

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. FAA-2022-1646; Project Identifier MCAI-2022-01135-T; Amendment 39-22348; AD 2023-04-01]

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-700-2A12 airplanes. This AD was prompted by report that the passenger door functional test engineering requirements (FTEs) were not fully accomplished on several airplanes. This AD requires measuring the passenger door steps, passenger door gaps, and passenger door stops rigging, and re-adjusting the door if necessary. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective April 7, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 7, 2023.

**ADDRESSES:**

*AD Docket:* You may examine the AD docket at regulations.gov under Docket No. FAA-2022-1646; 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

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](mailto:ac.yul@aero.bombardier.com); website [bombardier.com](http://bombardier.com).

- You may view this material 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 in the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1646.

**FOR FURTHER INFORMATION CONTACT:**

Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7300; email [9-avs-nyaco-cos@faa.gov](mailto: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-700-2A12 airplanes. The NPRM published in the **Federal Register** on December 16, 2022 (87 FR 77040). The NPRM was prompted by AD CF-2022-48, dated August 18, 2022, issued by Transport Canada, which is the aviation authority for Canada (Transport Canada AD CF-2022-48) (also referred to as the MCAI). The MCAI states that non-conformities have been reported involving the passenger door FTEs. It has been found that the FTER was not fully accomplished on several airplanes with the assembled airplane in the weight-on-wheel condition, which could affect the rigging of the passenger door. Door mis-rigging could result in higher loads on the passenger door stops that could initiate cracks before the intended design service goal, and an in-flight opening of the passenger door.

In the NPRM, the FAA proposed to require measuring the passenger door steps, passenger door gaps, and passenger door stops rigging, and re-adjusting the door if necessary. The

FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1646.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received no comments on the NPRM or on the determination of the cost to the public.

**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 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, 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 14 CFR Part 51**

The FAA reviewed Bombardier Service Bulletin 700-52-7511, dated July 22, 2022. This service information specifies procedures for measuring the passenger door steps and gaps, rigging of the passenger door stops, and corrective actions if the measurements are not within the specified limits. This material 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 29 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
Up to 4 work-hours × \$85 per hour = \$340 .....	\$0	\$340	Up to \$9,860.

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on

the results of any required actions. The FAA has no way of determining the

number of aircraft that might need these on-condition actions:

ESTIMATED COSTS OF ON-CONDITION ACTIONS

Labor cost	Parts cost	Cost per product
Up to 30 work-hours × \$85 per hour = \$3,400 .....	\$0	Up to \$3,400.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

**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:

**2023-04-01 Bombardier, Inc.:** Amendment 39-22348; Docket No. FAA-2022-1646; Project Identifier MCAI-2022-01135-T.

**(a) Effective Date**

This airworthiness directive (AD) is effective April 7, 2023.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-700-2A12 airplanes, certificated in any category, serial numbers 70006 through 70061 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code: 52, Doors.

**(e) Unsafe Condition**

This AD was prompted by a report that the passenger door functional test engineering requirements (FTEs) were not fully accomplished on several airplanes. The FAA is issuing this AD to ensure that the passenger door is properly rigged. The unsafe condition, if not addressed, could result in higher loads on the passenger door stops that could initiate cracks before the intended design service goal, and an in-flight opening of the passenger door.

**(f) Compliance**

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

**(g) Requirements**

Within 72 months after the effective date of this AD, measure the passenger door steps and gap values on each lateral side of the door at 8 points, and on the lower and upper sides of the door at 4 points, in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 700-52-7511, dated July 22, 2022. Then accomplish the actions specified by paragraph (g)(1) or (2) of this AD, as applicable.

- (1) If any measurement is not within the specified limits, before further flight, re-

adjust the passenger door steps and gaps to obtain the acceptable (necessary) values in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 700-52-7511, dated July 22, 2022.

(2) If all of the measurements are within the specified limits, before further flight, with the door in the closed position, measure the passenger door stops gaps in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin 700-52-7511, dated July 22, 2022. If any passenger door stops gaps measurement is not within the specified limits, before further flight, re-adjust the passenger door stops to obtain the acceptable (necessary) values in accordance with Part D of the Accomplishment Instructions of Bombardier Service Bulletin 700-52-7511, dated July 22, 2022.

