



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0843; Product Identifier 2020-NM-073-AD; Amendment 39-21420; AD 2021-03-17]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., 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, Inc., Model BD-700-1A10 airplanes. This AD was prompted by a report of smoke and signs of an overheating condition from the emergency light battery (ELB) due to excessive corrosion surrounding the internal lead acid batteries, which caused an electrical short circuit that led to the smoke and overheating condition. This AD requires an inspection to determine the last replacement date of the ELB, and replacement if necessary. This AD also requires the incorporation of a new maintenance task into the existing maintenance or inspection program. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact

Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet <https://www.bombardier.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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 <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0843.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0843; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is 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: Thomas Niczky, Aerospace Engineer, Avionics and Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2020-07, dated March 17, 2020 (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Bombardier, Inc., Model BD-700-1A10 airplanes. You may

examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0843.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-1A10 airplanes. The NPRM published in the *Federal Register* on September 17, 2020 (85 FR 58010). The NPRM was prompted by a report of smoke and signs of an overheating condition from the ELB due to excessive corrosion surrounding the internal lead acid batteries, which caused an electrical short circuit that led to the smoke and overheating condition. The NPRM proposed to require an inspection to determine the last replacement date of the ELB, and replacement if necessary. The NPRM also proposed to require the incorporation of a new maintenance task into the existing maintenance or inspection program. The FAA is issuing this AD to address smoke and an overheating condition of the ELB due to corrosion, which could cause fire onboard the airplane. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to that comment.

Request to Update Bombardier Email Address

Bombardier requested that the FAA revise the NPRM to update the email address for obtaining the specified service information from “thd.crj@aero.bombardier.com” to “ac.yul@aero.bombardier.com.”

The FAA agrees with the request and has revised this final rule accordingly.

Clarifications of Compliance Times

The FAA has revised paragraph (g) of this AD to clarify when replacement is required. This clarification explains that replacement is required if, during the inspection

required by paragraph (g) of this AD, any last replacement date or manufacturing date is found to be 4 years or older.

The FAA has also revised paragraph (h)(2) of this AD to clarify that the compliance time of within 48 months is related to the applicable date specified in paragraph (h)(2)(i) or (ii) of this AD. The proposed AD inadvertently stated that the compliance time was “[w]ithin 48 months after the applicable compliance time specified in paragraph (h)(2)(i) or (ii) of this AD,” but paragraphs (h)(2)(i) and (ii) of this AD specify dates, not compliance times.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that this change will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR Part 51

Bombardier has issued Service Bulletin 700-33-024, dated May 13, 2019. This service information describes procedures for an inspection to determine the last battery replacement date of the ELB, and replacement if necessary.

Bombardier also issued the following service information.

- Global Express BD-700 Supplemental Time Limits/Maintenance Checks (STLMC) Temporary Revision (TR) 05-19091701, dated September 17, 2019.

- Global Express BD-700 STLMC TR 05-19091704, dated September 17, 2019.
- Global Express XRS BD-700 STLMC TR 05-19091705, dated September 17, 2019.

These documents describe an amendment to the aircraft maintenance schedule to include STLMC Chapter 5 task number 33-51-54-603, “Restoration of the Emergency Lighting Batteries (XL245-B Emergency Battery System),” and are distinct since they apply to different airplane serial numbers.

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

The FAA estimates that this AD affects 69 airplanes of U.S. registry. The FAA estimates 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
3 work-hours X \$85 per hour = \$255	\$11,308	\$11,563	\$797,847

The FAA has determined that revising the existing maintenance or inspection program takes an average of 90 work-hours per operator, although the FAA recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, 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.

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 airworthiness directive:

2021-03-17 Bombardier, Inc.: Amendment 39-21420; Docket No. FAA-2020-0843;

Product Identifier 2020-NM-073-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-700-1A10 airplanes, certificated in any category, serial numbers 9002, 9003, 9011, 9016, 9020, 9022 through 9025 inclusive, 9029, 9031, 9032, 9036, 9039 through 9044 inclusive, 9046 through 9058 inclusive, 9060 through 9065 inclusive, 9067 through 9081 inclusive, 9083 through 9106 inclusive, 9108 through 9122 inclusive, 9124 through 9126 inclusive, 9128, 9129, 9133, 9134, 9136 through 9139 inclusive, 9141 through 9148 inclusive, 9150, 9151, 9153, 9159, 9162, 9163, 9165, and 9169.

(d) Subject

Air Transport Association (ATA) of America Code 33, Lights.

