



This document is scheduled to be published in the Federal Register on 03/05/2024 and available online at

<https://federalregister.gov/d/2024-04556>, and on <https://govinfo.gov> [4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1223; Project Identifier MCAI-2022-00982-T; Amendment 39-22669; AD 2024-02-05]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes. This AD was prompted by a determination that a certain nondestructive test (NDT) procedure associated with a certain airworthiness limitation for inspecting the inboard, mid, and outboard flap metallic end ribs does not contain all of the necessary instructions. This AD requires a revision to the existing maintenance or inspection program to require using a revised NDT procedure when performing an airworthiness limitation task. This AD also prohibits the use of earlier revisions of that NDT procedure. 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 a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1223; 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 mandatory continuing airworthiness information (MCAI), 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.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Bombardier, Inc., Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; internet bombardier.com.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1223.

FOR FURTHER INFORMATION CONTACT: Yaser Osman, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

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 and BD-700-1A11 airplanes. The NPRM published in the *Federal Register* on July 5, 2023 (88 FR 42884). The NPRM was prompted by AD CF-2022-40, dated July 21, 2022,

issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that Bombardier determined that non-destructive testing manual (NDTM) procedure ET-57-51-009, dated May 6, 2019, or earlier, did not contain all of the necessary instructions to perform the inspections of the inboard, mid, and outboard flap metallic end ribs in associated airworthiness limitation task number 57-51-00-109. If those inspections are not fully completed, there is a potential for undetected cracks in the inspection area; which can result in structural failure of the flap.

In the NPRM, the FAA proposed to require a revision to the existing maintenance or inspection program to require using a revised NDT procedure when performing a certain airworthiness limitation task. The FAA also proposed to prohibit the use of earlier revisions of that NDT procedure when performing that airworthiness limitation task. The FAA is issuing this AD to address undetected cracking. The unsafe condition, if not addressed, could result in structural failure of the flap, which could result in possible reduced structural integrity of the airplane.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1223.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from NetJets. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Clarify Affected Airplanes and Appropriate NDT Manuals

NetJets requested that the proposed applicability be clarified if aircraft types G5500 and G6000 are affected, considering that the required actions in paragraphs (g) and (h) of the proposed AD reference a G5000 NDT manual only, but the serial numbers specified in paragraph (c) of the proposed AD include the G5500 and G6000 airplanes.

Additionally, NetJets requested that paragraph (g) of the proposed AD be revised to remove reference to “Revision 46” because the G5500 NDT manual is not at that revision level. NetJets noted that Transport Canada did not refer to a revision level to avoid alternative method of compliance (AMOC) requests.

The FAA contacted Bombardier and confirmed the G5500 and G6000 airplanes are included in the applicability as well as the G6000, G5000 GVFD, Global Express, and Global XRS airplanes. Paragraph (c) of this AD specifies that the AD applies to Model BD-700-1A10 and BD-700-1A11 airplanes, having serial numbers 9002 through 9879 inclusive, 9998, and 60001 and subsequent; these serial numbers include airplanes with the marketing designations Global 5000, Global 5000 GVFD, Global 5500, Global 6000, Global 6500, Global Express, and Global Express XRS. The FAA also confirmed that operators cannot use the G5000 NDT manual for all airplanes as it is only applicable to the G5000 and would need to get an AMOC to comply with this AD as proposed. The FAA has revised paragraph (g) of this AD to reference the appropriate NDT manuals for all of the airplanes identified in the applicability, including the appropriate revision level of each manual. The FAA must include revision levels due to Office of the Federal Register (OFR) regulations on citing material that must be used to comply with an AD and is incorporated by reference. The requirements and substantive contents of the required task in each NDT manual are the same and the cost to use each NDT manual is the same; therefore this revision does not create an additional burden on operators. The FAA has also revised paragraph (h) of this AD to remove the reference to specific NDT manuals.

Conclusion

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 this State of Design Authority, it has notified the FAA of the unsafe condition

described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed the revised inspection procedures for NDT procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of the following nondestructive testing manuals. These documents are distinct since they apply to different airplane configurations.

(1) Bombardier Global 5000 Nondestructive Testing Manual, Publication No. BD-700 NDTM, Revision 46, dated August 16, 2022.

(2) Bombardier Global 5000 Featuring Global Vision Flight Deck Nondestructive Testing Manual, Publication No. GL 5000 GVFD NDTM, Revision 34, dated August 16, 2022.

(3) Bombardier Global 5500 Nondestructive Testing Manual, Publication No. GL 5500 NDTM, Revision 8, dated August 16, 2022.

(4) Bombardier Global 6000 Nondestructive Testing Manual, Publication No. GL 6000 NDTM, Revision 34, dated August 16, 2022.

(5) Bombardier Global 6500 Nondestructive Testing Manual, Publication No. GL 6500 NDTM, Revision 8, dated August 16, 2022.

(6) Bombardier Global Express Nondestructive Testing Manual, Publication No. BD-700-NDTM, Revision 48, dated August 16, 2022.

(7) Bombardier Global Express XRS Nondestructive Testing Manual, Publication No. BD-700 XRS NDTM, Revision 44, dated August 16, 2022.

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 441 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
1 work-hour X \$85 per hour = \$85	\$0	\$85	\$37,485

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.

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:

2024-02-05 Bombardier, Inc.: Amendment 39-22669; Docket No. FAA-2023-1223;

Project Identifier MCAI-2022-00982-T.

