



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2019-0987; Product Identifier 2019-NM-144-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc., Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This proposed AD was prompted by reports that during airplane wing fatigue testing, fatigue cracks were found on the lower right-hand-side wing plank at the end of the integrally machined stringers, which led to a determination that new or more restrictive airworthiness limitations are necessary. This proposed AD would require, for certain airplanes, revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, 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](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>. 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.

### **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-2019-0987; 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 NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Aziz Ahmed, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2019-0987; Product Identifier 2019-NM-144-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact the agency receives about this NPRM.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2019-21, dated May 15, 2019 (referred to after this 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-2019-0987.

This proposed AD was prompted by reports that during airplane wing fatigue testing, fatigue cracks were found on the lower right-hand-side wing plank at the end of the integrally machined stringers, which led to a determination that new or more restrictive airworthiness limitations are necessary. The FAA is proposing this AD to address undetected cracks on the lower wing plank at the stringer run-out, which could affect the structural integrity of the wing. See the MCAI for additional background information.

#### **Related Service Information Under 1 CFR part 51**

Bombardier has issued Nondestructive Testing Manual, CSP A-010, Revision 40, dated November 10, 2018. This service information describes airworthiness limitations for doing a special detailed inspection of the lower wing skin splice joints at buttock line (BL) 45.00, wing station (WS) 65.75, and WS148.00. Bombardier has also issued Temporary Revision 2B-2273, dated October 31, 2019, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual. This service information describes airworthiness limitations for doing an inspection for cracking on the lower wing plank at the stringer run-out. 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.

### **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed Requirements of this NPRM**

This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (j)(1) of this proposed AD.

### **Differences Between this Proposed AD and the MCAI**

Paragraph (h) of this proposed AD would require revising the maintenance/inspection program to incorporate Airworthiness Limitations (AWL) Task 57-21-169 for certain airplanes. The corresponding MCAI requirement specifies

incorporating this task using Bombardier Temporary Revision 2B-2269, dated July 18, 2018, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual. However, since the MCAI was issued, that service information has been revised to Temporary Revision 2B-2273, dated October 31, 2019 (“Temporary Revision 2B-2273”). Temporary Revision 2B-2273 defines the compliance time threshold, which begins from the time the airplane entered into service. This proposed AD would require incorporating Temporary Revision 2B-2273.

### **Costs of Compliance**

The FAA estimates that this proposed AD affects 464 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

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. In the past, the FAA 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 FAA estimates the total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

According to the manufacturer, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all known costs in the cost estimate.

## **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.

This proposed AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

## **Regulatory Findings**

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

(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.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

**Bombardier, Inc.:** Docket No. FAA-2019-0987; Product Identifier 2019-NM-144-AD.

**(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].



**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial number 7003 and subsequent.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings.

**(e) Reason**

This AD was prompted by reports that during airplane wing fatigue testing, fatigue cracks were found on the lower right-hand-side wing plank at the end of the integrally machined stringers, which led to a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address undetected cracks on the lower wing plank at the stringer run-out, which could affect the structural integrity of the wing.

**(f) Compliance**

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

**(g) Maintenance or Inspection Program Revision for Task 57-21-112**

For airplanes on which Bombardier Service Bulletin 601R-57-044 has not been done: Within 30 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate airworthiness limitations (AWL) task 57-21-112, as specified in Bombardier Nondestructive Testing Manual, CSP A-010, Revision 40, dated November 10, 2018. The initial compliance time for doing the task is

at the time specified in Bombardier Nondestructive Testing Manual, CSP A-010, Revision 40, dated November 10, 2018, or within 30 days after the effective date of this AD, whichever occurs later.

**(h) Maintenance or Inspection Program Revision for Task 57-21-169**

For airplanes on which Bombardier Service Bulletin 601R-57-044 has been done: Within 30 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate AWL task 57-21-169, as specified in Bombardier Temporary Revision 2B-2273, dated October 31, 2019, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual. The initial compliance time for doing the task is at the time specified in Bombardier Temporary Revision 2B-2273, dated October 31, 2019, to Appendix B – Airworthiness Limitations, of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual, or within 30 days after the effective date of this AD, whichever occurs later.

**(i) No Alternative Actions or Intervals**

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

**(j) 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, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(k) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2019-21, dated May 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-2019-0987.

(2) For more information about this AD, contact Aziz Ahmed, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart

Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(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>. 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.

Issued on December 17, 2019.

Michael Kaszycki, Acting Director,  
System Oversight Division,  
Aircraft Certification Service.

[FR Doc. 2019-27768 Filed: 12/26/2019 8:45 am; Publication Date: 12/27/2019]