-2B19 aeroplanes resulting in loss of the associated hydraulic system and high-energy impact damage to adjacent systems and structure. The lowest number of flight cycles accumulated at the time of failure, to date, has been 6,991 flight cycles.

Although there have been no failures to date on any CL-600-2C10, CL-600-2D15 or CL-600-2D24 aeroplanes, similar accumulators to those installed on the CL-600-2B19, are installed. The part numbers (P/Ns) of the accumulators installed on CL-600-2C10, CL-600-2D15 and CL-600-2D24 aeroplanes are 900096-1 (Hydraulic System No. 1 and Hydraulic System No. 2 accumulators), 900097-1 (Hydraulic System No. 3 accumulator) and 08-60204-001 (Inboard Brake and Outboard Brake accumulators).

A detailed analysis of the calculated line of trajectory of a failed screw cap/end cap for each of the accumulators has been conducted, resulting in the identification of several areas where systems and/or structural components could potentially be damaged. Although all of the failures to date have occurred on the ground, an in-flight failure affecting such components could potentially have an adverse effect on the controllability of the aeroplane.

This [Canadian] directive gives instructions to conduct [an inspection to determine if certain hydraulic accumulators are installed and, if necessary,] repetitive ultrasonic inspections [for cracking] of the Hydraulic System No. 1, Hydraulic System No. 2, Hydraulic System No. 3, Inboard Brake and Outboard Brake accumulators, P/Ns 900096-1, 900097-1, and 08-60204-001, that are not identified by the letter "M" or "T" after the S/N [serial number] on the identification plate.

\* \* \* \* \*

Required actions include revising the maintenance program to include a life limit for certain accumulators, and for airplanes on which cracking is found during an ultrasonic inspection, replacing the accumulator with a new accumulator containing the letter "M" or "T", as applicable, after the serial number on the identification plate or with a new accumulator with a different part number, and eventual replacement of certain accumulators with new accumulators. 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.

**Request To Reference Most Recent Service Information**

Comair Inc. (Comair) requested that we reference the most recent service information. Comair also stated that the revised service information has no effect on airplanes on which inspections, replacements, or maintenance program revisions were accomplished using the previous issues that were identified in the NPRM (77 FR 16193, March 20, 2012).

We agree to reference the most recent service information of certain service bulletins as identified below.

- Bombardier Alert Service Bulletin A670BA-29-011, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010 (for hydraulic system No. 1, and hydraulic system No. 2 accumulators).

- Bombardier Alert Service Bulletin A670BA-29-012, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010 (for hydraulic system No. 3 accumulators).

- Bombardier Alert Service Bulletin A670BA-32-021, Revision D, dated December 22, 2010, including Appendix A, Revision A, dated October 18, 2007 (for inboard and outboard brake accumulators).

- Bombardier Service Bulletin 670BA-29-013, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010 (for hydraulic system No. 1, and hydraulic system No. 2 accumulators).

- Bombardier Service Bulletin 670BA-32-026, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010 (for inboard and outboard brake accumulators).

- Bombardier Service Bulletin 670BA-32-028, Revision A, dated February 3, 2011 (for inboard brake and outboard brake accumulators).

This revised service information does not add more work to the actions described in the NPRM (77 FR 16193, March 20, 2012). We have revised paragraphs (i), (p), (q), and (t) of this AD accordingly.

**Request To Include an Alternative Method of Compliance (AMOC) for a Different Part Number (P/N)**

Tactair Fluid Controls (Tactair) requested that we include a hydraulic accumulator having P/N 11093-4 as an AMOC for replacing hydraulic accumulators having P/N 08-60204-001. Tactair noted that more than half

of the airplanes in the Model CL-600-2B19 fleet have been retrofitted to P/N 11093-4. Tactair also indicated that allowing use of P/N 11093-4 would be more economical for operators.

We disagree with the commenter's request. Part number 11093-4 has not yet been certified for use on 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. Approval of AMOCs provides alternative methods of compliance to the methods required to be used in the associated AD. An AMOC is issued only after an AD has been issued and only after data are provided to show that the proposed solution is complete and addresses the unsafe condition. Once we issue this AD, any person may request approval of an AMOC under the provisions of paragraph (s)(1) of this AD. We have not changed this AD in this regard.

#### Updated Credit Language

We have revised the heading and wording for paragraph (q) of this AD to provide appropriate credit for previous accomplishment of certain actions. This change does not affect the intent of that paragraph.

#### 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 changes described previously.

#### Costs of Compliance

We estimate that this AD will affect 389 products of U.S. registry. We also estimate that it will take up to 21 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 \$8,988 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 the U.S. operators to be up to \$4,190,697, or \$10,773 per product, per inspection cycle.