(e) Reason

This AD was prompted by a report of smoke and signs of an overheating condition from the emergency light battery (ELB) due to excessive corrosion surrounding the internal lead acid batteries, which caused an electrical short circuit that led to the

smoke and overheating condition. The FAA is issuing this AD to address such conditions, which could cause fire onboard the airplane.

(f) Compliance

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

(g) Inspection and Corrective Action

Within 15 months after the effective date of this AD, inspect the ELB to determine the last replacement date or the manufacturing date, as applicable; if during this inspection, any date is found to be 4 years or older, replace the ELB before further flight. Do the actions in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 700-33-024, dated May 13, 2019. For airplanes on which the restoration task specified in paragraph (h) of this AD was done before the effective date of this AD, the requirements of paragraph (g) of this AD are not required.

(h) Maintenance or Inspection Program Revision

Within 60 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to include the information specified in Bombardier BD-700 Supplemental Time Limits/Maintenance Checks (STLMC) Chapter 5 task number 33-51-54-603, “Restoration of the Emergency Lighting Batteries (XL245-B Emergency Battery System),” in the Bombardier BD-700 STLMC, as specified in the applicable temporary revision identified in figure 1 to paragraph (h) of this AD. The initial compliance time for doing task 33-51-54-603 is at the applicable time specified in paragraph (h)(1) or (2) of this AD. Repeat task 33-51-54-603 thereafter at the interval specified within that task.

(1) If both ELBs were replaced at the time of compliance with paragraph (g) of this AD: Within 48 months after the ELB replacement.

(2) If neither ELB, or only one ELB, was replaced at the time of compliance with paragraph (g) of this AD: Within 48 months after the applicable date specified in paragraph (h)(2)(i) or (ii) of this AD.

(i) For each ELB, use the battery replacement date, if it is indicated.

(ii) For each ELB, use the date of manufacture, if it does not have a battery replacement date indicated.

Figure 1 to paragraph (h) – Service Information

Airplane Serial Number	Temporary Revision (TR)
9002, 9003, 9011, 9016, 9020, 9022 through 9025 inclusive, 9029, 9031, 9032, 9036, 9039 through 9044 inclusive, 9046 through 9058 inclusive, 9060 through 9065 inclusive, 9067 through 9081 inclusive, 9083 through 9106 inclusive, 9108 through 9122 inclusive, and 9124	Bombardier Global Express BD-700 STLMC TR 05-19091701, dated September 17, 2019
9125, 9126, 9128, 9129, 9133, 9134, 9136 through 9139 inclusive, 9141 through 9148 inclusive, 9150, 9151, and 9153	Bombardier Global Express BD-700 STLMC TR 05-19091704, dated September 17, 2019
9159, 9162, 9163, 9165, and 9169	Bombardier Global Express XRS BD-700 STLMC TR 05-19091705, dated September 17, 2019

(i) Misidentified Restoration Task

The following temporary revisions misidentified the required restoration task as task “33-51-54-602.”

(1) Bombardier Global Express XRS BD-700 STLMC Temporary Revision 05-19032701, dated March 27, 2019.

(2) Bombardier Global Express BD-700 STLMC Temporary Revision 05-19040301, dated April 3, 2019.

(3) Bombardier Global Express BD-700 STLMC Temporary Revision 05-19040401, dated April 4, 2019.

(j) Compliance with Restoration Task for Airplanes on Which the Misidentified Task was Accomplished

For airplanes on which the restoration task specified as task “33-51-54-602” in the applicable temporary revision identified in paragraph (i) of this AD was done before the effective date of this AD:

(1) The actions specified in paragraph (g) of this AD are not required.

(2) The initial accomplishment of the task specified in paragraphs (h)(1) and (2) of this AD is not required.

(3) Task 33-51-54-603 must be done within 48 months after task “33-51-54-602” was accomplished, and thereafter at the intervals specified in task 33-51-54-603.

(k) No Alternative Actions and Intervals

After the existing maintenance or inspection program has been revised as required by paragraph (h) of this AD, no alternative actions (e.g., inspections) and intervals may be used unless the actions and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

(l) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2020-07, dated March 17, 2020, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0843.

(2) For more information about this AD, contact Thomas Niczky, Aerospace Engineer, Avionics and Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(n) 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 700-33-024, dated May 13, 2019.

(ii) Bombardier Global Express BD-700 Supplemental Time Limits/Maintenance Checks (STLMC) Temporary Revision (TR) 05-19091701, dated September 17, 2019.

(iii) Bombardier Global Express BD-700 STLMC TR 05-19091704, dated September 17, 2019.

(iv) Bombardier Global Express XRS BD-700 STLMC TR 05-19091705, dated September 17, 2019.

(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 ac.yul@aero.bombardier.com; Internet <https://www.bombardier.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on January 29, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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