



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2023-1706; Project Identifier MCAI-2023-00039-T; Amendment 39-22625; AD 2023-24-08]

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 reports that the nose wheel steering selector valve (SSV) can be slow to deactivate under low temperature conditions. This AD requires replacing the affected SSV with a re-designed SSV that has an improved response time. 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:**

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1706; 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 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. It is also available at [regulations.gov](http://regulations.gov) under Docket No. FAA-2023-1706.

**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](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-700-1A10 and BD-700-1A11 airplanes. The NPRM published in the *Federal Register* on August 9, 2023 (88 FR 53823). The NPRM was prompted by AD CF-2023-02, dated January 11, 2023, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that following a runway excursion on a different model, an investigation revealed that the nose wheel SSV can be slow to deactivate under low temperature conditions. A similar SSV is installed on the airplanes to which this AD is applicable. In the event of an un-commanded steering input, a slow

SSV deactivation could lead to a delayed transition to free caster mode and result in an aircraft runway excursion.

In the NPRM, the FAA proposed to require replacing the affected SSV with a re-designed SSV that has an improved response time. 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 under Docket No. FAA-2023-1706.

## **Discussion of Final Airworthiness Directive**

### **Comments**

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

### **Request to Add Bombardier Part Numbers**

NetJets suggested adding Bombardier part numbers GW415-6275-1 & GW415-6275-3 to paragraph (g) of the proposed AD, in addition to Safran part numbers, as stated in SB 700-32-6021, paragraph 3., MATERIAL INFORMATION. NetJets stated that, at new aircraft delivery, the Bombardier part numbers are provided in the documentation of the aircraft. The FAA infers that NetJets would like to ensure the proper identification of the parts.

The FAA concurs with the suggestion. To aid in identifying the parts, paragraph (g) of this AD has been changed to add the referenced Bombardier part numbers.

### **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 following Bombardier service information.

- Service Bulletin 700-32-044, Revision 01, dated December 7, 2022.
- Service Bulletin 700-32-6021, Revision 01, dated December 7, 2022.
- Service Bulletin 700-32-6507, Revision 01, dated December 7, 2022.
- Service Bulletin 700-1A11-32-031, Revision 01, dated December 7, 2022.
- Service Bulletin 700-32-5021, Revision 01, dated December 7, 2022.
- Service Bulletin 700-32-5507, Revision 01, dated December 7, 2022.

This service information specifies procedures for replacing the affected SSV with a re-designed SSV. These documents are distinct since they apply to different airplane configurations. 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 442 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
4 work-hours X \$85 per hour = \$340	\$5,542	\$5,882	Up to \$2,599,844

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:

**2023-24-08 Bombardier, Inc.:** Amendment 39-22625; Docket No. FAA-2023-1706; Project Identifier MCAI-2023-00039-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 the Bombardier, Inc., airplanes, certificated in any category, identified in paragraphs (c)(1) through (6) of this AD.

(1) Model BD-700-1A10 airplanes, as identified in Bombardier Service Bulletin 700-32-044, Revision 01, dated December 7, 2022.

(2) Model BD-700-1A10 airplanes, as identified in Bombardier Service Bulletin 700-32-6021, Revision 01, dated December 7, 2022.

(3) Model BD-700-1A10 airplanes, as identified in Bombardier Service Bulletin 700-32-6507, Revision 01, dated December 7, 2022.

(4) Model BD-700-1A11 airplanes, as identified in Bombardier Service Bulletin 700-1A11-32-031, Revision 01, dated December 7, 2022.

(5) Model BD-700-1A11 airplanes, as identified in Bombardier Service Bulletin 700-32-5021, Revision 01, dated December 7, 2022.

(6) Model BD-700-1A11 airplanes, as identified in Bombardier Service Bulletin 700-32-5507, Revision 01, dated December 7, 2022.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Unsafe Condition**

This AD was prompted by reports that the nose wheel steering selector valve (SSV) can be slow to deactivate under low temperature conditions. The FAA is issuing this AD to address a possible delayed transition to free caster mode in the event of an un-commanded steering input. The unsafe condition, if not addressed, could result in an aircraft runway excursion.

**(f) Compliance**

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

**(g) Required Action**

Within 66 months or 3,200 flight hours, whichever occurs first after the effective date of this AD: Replace SSV part number (P/N) 23600-101 (Bombardier P/N GW415-6275-1) with SSV P/N 23600-103 (Bombardier P/N GW415-6275-3) in accordance with the Accomplishment Instructions of the applicable Bombardier service bulletin listed in figure 1 to paragraph (g) of this AD.

**Figure 1 to paragraph (g) – Service Bulletin References**

<b>Model</b>	<b>Bombardier Service Bulletin</b>	<b>Issue Date</b>
BD-700-1A10	700-32-044, Revision 01	December 7, 2022
BD-700-1A10	700-32-6021, Revision 01	December 7, 2022
BD-700-1A10	700-32-6507, Revision 01	December 7, 2022

<b>Model</b>	<b>Bombardier Service Bulletin</b>	<b>Issue Date</b>
BD-700-1A11	700-1A11-32-031, Revision 01	December 7, 2022
BD-700-1A11	700-32-5021, Revision 01	December 7, 2022
BD-700-1A11	700-32-5507, Revision 01	December 7, 2022

**(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the applicable Bombardier service bulletin listed in figure 2 to paragraph (h) of this AD.

**Figure 2 to paragraph (h) – Credit Service Bulletins**

<b>Model</b>	<b>Bombardier Service Bulletin</b>	<b>Issue Date</b>
BD-700-1A10	700-32-044	November 24, 2022
BD-700-1A10	700-32-6021	November 24, 2022
BD-700-1A10	700-32-6507	November 24, 2022
BD-700-1A11	700-1A11-32-031	November 24, 2022
BD-700-1A11	700-32-5021	November 24, 2022
BD-700-1A11	700-32-5507	November 24, 2022

**(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 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-AIR-730-AMOC@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-2023-02, dated January 11, 2023, for related information. This Transport Canada AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1706.

(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](mailto: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) Bombardier Service Bulletin 700-32-044, Revision 01, dated December 7, 2022.

(ii) Bombardier Service Bulletin 700-32-6021, Revision 01, dated December 7, 2022.

(iii) Bombardier Service Bulletin 700-32-6507, Revision 01, dated December 7, 2022.

(iv) Bombardier Service Bulletin 700-1A11-32-031, Revision 01, dated December 7, 2022.

(v) Bombardier Service Bulletin 700-32-5021, Revision 01, dated December 7, 2022.

(vi) Bombardier Service Bulletin 700-32-5507, Revision 01, dated December 7, 2022.

(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 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](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on November 29, 2023.

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

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