DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0720; Product Identifier 2019-NM-117-AD; Amendment 39-19831; AD 2020-02-19]

RIN 2120-AA64

Airworthiness Directives: Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2003-09-04 R1, which applied to certain Bombardier, Inc., Model CL-600-2B19 (Regional Jet series 100 & 440) airplanes. AD 2003-09-04 R1 required revising the airworthiness limitations for certain structural inspections; repair if necessary; and submission of inspection findings to the airplane manufacturer. This AD revises the applicability to include additional airplanes; revises certain compliance times; and requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. This AD was prompted by a report of fatigue cracks occurring on the pressure floor skin at fuselage stations (FS) 460 and 513. 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; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email ac.yul@aero.bombardier.com; Internet https://www.bombardier.com. You may view this referenced service information at the FAA, Transport Standards 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-2019-0720.

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-2019-0720; 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, the regulatory evaluation, 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: Andrea Jimenez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; 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-2002-39R2, dated August 15, 2019 (also referred to as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model CL-600-2B19 (Regional Jet series 100 & 440) 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-2019-0720.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2003-09-04 R1, Amendment 39-13305 (68 FR 54985, September 22, 2003) (“AD 2003-09-04 R1”). AD 2003-09-04 R1 applied to certain Bombardier, Inc., Model CL-600-2B19 (Regional Jet series 100 & 440) airplanes. The NPRM published in the Federal Register on October 30, 2019 (84 FR 58062). The NPRM was prompted by a report of fatigue cracks occurring on the pressure floor skin at FS 460 and 513. The NPRM proposed to revise the applicability to include additional airplanes; revise certain compliance times; and require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address fatigue cracks, which could result in failure of the pressure...
floor skin and consequent rapid decompression of the airplane during flight. 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 each comment.

Request to Revise Certain Language

SkyWest Airlines requested that the FAA revise certain language in the proposed AD. SkyWest Airlines suggested that the wording in paragraph (i)(2) of the proposed AD be revised to more closely match the wording in paragraph (c)(2) of AD 2003-09-04 R1. SkyWest Airlines noted that paragraph (i)(2) of the proposed AD states that new airworthiness limitations and inspection requirements are to be inserted into a Bombardier Temporary Revision, but Temporary Revisions are issued and controlled by Bombardier. SkyWest Airlines stated that it appears that the intent of paragraph (i)(2) of the proposed AD is to track the additional airworthiness limitations and inspection requirements introduced by the repair described in paragraph (i)(1) of the proposed AD.

The FAA agrees to clarify. The FAA has revised paragraph (i) of this AD to clarify that operators must comply with any repair instructions, including any new airworthiness limitations and inspection requirements, approved by the FAA, TCCA, or Bombardier, Inc.’s TCCA Design Approval Organization (DAO). As part of this clarification, the FAA revised the content that was in paragraph (i)(2) of the proposed AD, combined the content of paragraph (i)(1) with the revised content of paragraph
(i)(2), and moved that combined content into paragraph (i) of this AD (eliminating paragraphs (i)(1) and (2) of the proposed AD).

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 change 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 these changes 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 Bombardier CL-600-2B19 Temporary Revision 2B-2265, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual; and Bombardier CL-600-2B19 Temporary Revision 2B-2266, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual. These temporary revisions describe airworthiness limitations for inspections of the pressure floor skin. These documents are distinct since they describe different airworthiness limitations.
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 would affect 37 airplanes of U.S. registry.

The FAA has determined that revising the maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. In the past, the agency has estimated that this action takes 1 work-hour per airplane. 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 agency estimates the average 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**

The FAA 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. 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 removing Airworthiness Directive (AD) 2003-09-04 R1, Amendment 39-13305 (68 FR 54985, September 22, 2003), and adding the following new AD:


(a) Effective Date

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

(b) Affected ADs

This AD replaces AD 2003-09-04 R1, Amendment 39-13305 (68 FR 54985, September 22, 2003) (“AD 2003-09-04 R1”).

(c) Applicability

This AD applies to Bombardier, Inc., Model CL-600-2B19 (Regional Jet series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 8999 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by a report of fatigue cracks occurring on the pressure floor skin at fuselage stations (FS) 460 and 513. The FAA is issuing this AD to address
such fatigue cracks, which could result in failure of the pressure floor skin and consequent rapid decompression of the airplane during flight.

