

[Federal Register Volume 76, Number 55 (Tuesday, March 22, 2011)]  
[Rules and Regulations]  
[Pages 15823-15825]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2011-5771]

[[Page 15823]]

---

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2010-0703; Directorate Identifier 2010-NM-040-AD; Amendment 39-16633; AD 2011-06-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) Airplanes, CL-600-2C10 (Regional Jet Series 700, 701, & 702) Airplanes, CL-600-2D15 (Regional Jet Series 705) Airplanes, and 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:

There have been failures of the harness assembly (power feeder wires) connecting the Air-Driven Generator (ADG) to the aeroplane electrical system, in the area close to the ADG cannon plug. Several electrical wires were found cut as a combined result of corrosion and bending stress from the harness mounting to the ADG.

The ADG electrical wires are insulated with a silver-plating for corrosion protection. It has been determined that the silver-plating of wire strands in the area of tight bend is highly susceptible to breakdown. The plating layer may crack as a result of mechanical stress, and consequently lead to the onset of corrosion on all, or a majority, of the wire strands.

In the event of a damaged harness assembly, the ADG may not be able to provide emergency electrical power to the aeroplane. \* \* \*

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

**DATES:** This AD becomes effective April 26, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 26, 2011.

**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:** Assata Dessaline, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7301; 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 August 5, 2010 (75 FR 47249). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

There have been failures of the harness assembly (power feeder wires) connecting the Air-Driven Generator (ADG) to the aeroplane electrical system, in the area close to the ADG cannon plug. Several electrical wires were found cut as a combined result of corrosion and bending stress from the harness mounting to the ADG.

The ADG electrical wires are insulated with a silver-plating for corrosion protection. It has been determined that the silver-plating of wire strands in the area of tight bend is highly susceptible to breakdown. The plating layer may crack as a result of mechanical stress, and consequently lead to the onset of corrosion on all, or a majority, of the wire strands.

In the event of a damaged harness assembly, the ADG may not be able to provide emergency electrical power to the aeroplane. This directive is issued to correct the identified unsafe condition by requiring [the modification of the ADG, which includes] the replacement of the harness assembly with tin-plated electrical wires, [the replacement of the backshell,] and the re-orientation of the ADG cannon plug to reduce bending stress.

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

### **Updated Relevant Service Information**

We have received Bombardier Service Bulletin 601R-24-128, Revision C, dated May 14, 2010. In the NPRM we referred to Bombardier Service Bulletin 601R-24-128, Revision A, dated November 27, 2009, as the source of service information for doing the required actions on certain models affected by this AD. Revision C of that service bulletin makes certain editorial changes. We have revised paragraph (g)(1) of this AD to specify Revision C of that service bulletin, and revised paragraph (h) of this AD to give credit for having done Bombardier Service Bulletin 601R-24-128, Revision A, dated November 27, 2009, and Revision B, dated April 16, 2010, prior to the effective date of this AD.

### **Comments**

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

## **Request To Shorten Compliance Time**

Air Line Pilots Association, International (ALPA) requested that the compliance time of 72 months be reduced to 36 months, because the corrective action only requires 8 work-hours to complete and ALPA believes that 72 months is too long to comply with the AD based on the importance of this modification.

We do not agree with the request for a shorter compliance time. In developing the compliance time, we determined that the compliance time of 72 months or 6,000 flight hours, whichever occurs first, is appropriate in consideration of the safety implications, the average utilization rate of the affected fleet, the practical aspects of an orderly inspection of the fleet during regular maintenance periods, and the availability of required modification parts. In addition, our compliance time corresponds with the 72-month compliance time of the parallel AD issued by Transport Canada Civil Aviation (TCCA). We have not changed the AD in this regard.

## **Change to Applicability in This Final Rule**

We received notice from Bombardier, Inc. and TCCA that certain airplanes identified in the NPRM have had the actions specified by this AD already incorporated in production, and therefore are not affected by the identified unsafe condition. Specifically, Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 8108 through 8111 have had the actions incorporated. We have reduced the applicability in paragraph (c)(1) of this AD accordingly.

## **Conclusion**

We reviewed the available data, including the comment received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes 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.

## **Costs of Compliance**

We estimate that this AD will affect 920 products of U.S. registry. We also estimate that it will take 8 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 \$1,881 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 \$2,356,120, or \$2,561 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:



---

**2011-06-08 Bombardier, Inc.:** Amendment 39-16633. Docket No. FAA-2010-0703; Directorate Identifier 2010-NM-040-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective April 26, 2011.

**Affected ADs**

- (b) None.

**Applicability**

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

(1) Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 7305 through 7990 inclusive, and 8000 through 8107 inclusive.

(2) Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10003 through 10302 inclusive.

(3) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15259 inclusive.

**Subject**

- (d) Air Transport Association (ATA) of America Code 24: Electrical power.

**Reason**

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

There have been failures of the harness assembly (power feeder wires) connecting the Air-Driven Generator (ADG) to the aeroplane electrical system, in the area close to the ADG cannon plug. Several electrical wires were found cut as a combined result of corrosion and bending stress from the harness mounting to the ADG.

The ADG electrical wires are insulated with a silver-plating for corrosion protection. It has been determined that the silver-plating of wire strands in the area of tight bend is highly susceptible to breakdown. The plating layer may crack as a result of mechanical stress, and consequently lead to the onset of corrosion on all, or a majority, of the wire strands.

In the event of a damaged harness assembly, the ADG may not be able to provide emergency electrical power to the aeroplane. \* \* \*

**Compliance**

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

## Actions

(g) Within 6,000 flight hours or 72 months after the effective date of this AD, whichever occurs first, do the applicable actions specified in paragraph (g)(1) or (g)(2) of this AD.

(1) For Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes: Modify the air-driven generator (ADG) in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-24-128, Revision C, dated May 14, 2010.

(2) For 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: Modify the ADG in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-24-027, dated September 17, 2009.

## Credit for Actions Accomplished in Accordance With Previous Service Information

(h) Actions accomplished before the effective date of this AD in accordance with the Bombardier service bulletins identified in Table 1 of this AD are considered acceptable for compliance with the corresponding action specified in this AD.

**Table 1–Credit Service Bulletins**

<b>Bombardier Service Bulletin -</b>	<b>Revision -</b>	<b>Dated -</b>
601R-24-128	Original	September 17, 2009
601R-24-128	A	November 27, 2009
601R-24-128	B	April 16, 2010

## FAA AD Differences

**Note 1:** This AD differs from the MCAI and/or service information as follows: The Canadian airworthiness directive includes Model CL-600-2B19 airplanes having serial numbers 8108 through 8111 in the applicability. This AD does not apply to those airplanes.

## Other FAA AD Provisions

(i) 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, 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.

## **Related Information**

(j) Refer to MCAI Canadian Airworthiness Directive CF-2009-47, dated December 14, 2009; Bombardier Service Bulletin 601R-24-128, Revision C, dated May 14, 2010; and Bombardier Service Bulletin 670BA-24-027, dated September 17, 2009; for related information.

## **Material Incorporated by Reference**

(k) You must use Bombardier Service Bulletin 601R-24-128, Revision C, dated May 14, 2010; or Bombardier Service Bulletin 670BA-24-027, dated September 17, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(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](mailto: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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on March 4, 2011.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2011-5771 Filed 3-21-11; 8:45 am]

BILLING CODE 4910-13-P