



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-2242; Project Identifier MCAI-2023-00704-T]

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 BD-100-1A10 airplanes. This proposed AD was prompted by a determination that new or more restrictive maintenance tasks are necessary. This proposed AD would require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive maintenance tasks. 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 [regulations.gov](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.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2242; 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 mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this NPRM, contact Bombardier 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; website [bombardier.com](https://www.bombardier.com).

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

FOR FURTHER INFORMATION CONTACT: Gabriel Kim, 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:

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 ADDRESSES. Include “Docket No. FAA-2023-2242; Project Identifier MCAI-2023-00704-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Gabriel Kim, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Transport Canada, which is the aviation authority for Canada, has issued Transport Canada AD CF-2023-34, dated May 25, 2023 (Transport Canada AD CF-2023-34) (also referred to after this as the MCAI), to correct an unsafe condition for all Bombardier, Inc., Model BD-100-1A10 airplanes. The MCAI states that new or more restrictive maintenance tasks have been developed.

Airplanes with certain serial numbers were delivered after the maintenance or inspection program was revised and must comply with the airworthiness limitations specified as part of the approved type design and referenced on the type certificate data sheet; this proposed AD therefore does not include those airplanes in the applicability.

The FAA is proposing this AD to address failure or degradation of the horizontal stabilizer trim actuator (HSTA) and motor brake assembly. A failed or degraded HSTA or motor brake assembly could result in loss of control of the airplane. You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-2242.

Related Service Information under 1 CFR Part 51

The FAA reviewed the following Bombardier service information, which describes new or more restrictive airworthiness limitation maintenance tasks that specify inspection and overhaul of the HSTA and add flight-cycle and flight-hour limitations.

- Sections 5-10-20, “Time Limits – Supplementary Limitations,” and 5-10-40, “Certification Maintenance Requirements,” of part 2, “Airworthiness Limitations,” of the Bombardier Challenger 350 Time Limits/Maintenance Check, CH 350, Revision 13, dated June 14, 2022, which include Task 27-40-00-104*, “Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004 and subs,” and Task 27-41-05-104*, “Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004/-005.”

- Sections 5-10-20, “Time Limits – Supplementary Limitations,” and 5-10-40, “Certification Maintenance Requirements,” of part 2, “Airworthiness Limitations,” of the Bombardier Challenger 300 Time Limits/Maintenance Check, CH 300, Revision 23, dated June 14, 2022, which include Task 27-40-00-104*, “Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004 and subs,” and Task 27-41-05-104*, “Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004/-005.”

- Temporary Revision 5-2-31, dated January 31, 2023, which includes Task 27-40-00-108**, “Restoration (Inspection) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-003 and subs.”

- Temporary Revision 5-2-102, dated January 31, 2023, which includes Task 27-40-00-108**, “Restoration (Inspection) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-003 and subs.”

These documents are distinct since they apply to different airplane models.

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 ADDRESSES.

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 this 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 maintenance tasks.

This proposed AD would require revisions to certain operator maintenance documents to add new actions (i.e., inspections) and certain overhaul time limitations. 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 (i)(1) of this proposed AD.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 737 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

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. 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 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) Would not affect intrastate aviation in Alaska, and
- (3) Would 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:

Bombardier, Inc.: Docket No. FAA-2023-2242; Project Identifier

MCAI-2023-00704-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) 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 BD-100-1A10 airplanes, certificated in any category, having serial numbers 20003 through 20500 inclusive, and 20501 through 20959 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks; 27, Stabilizer.

(e) Reason

This AD was prompted by a determination that new or more restrictive maintenance tasks are necessary. The FAA is issuing this AD to address failure or degradation of the horizontal stabilizer trim actuator (HSTA) and motor brake assembly. The unsafe condition, if not addressed, could result in loss of control of the airplane.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 60 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in figure 1 or 2 to paragraph (g) of this AD, as applicable. The initial compliance time for doing the tasks is at the time specified in the applicable temporary revision (TR) or time

limit/maintenance check (TLMC) document specified in figures 1 and 2 to paragraph (g) of this AD, or within 60 days after the effective date of this AD, whichever occurs later.