(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 and BD-700-1A11

airplanes, certificated in any category, having serial numbers 9002 through 9879 inclusive, 9998, and 60001 and subsequent.

(d) Subject

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

(e) Reason

This AD was prompted by a determination that a certain nondestructive test (NDT) procedure associated with a certain airworthiness limitation for inspecting for cracks at the inboard, mid, and outboard flap metallic end ribs does not contain all of the necessary instructions. The FAA is issuing this AD to address undetected cracks. The unsafe condition, if not addressed, could result in structural failure of the flap, which could result in possible reduced structural integrity of the airplane.

(f) Compliance

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

(g) Maintenance Procedure Limitation

As of 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to use procedure ET-57-51-009, "Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs", of Part 6-Eddy Current, of the applicable Bombardier NDT manual specified in paragraphs (g)(1) through (7) of this AD when performing airworthiness limitation task number 57-51-00-109.

(1) For Global 5000 airplanes: Bombardier Global 5000 Nondestructive Testing Manual, Publication No. BD-700 NDTM, Revision 46, dated August 16, 2022.

(2) For Global 5000 GVFD airplanes: Bombardier Global 5000 Featuring Global Vision Flight Deck Nondestructive Testing Manual, Publication No. GL 5000 GVFD NDTM, Revision 34, dated August 16, 2022.

(3) For Global 5500 airplanes: Bombardier Global 5500 Nondestructive Testing

Manual, Publication No. GL 5500 NDTM, Revision 8, dated August 16, 2022.

(4) For Global 6000 airplanes: Bombardier Global 6000 Nondestructive Testing Manual, Publication No. GL 6000 NDTM, Revision 34, dated August 16, 2022.

(5) For Global 6500 airplanes: Bombardier Global 6500 Nondestructive Testing Manual, Publication No. GL 6500 NDTM, Revision 8, dated August 16, 2022.

(6) For Global Express airplanes: Bombardier Global Express Nondestructive Testing Manual, Publication No. BD-700-NDTM, Revision 48, dated August 16, 2022.

(7) For Global Express XRS airplanes: Bombardier Global Express XRS Nondestructive Testing Manual, Publication No. BD-700 XRS NDTM, Revision 44, dated August 16, 2022.

(h) Maintenance Procedure Prohibition

As of 90 days after the effective date of this AD, it is prohibited to use procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of any Bombardier Global NDT manual specified in paragraphs (h)(1) through (7) of this AD, dated May 6, 2019, or earlier revisions when performing airworthiness limitation task number 57-51-00-109.

(1) For Global 5000 airplanes: Bombardier Global 5000 Nondestructive Testing Manual, Publication No. BD-700 NDTM.

(2) For Global 5000 GVFD airplanes: Bombardier Global 5000 Featuring Global Vision Flight Deck Nondestructive Testing Manual, Publication No. GL 5000 GVFD NDTM.

(3) For Global 5500 airplanes: Bombardier Global 5500 Nondestructive Testing Manual, Publication No. GL 5500 NDTM.

(4) For Global 6000 airplanes: Bombardier Global 6000 Nondestructive Testing Manual, Publication No. GL 6000 NDTM.

(5) For Global 6500 airplanes: Bombardier Global 6500 Nondestructive Testing

Manual, Publication No. GL 6500 NDTM.

(6) For Global Express airplanes: Bombardier Global Express Nondestructive Testing Manual, Publication No. BD-700-NDTM.

(7) For Global Express XRS airplanes: Bombardier Global Express XRS Nondestructive Testing Manual, Publication No. BD-700 XRS NDTM.

(i) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation 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 responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards 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, International Validation Branch, FAA; or Transport Canada; or Bombardier, Inc.'s Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Additional Information

(1) Refer to Transport Canada AD CF-2022-40, dated July 21, 2022, for related information. This Transport Canada may be found in the AD docket at regulations.gov under Docket No. FAA-2023-1223.

(2) For more information about this AD, contact Yaser Osman, Aviation Safety

Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(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) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs, of Part 6-Eddy Current, of Bombardier Global 5000 Nondestructive Testing Manual, Publication No. BD-700 NDTM, Revision 46, dated August 16, 2022.

(ii) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global 5000 Featuring Global Vision Flight Deck Nondestructive Testing Manual, Publication No. GL 5000 GVFD NDTM, Revision 34, dated August 16, 2022.

(iii) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global 5500 Nondestructive Testing Manual, Publication No. GL 5500 NDTM, Revision 8, dated August 16, 2022.

(iv) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global 6000 Nondestructive Testing Manual, Publication No. GL 6000 NDTM, Revision 34, dated August 16, 2022.

(v) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global

6500 Nondestructive Testing Manual, Publication No. GL 6500 NDTM, Revision 8, dated August 16, 2022.

(vi) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global Express Nondestructive Testing Manual, Publication No. BD-700-NDTM, Revision 48, dated August 16, 2022.

(vii) Procedure ET-57-51-009, “Special Detailed Inspection of the Inboard, Mid and Outboard Flap (Metallic) End Ribs,” of Part 6-Eddy Current, of Bombardier Global Express XRS Nondestructive Testing Manual, Publication No. BD-700 XRS NDTM, Revision 44, dated August 16, 2022.

(3) For service information identified in this AD, contact Bombardier, Inc., Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; internet bombardier.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on January 29, 2024.

Victor Wicklund,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

