



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9299; Directorate Identifier 2016-NM-119-AD; Amendment 39-18851; AD 2017-08-02]

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 DHC-8-102, -103, and -106 airplanes; and Model DHC-8-200 and DHC-8-300 series airplanes. This AD was prompted by reports of incorrect installation of the auto-ignition system due to crossed wires at one of the splices in the auto-relight system. This AD requires inspecting the auto-ignition system for correct wiring, and doing corrective actions if necessary. We are 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 a certain publication 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., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced 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. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9299.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9299; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, 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: Norman Perenson, Aerospace Engineer, Propulsion and Services Branch, ANE-173, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7337; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We 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 DHC-8-102, -103, and -106 airplanes; and Model DHC-8-200 and DHC-8-300 series airplanes. The NPRM published in the Federal Register on October 26, 2016 (81 FR 74360) (“the NPRM”). The NPRM was prompted by reports of incorrect installation of the auto-ignition system due to crossed wires at one of the splices in the auto-relight system. The NPRM proposed to require inspecting the auto-ignition system for correct wiring, and doing corrective actions if necessary. We are issuing this AD to detect and correct incorrect wiring of the auto-ignition system, which could result in inability to restart the engine in flight and consequent reduced controllability of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-36, dated November 19, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model DHC-8-102, -103, and -106 airplanes; and Model DHC-8-200 and DHC-8-300 series airplanes. The MCAI states:

There have been reports of incorrect installation of the auto-ignition system introduced by MS [ModSum] 8Q100813 of SB [Service Bulletin] 8-74-02, where wires crossed at one of the splices in the auto-relight system. The incorrect wire installation may result in the inability to achieve an in-flight engine relight when the ignition switch is selected in the AUTO position.

Bombardier has issued SB 8-74-05 to introduce an inspection to check for correct wiring connection and rectification as required. This [Canadian] AD mandates incorporation of Bombardier SB 8-74-05.

Corrective actions include reconnecting any incorrect wiring of the auto-ignition system and performing a functional test. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9299.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comment received. The Air Line Pilots Association, International (ALPA) supported the NPRM.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed, except for minor editorial changes. We have determined that these minor changes:

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

Related Service Information under 1 CFR part 51

We reviewed Bombardier Service Bulletin 8-74-05, Revision B, dated April 14, 2014. This service information describes procedures for inspecting the auto-ignition system for correct wiring, and doing corrective actions that include rewiring if needed,

followed by a functional test of the auto-ignition system. 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

We estimate that this AD affects 88 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$7,480

In addition, we estimate that any necessary corrective actions will take about 2 work-hours, for a cost of \$170 per product. We have no way of determining the number of aircraft that might 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.

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

(AD):

2017-08-02 Bombardier, Inc.: Amendment 39-18851; FAA-2016-9299; Directorate Identifier 2016-NM-119-AD.

(a) Effective Date

This 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., airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, serial numbers 003 through 672 inclusive, on which Bombardier ModSum 8Q100813 or Bombardier Service Bulletin 8-74-02 is incorporated.

(1) Model DHC-8-102, -103, and -106 airplanes.

(2) Model DHC-8-201 and -202 airplanes.

(3) Model DHC-8-301, -311, and -315 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 74, Ignition.

(e) Reason

This AD was prompted by reports of incorrect installation of the auto-ignition system due to crossed wires at one of the splices in the auto-relight system. We are issuing this AD to detect and correct incorrect wiring of the auto-ignition system, which could result in inability to restart the engine in flight and consequent reduced controllability of the airplane.

(f) Compliance

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

(g) Inspection and Corrective Actions

Within 2,000 flight hours or 12 months after the effective date of this AD, whichever occurs first: Inspect the auto-ignition system for correct wiring and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 8-74-05, Revision B, dated April 14, 2014. All applicable corrective actions must be done before further flight.

(h) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 8-74-05, dated July 12, 2013; or Revision A, dated January 27, 2014.

(i) 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 New York ACO, send it to the attention of the person identified in paragraph (j) (2) of this AD. 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 corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-36, dated November 19, 2013, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9299.

(2) For more information about this AD, contact the Program Manager, Continuing Operational Safety, New York ACO, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k) (3) and (k) (4) of this AD.

(k) 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 8-74-05, Revision B, dated April 14, 2014.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this 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 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, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on March 31, 2017.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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