Note 1 to paragraph (g): The asterisk (or “one star”) or double asterisk (“two star”) with the last three digits of the task numbers listed in figures 1 and 2 to paragraph (g) of this AD indicates that the task is an airworthiness limitation task.

Figure 1 to paragraph (g) - Tasks for Model BD-100-1A10 airplanes having S/Ns**20003 through 20500**

Task number	Task title	TLMC chapter	TLMC or TR document
27-40-00-108**	Restoration (Inspection) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-003 and subs	5-10-40	Bombardier Temporary Revision 5-2-102, dated January 31, 2023
27-40-00-104*	Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004 and subs	5-10-40	Part 2, "Airworthiness Limitations," of the Bombardier Challenger 300 Time Limits/Maintenance Check, CH 300, Revision 23, dated June 14, 2022
27-41-05-104*	Restoration (Overhaul) of the Horizontal Stabilizer Trim actuator (HSTA), Part No. C47100-004/-005	5-10-20	Part 2, "Airworthiness Limitations," of the Bombardier Challenger 300 Time Limits/Maintenance Check, CH 300, Revision 23, dated June 14, 2022

**Figure 2 to paragraph (g) - Tasks for Model BD-100-1A10 airplanes having S/Ns
20501 through 20959**

Task number	Task title	TLMC chapter	TLMC or TR document
27-40-00-108**	Restoration (Inspection) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-003 and subs	5-10-40	Bombardier Temporary Revision 5-2-31, dated January 31, 2023
27-40-00-104*	Restoration (Overhaul) of the Horizontal-Stabilizer Trim-Actuator (HSTA), Part No. C47100-004 and subs	5-10-40	Part 2, “Airworthiness Limitations,” of the Bombardier Challenger 350 Time Limits/Maintenance Check, CH 350, Revision 13, dated June 14, 2022
27-41-05-104*	Restoration (Overhaul) of the Horizontal Stabilizer Trim actuator (HSTA), Part No. C47100-004/-005	5-10-20	Part 2, “Airworthiness Limitations,” of the Bombardier Challenger 350 Time Limits/Maintenance Check, CH 350, Revision 13, dated June 14, 2022

(h) No Alternative Actions, or Intervals

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

(i) Other FAA 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 manager of the International Validation Branch, mail it to ATTN: Program Manager, Continuing Operational Safety, at the address identified in paragraph (j)(2) of this AD or email to: 9-avs-nyaco-cos@faa.gov. If mailing information, also submit information by email. 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-2023-34, dated May 25, 2023, for related information. This Transport Canada AD may be found in the AD docket at regulations.gov under Docket No. FAA-2023-2242.

(2) For more information about this AD, contact Gabriel Kim, 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) Section 5-10-20, “Time Limits – Supplementary Limitations,” of Part 2, “Airworthiness Limitations,” of the Bombardier Challenger 300 Time Limits/Maintenance Check, CH 300, Revision 23, dated June 14, 2022.

(ii) Section 5-10-20, “Time Limits – Supplementary Limitations,” of Part 2, “Airworthiness Limitations,” of the Bombardier Time Limits/Maintenance Check, CH 350, Revision 13, dated June 14, 2022.

(iii) Section 5-10-40, “Certification Maintenance Requirements,” of Part 2, “Airworthiness Limitations,” of the Bombardier Challenger 300 Time Limits/Maintenance Check, CH 300, Revision 23, dated June 14, 2022.

(iv) Section 5-10-40, “Certification Maintenance Requirements,” of Part 2, “Airworthiness Limitations,” of the Bombardier Time Limits/Maintenance Check, CH 350, Revision 13, dated June 14, 2022.

(v) Bombardier Temporary Revision 5-2-31, dated January 31, 2023.

(vi) Bombardier Temporary Revision 5-2-102, dated January 31, 2023.

(3) For service information identified in this AD, contact Bombardier 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; website bombardier.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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 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 December 8, 2023.

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

[FR Doc. 2023-27387 Filed: 12/18/2023 8:45 am; Publication Date: 12/19/2023]