(f) Compliance

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

(g) Maintenance Program Revision for Serial Numbers 7003 through 8079

For airplane serial numbers 7003 through 8079 inclusive: Within 30 days from the effective date this AD, revise the existing maintenance or inspection program, as applicable, by incorporating the information specified in Airworthiness Limitations (AWL) task number 53-41-149 specified in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2265, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual.

(1) The initial compliance time for doing the task is at the time specified in figure 1 to paragraph (g)(1) of this AD, or within 90 days after the effective date of this AD, whichever occurs later.
<table>
<thead>
<tr>
<th>Total Flight Cycles (FC) Accumulated as of October 7, 2003 (the effective date of AD 2003-09-04 R1)</th>
<th>Compliance Schedule for Initial Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,000 FC or less</td>
<td>Prior to exceeding 10,000 total FC</td>
</tr>
<tr>
<td>More than 8,000 FC but less than 10,000 FC</td>
<td>Within 2,000 FC from October 7, 2003 (the effective date of FAA AD 2003-09-04 R1)</td>
</tr>
<tr>
<td>10,000 FC or more but less than 15,000 FC</td>
<td>Within 1,500 FC from October 7, 2003 (the effective date of FAA AD 2003-09-04 R1)</td>
</tr>
<tr>
<td>15,000 FC or more but less than 17,325 FC</td>
<td>Within 1,000 FC from the effective date of October 7, 2003 (the effective date of FAA AD 2003-09-04 R1)</td>
</tr>
<tr>
<td>17,325 FC or more but less than 18,325 FC</td>
<td>Prior to exceeding 18,325 total FC</td>
</tr>
<tr>
<td>18,325 FC or more</td>
<td>Not required if the initial inspection has already been performed in accordance with AWL Task number 53-41-149</td>
</tr>
</tbody>
</table>

(2) For airplanes on which Bombardier Service Bulletin 601R-53-067, Bombardier Service Bulletin 601R-53-077, and AWL task number 53-41-194 have been done, the inspections in AWL task number 53-41-149 are not required in the areas covered by doublers at FS460 and FS513.

(3) For airplanes on which the initial inspection has been accomplished at 18,325 or more total flight cycles, and no cracks were found, as of October 7, 2003 (the effective date of AD 2003-09-04), the repetitive interval of 10,000 flight cycles starts from the completion date of the initial inspection.
(4) For airplanes that were previously inspected using AWL task number 53-41-193, perform an inspection using the information specified in AWL task number 53-41-149, provided in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2265, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual, within 10,000 flight cycles from the previously accomplished inspection.

(h) **Maintenance Program Revision for Serial Numbers 8080 through 8999**

(1) For airplane serial numbers 8080 through 8999 inclusive: Within 30 days from the effective date of this AD, revise the existing maintenance or inspection program, as applicable, by incorporating the information specified in AWL task number 53-41-193 specified in Bombardier CL-600-2B19 Airworthiness Limitations Temporary Revision 2B-2266, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual. Except as specified in paragraph (h)(2) of this AD, the initial compliance time for doing the task is at the time specified in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2266, dated July 19, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual, or within 90 days after the effective date of this AD, whichever occurs later.

(2) For airplanes that were previously inspected using AWL task number 53-41-149, perform an inspection by incorporating the information specified in AWL task number 53-41-193, provided in Bombardier CL-600-2B19 Airworthiness Requirements Temporary Revision 2B-2265, dated July 19, 2018, to Appendix B –
Airworthiness Limitations, of Part 2 of the Bombardier Maintenance Requirements Manual, within 10,000 flight cycles from the previously accomplished inspection.

(i) Corrective Actions

If any crack is found during any inspection required by this AD, before further flight, repair using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.’s TCCA Design Approval Organization (DAO), and accomplish any repair instructions, including any new airworthiness limitations and inspection requirements accordingly. If approved by the DAO, the approval must include the DAO-authorized signature.

(j) No Alternative Actions or Intervals

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

(k) Other FAA AD Provisions

(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
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.

(ii) AMOCs approved previously for AD 2003-09-04 R1 are approved as AMOCs for the corresponding provisions of this AD.

(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 TCCA; or Bombardier, Inc.’s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

(1) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2002-39R2, dated August 15, 2019, 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-2019-0720.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.
(m) 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.


(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; 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, Transport Standards 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.


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

[FR Doc. 2020-02718 Filed: 2/11/2020 8:45 am; Publication Date: 2/12/2020]