



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9054; Directorate Identifier 2016-NM-081-AD; Amendment 39-18834; AD 2017-06-10]

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-8-400 series airplanes. This AD was prompted by reports of interior emergency lights remaining “ON” following routine operational checks of the emergency light system. This AD requires changing the wiring gauge for the affected emergency lights power supplies wiring to prevent overheating in the wires. 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-2016-9054.

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-2016-9054; 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: Assata Dessaline, Aerospace Engineer, Avionics and Services Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 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 by adding an AD that would apply to certain Bombardier, Inc. Model DHC-8-400 series airplanes. The NPRM published in the Federal Register on August 30, 2016 (81 FR 59539). The NPRM was prompted by reports of interior emergency lights remaining “ON” following routine operational checks of the emergency light system. The NPRM proposed to require changing the wiring gauge for the affected emergency lights power supplies wiring to prevent overheating in the wires. Overheating can damage the wire insulation, potentially causing a fire.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2016-12, effective May 11, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc. Model DHC-8-400 series airplanes. The MCAI states:

There have been several reports of Interior Emergency Lights remaining “ON” following routine operational checks of the Emergency Light System. During these events, the system could not be deactivated and the associated circuit breaker was also found tripped. The events were caused by the overheating of the negative interlock and ground wires at the Emergency Light System Power Supplies.

Investigation has determined that the wire gauge of the negative interlock and ground wiring is incompatible with the current load experienced during the Emergency Light System operational check and this has led to the degradation of the wiring insulation.

This [Canadian] AD is being issued to mandate the change of the wiring gauge from 22 to 20 American wire gauge (AWG) for the affected Emergency Lights Power Supplies wiring.

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-2016-9054.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

The Air Line Pilots Association, International, stated that it supports the NPRM.

Requests to Refer to Updated Service Information and Provide Credit for Previous Service Information

Horizon Air and Ryota Takeuchi requested that we revise the NPRM to specify that the wire gauge be changed in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-33-12, Revision B, dated June 28, 2016 ("SB 84-33-12, Revision B").

Horizon Air also requested that we revise the NPRM to provide credit for previous actions done using Bombardier Service Bulletin 84-33-12, Revision A, dated January 19, 2016.

We agree with these requests. We have determined that SB 84-33-12, Revision B, requires no additional actions for airplanes modified using previous revisions. Therefore, we have revised this final rule to refer to SB 84-33-12, Revision B. We have also revised

paragraph (h) of this AD to include credit for actions accomplished before the effective date of this AD using Bombardier Service Bulletin 84-33-12, Revision A, dated January 19, 2016.

Request to Reference Only the Actions Required for Compliance

Horizon Air also requested that we revise paragraph (g) of the proposed AD to require that the wire gauge be changed in accordance with paragraph 3.B. of the Accomplishment Instructions of SB 84-33-12, Revision B. Horizon pointed out that incorporating the Job Set-up and Close Out sections of the Accomplishment Instructions restricts an operator's ability to perform other maintenance in conjunction with the requirements of the proposed AD.

We agree with Horizon Air's request for the reason provided. We have revised this AD to reference only the actions necessary to address the unsafe condition specified in this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and 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.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed SB 84-33-12, Revision B. This service information describes procedures for changing the wiring gauge for the affected emergency lights power supplies wiring to prevent overheating in the wires. 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 52 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
Replacement	8 work-hours X \$85 per hour = \$680	\$0	\$680	\$35,360

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):

2017-06-10 Bombardier, Inc.: Amendment 39-18834; Docket No. FAA-2016-9054;

Directorate Identifier 2016-NM-081-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. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001, and 4003 through 4507 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of interior emergency lights remaining “ON” following routine operational checks of the emergency light system. We are issuing this

AD to prevent overheating in the wires. Overheating can damage the wire insulation, potentially causing a fire.

(f) Compliance

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

(g) Replacement of Affected Wires

Within 6,000 flight hours or 36 months, whichever occurs first, after the effective date of this AD, incorporate Bombardier Modification Summary 4-126620 to replace affected wires with a heavier wire gauge, in accordance with paragraph 3.B. of the Accomplishment Instructions of Bombardier Service Bulletin 84-33-12, Revision B, dated June 28, 2016.

(h) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-33-12, dated September 29, 2015; or Bombardier Service Bulletin 84-33-12, Revision A, dated January 19, 2016.

(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 ACO send it to

ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 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 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-2016-12, effective May 11, 2016, 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-2016-9054.

(2) 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 84-33-12, Revision B, dated June 28, 2016.

(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 14, 2017.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2017-05524 Filed: 3/24/2017 8:45 am; Publication Date: 3/27/2017]