In addition, we estimate that any necessary follow-on actions would take up to 7 work-hours and require parts costing \$8,988, for a cost of \$9,583 per product. We have no way of determining the number of products that may need these actions.

#### 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.

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 (77 FR 16193, March 20, 2012), 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:

**2012-18-11 Bombardier, Inc.:** Amendment 39-17188. Docket No. FAA-2012-0142; Directorate Identifier 2010-NM-275-AD.

#### (a) Effective Date

This airworthiness directive (AD) becomes effective October 24, 2012.

#### (b) Affected ADs

None.

#### (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, with serial number (S/N) 10003 through 10314 inclusive.

(2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, with S/N 15001 through 15259 inclusive.

#### (d) Subject

Air Transport Association (ATA) of America Code 29: Hydraulic Power, and 32: Landing Gear.

#### (e) Reason

This AD was prompted by reports of failures of a hydraulic accumulator's screw-cap/end cap while on the ground that resulted in loss of use of that hydraulic system, and in high-energy impact damage to adjacent systems and structures. We are issuing this AD to prevent loss of use of a hydraulic system, which could result in reduced controllability of the airplane.

#### (f) Compliance

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

#### (g) Inspection for Part Numbers (P/Ns)

At the applicable time specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, inspect the hydraulic accumulators in hydraulic systems No. 1, No. 2, and No. 3, and the inboard and outboard brake systems, to determine the part number of the

accumulator. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the accumulator can be conclusively determined from that review.

(1) For an accumulator with more than 4,500 total flight cycles as of the effective date of this AD, inspect that accumulator within 500 flight cycles after the effective date of this AD.

(2) For an accumulator with 4,500 or less total flight cycles as of the effective date of this AD, inspect that accumulator before it has accumulated 5,000 total flight cycles.

(3) If it is not possible to determine the total flight cycles accumulated on an accumulator, inspect that accumulator within 500 flight cycles after the effective date of this AD.

#### **(h) Inspection for Letter Designation After the Serial Number**

If, during an inspection required by paragraph (g) of this AD, an accumulator having P/N 900096-1 (for hydraulic systems No. 1 and No. 2 accumulators), 900097-1 (for hydraulic system No. 3 accumulator), or 08-60204-001 (for inboard and outboard brake accumulators) is found, at the applicable time specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, do an inspection of the identification plate on the hydraulic accumulator to determine if an "M" (for hydraulic system accumulators) or a "T" (for brake system accumulators) follows the serial number on the identification plate. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and the letter of the accumulator can be conclusively determined from that review.

**Note 1 to paragraphs (h), (i), (k), (l)(2), and (m) of this AD:** The letter "M" after the serial number on the identification plate is applicable to accumulators, P/Ns 900096-1 and 900097-1, on hydraulic systems No. 1, No. 2, and No. 3. The letter "T" after the serial number on the identification plate is applicable to accumulators, P/N 08-60204-001, on the brake system.

#### **(i) Initial Ultrasonic Inspections of Hydraulic System No. 1, Hydraulic System No. 2, Hydraulic System No. 3, Inboard Brake, and Outboard Brake Accumulators**

If, during any inspection required by paragraph (h) of this AD, any accumulator without the letter "M" (for hydraulic system accumulators) or a "T" (for brake system accumulators) after the serial number is found, at the applicable time specified in paragraph (g)(1), (g)(2), or (g)(3) of this AD: Do an ultrasonic inspection of the inner shoulders of the accumulator screw-cap for cracking, in accordance with Part B of the Accomplishment Instructions of the applicable Bombardier service bulletin identified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD, and at the internal threads of the screw-caps, in accordance with the Accomplishment Instructions of the applicable Bombardier service bulletin identified in paragraphs (i)(4), (i)(5), and (i)(6) of this AD.

(1) For hydraulic system No. 1, and hydraulic system No. 2 accumulators: Bombardier Alert Service Bulletin A670BA-

29-011, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(2) For hydraulic system No. 3 accumulators: Bombardier Alert Service Bulletin A670BA-29-012, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(3) For inboard brake and outboard brake accumulators: Bombardier Alert Service Bulletin A670BA-32-021, Revision D, dated December 22, 2010, including Appendix A, Revision A, dated October 18, 2007.

(4) For hydraulic system No. 1 accumulators: Bombardier Service Bulletin 670BA-29-013, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(5) For hydraulic system No. 2 accumulators: Bombardier Service Bulletin 670BA-29-013, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(6) For inboard brake and outboard brake accumulators: Bombardier Service Bulletin 670BA-32-026, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

#### **(j) No Cracking Found During Accomplishment of the Actions Required by Paragraph (i) of This AD**

If no cracking is found during the inspections required by paragraph (i) of this AD, do the actions required by paragraph (l) of this AD.