**(h) No Reporting Requirement**

Although Bombardier Service Bulletin 700-52-7511, dated July 22, 2022, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(i) Additional 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 responsible Flight Standards 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. 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, New York ACO Branch, FAA; or Transport Canada; or Bombardier Inc.’s Transport Canada Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Additional Information**

(1) Refer to Transport Canada AD CF-2022-48, dated August 18, 2022, for related information. This Transport Canada AD may be found in the AD docket at *regulations.gov* under Docket No. FAA-2022-1646.

(2) For more information about this AD, contact Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7300; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

#### (k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference 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 700-52-7511, dated July 22, 2022.

(ii) [Reserved]

(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](mailto:ac.yul@aero.bombardier.com); website [bombardier.com](http://bombardier.com).

(4) You may view this material 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 that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html).

Issued on February 14, 2023.

**Christina Underwood,**

*Acting Director, Compliance & Airworthiness Division, Aircraft Certification Service.*

[FR Doc. 2023-04256 Filed 3-2-23; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2022-1243; Project Identifier MCAI-2022-00674-T; Amendment 39-22344; AD 2023-03-19]

RIN 2120-AA64

#### Airworthiness Directives; Embraer S.A. (Type Certificate Previously Held by Yaborá Indústria Aeronáutica S.A.; Embraer S.A.) Airplanes

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Embraer S.A. Model ERJ 170 airplanes. This AD was prompted by a report of

uncommanded setting of the barometric reference in both primary flight displays (PFDs) due to the architecture of data communication of the Control I/O modules, which interconnect the display controllers to the air data system. This AD requires installing updated Primus EPIC software, as specified in an Agência Nacional de Aviação Civil (ANAC) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective April 7, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 7, 2023.

#### ADDRESSES:

**AD Docket:** You may examine the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1243; 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 material incorporated by reference in this AD, contact ANAC, Aeronautical Products Certification Branch (GGCP), Rua Dr. Orlando Feirabend Filho, 230—Centro Empresarial Aquarius—Torre B—Andares 14 a 18, Parque Residencial Aquarius, CEP 12.246-190—São José dos Campos—SP, Brazil; telephone 55 (12) 3203-6600; email [pac@anac.gov.br](mailto:pac@anac.gov.br); website [anac.gov.br/en/](http://anac.gov.br/en/). You may find this material on the ANAC website at [sistemas.anac.gov.br/certificacao/DA/DAE.asp](http://sistemas.anac.gov.br/certificacao/DA/DAE.asp).

- You may view this material 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. It is also available in the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1243.

#### FOR FURTHER INFORMATION CONTACT:

Hassan Ibrahim, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3653; email [hassan.m.ibrahim@faa.gov](mailto:hassan.m.ibrahim@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 Embraer S.A. Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, -200 STD, and -200 LL airplanes. The NPRM published in the **Federal Register** on September 30, 2022 (87 FR 59345). The NPRM was prompted by AD 2022-05-03, effective May 25, 2022 issued by ANAC, which is the aviation authority for Brazil (ANAC AD 2022-05-03) (also referred to as the MCAI). The MCAI states that there was a report of uncommanded setting of the barometric reference in both PFDs due to the architecture of data communication of the Control I/O modules, which interconnect the display controllers to the air data system.

In the NPRM, the FAA proposed to require installing updated Primus EPIC software, as specified in ANAC AD 2022-05-03. The FAA is issuing this AD to address the unsafe condition which could interfere with the decisions taken by the flightcrew during critical phases of flight, and possibly result in reduced controllability of the airplane.

You may examine the MCAI in the AD docket at [regulations.gov](http://regulations.gov) under Docket No. FAA-2022-1243.

#### Related Rulemaking

This AD requires installing updated Primus EPIC software. ANAC AD 2022-05-03 specifies that accomplishment of that AD “covers the accomplishment of [terminates] ANAC AD 2019-10-02” (which corresponds to FAA AD 2020-05-22) Amendment 39-19872 (85 FR 15936, March 20, 2020) (AD 2020-05-22). Both AD 2020-05-22 and this AD require installing updated Primus EPIC software standards, and the FAA has determined that the actions in AD 2020-05-22 must be done prior to accomplishing the actions in this AD. Accomplishment of the actions in this AD on an airplane would then terminate all of the requirements of AD 2020-05-22 for that airplane only.

#### Discussion of Final Airworthiness Directive

##### Comments

The FAA received a comment from Horizon Air. The following presents the comment received on the NPRM and the FAA’s response to each comment.

##### Request To Revise an Exception

Horizon Air requested that the FAA revise paragraph (h)(2) of this AD. The commenter noted that paragraph (h)(2)