#### **(k) Cracking Found During Accomplishment of the Actions Required by Paragraph (i) of This AD**

If any cracking is found during the inspections required by paragraph (i) of this AD, before further flight, replace the accumulator with a new accumulator containing the letter "M" or "T", as applicable, after the serial number on the identification plate, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (i)(1) through (i)(6) of this AD, or replace the accumulator with a new accumulator as specified in paragraphs (k)(1) through (k)(3) of this AD, as applicable.

(1) For any cracked hydraulic system No. 1 or No. 2 accumulator, replace the cracked accumulator with a new accumulator, P/N 900121-1, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-29-014, dated December 22, 2010.

(2) For any cracked hydraulic system No. 3 accumulator, replace the cracked accumulator with a new accumulator, P/N 900122-1, in accordance with paragraph (o) of this AD.

(3) For any cracked inboard brake or outboard brake accumulator, replace the cracked accumulator with a new accumulator, P/N 90006691, in accordance with paragraph (p) of this AD.

#### **(l) Repetitive Ultrasonic Inspections of Hydraulic System No. 1, Hydraulic System No. 2, Hydraulic System No. 3, Inboard Brake, and Outboard Brake Accumulators**

For each accumulator on which no cracking was found during any inspection

required by paragraph (i) of this AD, within 500 flight cycles after the previous ultrasonic inspection, inspect the accumulator in accordance with paragraph (i) of this AD.

(1) If no cracking is found, do the actions required by paragraph (l) of this AD and repeat thereafter at intervals not to exceed 500 flight cycles.

(2) If any cracking is found, before further flight, replace the accumulator with a new accumulator containing the letter "M" or "T," as applicable, after the serial number on the identification plate, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (i)(1) through (i)(6) of this AD, or replace the accumulator with a new accumulator as specified in paragraphs (k)(1), (k)(2), and (k)(3) of this AD, as applicable.

#### **(m) Replacement of Hydraulic System No. 1 and No. 2 Accumulators**

For airplanes on which a hydraulic system No. 1 or No. 2 accumulator having P/N 900096-1 without the letter "M" after the serial number is installed: At the applicable time specified in paragraphs (m)(1) and (m)(2) of this AD, replace the accumulator with a new accumulator having P/N 900096-1 with the letter "M" after the serial number; or having P/N 900121-1, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-29-014, dated December 22, 2010.

(1) For an accumulator with more than 19,500 total flight cycles as of the effective date of this AD, replace that accumulator within 500 flight cycles after accomplishing the most recent inspection required by paragraph (i) or (l) of this AD.

(2) For an accumulator with 19,500 or less total flight cycles as of the effective date of this AD, replace that accumulator before it has accumulated 20,000 total flight cycles.

(3) If it is not possible to determine the total flight cycles accumulated on an accumulator, replace that accumulator within 500 flight cycles after accomplishing the most recent ultrasonic inspection required by paragraph (i) or (l) of this AD.

#### **(n) Hydraulic System Safe Life Limit Introduction**

Within 60 days after the effective date of this AD, revise the maintenance program to include a safe life limit for the hydraulic system No. 1 and No. 2 accumulators, P/N 900096-1, by incorporating Tasks 29-11-11-000-801 and 29-11-11-400-801 of Section 1.3—Safe Life Components, of Part 2, Airworthiness Limitations, Revision 11, dated October 20, 2010, of the Bombardier CL-600-2C10, CL-600-2D15, CL-600-2D24, CL-600-2E25 Maintenance Requirements Manual, CSP B-053.

#### **(o) Replacement of Hydraulic System No. 3 Accumulator**

Within 4,000 flight cycles or 24 months after the effective date of this AD, whichever occurs first, replace any hydraulic system No. 3 accumulator having P/N 900097-1 with a new accumulator having P/N 900122-1, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-29-015, dated December 22, 2010.

**(p) Replacement of Inboard or Outboard Brake System Accumulators**

Within 4,000 flight cycles or 24 months after the effective date of this AD, whichever occurs first, replace any inboard or outboard brake system accumulator having P/N 08-60204-001 with a new accumulator having P/N 90006691, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-32-028, Revision A, dated February 3, 2011.

**(q) Credit for Previous Actions**

(1) This paragraph provides credit for the actions required by paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Part B of the Accomplishment Instructions of the Bombardier service bulletin identified in paragraph (q)(1)(i), (q)(1)(ii), (q)(1)(iii), (q)(1)(iv), (q)(1)(v), (q)(1)(vi), (q)(1)(vii), or (q)(1)(viii) of this AD.

(i) Bombardier Alert Service Bulletin A670BA-29-011, dated October 18, 2007.

(ii) Bombardier Alert Service Bulletin A670BA-29-011, Revision A, dated July 27, 2010.

(iii) Bombardier Alert Service Bulletin A670BA-29-012, dated March 13, 2008.

(iv) Bombardier Alert Service Bulletin A670BA-29-012, Revision A, dated July 27, 2010.

(v) Bombardier Alert Service Bulletin A670BA-32-021, dated November 21, 2006.

(vi) Bombardier Alert Service Bulletin A670BA-32-021, Revision A, dated March 7, 2007.

(vii) Bombardier Alert Service Bulletin A670BA-32-021, Revision B, dated October 18, 2007.

(viii) Bombardier Service Bulletin A670BA-32-021, Revision C, dated July 27, 2010.

(2) This paragraph provides credit for the actions required by paragraphs (i) and (p) of this AD, if those actions were performed before the effective date of this AD using the Accomplishment Instructions of the Bombardier service bulletin identified in paragraph (q)(2)(i), (q)(2)(ii), (q)(2)(iii), (q)(2)(iv), or (q)(2)(v) of this AD.

(i) Bombardier Service Bulletin 670BA-29-013, dated January 29, 2010.

(ii) Bombardier Service Bulletin 670BA-29-013, Revision A, dated July 27, 2010.

(iii) Bombardier Service Bulletin 670BA-32-026, dated January 29, 2010.

(iv) Bombardier Service Bulletin 670BA-32-026, Revision A, dated July 27, 2010.

(v) Bombardier Service Bulletin 670BA-32-028, dated December 22, 2010.

**(r) Terminating Actions**

Accomplishing the actions required by paragraphs (m), (n), (o), and (p) of this AD terminates the requirements of this AD for the accumulator at that location only.

**(s) 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 manager of the ACO, send it 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, 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) *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.

**(t) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2010-35R1, dated June 28, 2011, and the service information identified in paragraphs (t)(1) through (t)(9) of this AD, for related information.

(1) Bombardier Alert Service Bulletin A670BA-29-011, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(2) Bombardier Alert Service Bulletin A670BA-29-012, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(3) Bombardier Alert Service Bulletin A670BA-32-021, Revision D, dated December 22, 2010, including Appendix A, Revision A, dated October 18, 2007.

(4) Bombardier Service Bulletin 670BA-29-013, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(5) Bombardier Service Bulletin 670BA-32-026, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(6) Bombardier Service Bulletin 670BA-29-014, dated December 22, 2010.

(7) Bombardier Service Bulletin 670BA-29-015, dated December 22, 2010.

(8) Bombardier Service Bulletin 670BA-32-028, Revision A, dated February 3, 2011.

(9) Tasks 29-11-11-000-801 and 29-11-11-400-801 of Section 1.3—Safe Life Components, of Part 2, Airworthiness Limitations, Revision 11, dated October 20, 2010, of the Bombardier CL-600-2C10, CL-600-2D15, CL-600-2D24, CL-600-2E25 Maintenance Requirements Manual, CSP B-053.

**(u) Material Incorporated by Reference**

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

(2) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise.

(i) Bombardier Alert Service Bulletin A670BA-29-011, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(ii) Bombardier Alert Service Bulletin A670BA-29-012, Revision B, dated December 22, 2010, including Appendix A, Revision A, dated July 27, 2010.

(iii) Bombardier Alert Service Bulletin A670BA-32-021, Revision D, dated December 22, 2010, including Appendix A, Revision A, dated October 18, 2007.

(iv) Bombardier Service Bulletin 670BA-29-013, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(v) Bombardier Service Bulletin 670BA-32-026, Revision B, dated December 22, 2010, including Appendix A, dated January 29, 2010.

(vi) Bombardier Service Bulletin 670BA-29-014, dated December 22, 2010.

(vii) Bombardier Service Bulletin 670BA-29-015, dated December 22, 2010.

(viii) Bombardier Service Bulletin 670BA-32-028, Revision A, dated February 3, 2011.

(ix) Tasks 29-11-11-000-801 and 29-11-11-400-801 of Section 1.3—Safe Life Components, of Part 2, Airworthiness Limitations, Revision 11, dated October 20, 2010, of the Bombardier CL-600-2C10, CL-600-2D15, CL-600-2D24, CL-600-2E25 Maintenance Requirements Manual, CSP B-053.

(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](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

(4) You may review copies of the 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 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 an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on August 31, 2012.

**Ali Bahrami,**

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22042 Filed 9-18-12; 8:45 am]

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