DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0101; Project Identifier MCAI-2020-01084-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 report that the inboard multi-function spoiler (MFS) surfaces failed to deploy, which was caused by missing notches on the piston seal of the MFS power control units (PCUs). This proposed AD would require an inspection to determine if affected MFS PCUs are installed, and replacement of affected MFS PCUs. 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., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free phone: 1-866-538-1247 or direct-dial phone: 1-514-855-2999; email: ac.yul@aero.bombardier.com; Internet: http://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.

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-2021-0101; 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, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7362; 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 ADDRESSES. Include “Docket No. FAA-2021-0101; Project Identifier MCAI-2020-01084-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 https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

**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 Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7362; fax: 516-794-5531; 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.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2020-26, dated August 4, 2020 (referred to after this as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an
unsafe condition for certain Bombardier, Inc., Model BD-100-1A10 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-2021-0101.

This proposed AD was prompted by a report that the inboard MFS surfaces failed to deploy, which was caused by missing notches on the piston seal of the MFS PCUs. The FAA is proposing this AD to address MFS PCUs with improperly configured piston seals, which could cause degraded proportional lift dumping (PLD) function and could hinder the airplane from carrying out an emergency descent, resulting in structural damage and injury to occupants. See the MCAI for additional background information.

**Related Service Information under 1 CFR Part 51**

Bombardier has issued the following service information. This service information describes procedures for an inspection to determine if affected MFS PCUs are installed, and replacement of affected MFS PCUs. 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.

**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 accomplishing the actions specified in the service information described previously.

**Costs of Compliance**

The FAA estimates that this proposed AD affects 630 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

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<th>Estimated costs for required actions</th>
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<tr>
<td><strong>Labor cost</strong></td>
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<td>Up to 19 work-hours X $85 per hour = Up to $1,615</td>
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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.

**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-2021-0101; Project Identifier MCAI-2020-01084-T.
(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) action 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, serial numbers 20003 through 20457 inclusive, and 20501 through 22999 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by a report that the inboard multi-function spoiler (MFS) surfaces failed to deploy, which was caused by missing notches on the piston seal of the MFS power control units (PCUs). The FAA is issuing this AD to address MFS PCUs with improperly configured piston seals, which could cause degraded proportional lift dumping (PLD) function. This condition could hinder the airplane from carrying out an emergency descent, resulting in structural damage and injury to occupants.

(f) Compliance

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

(g) Definition of Affected Part

For the purpose of this AD, an affected MFS PCU is an MFS PCU that has a serial number of 0001 through 1410 inclusive, except for those MFS PCUs having the serial numbers listed in figure 1 to paragraph (g) of this AD and except for those with the suffix “A” at the end of the serial number (i.e., serial number 1025A).
(h) **Required Actions**

(1) Within 12 months after the effective date of this AD: Do an inspection to determine if affected MFS PCUs are installed on the airplane in accordance with Paragraph 2.B. of Bombardier Service Bulletin 100-27-17, Revision 03, dated June 19, 2020; or Bombardier Service Bulletin 350-27-010, dated June 19, 2020; as applicable. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the MFS PCU can be conclusively determined from that review.

(2) Within 12 months after the effective date of this AD: Replace any affected MFS PCUs with MFS PCUs that are not affected, in accordance with Paragraphs 2.C.,

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(i) Parts Installation Prohibition

As of the effective date of this AD, no person may install an affected MFS PCU, on any airplane.

(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 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; phone: 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 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 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) TCCA AD CF-2020-26, dated August 4, 2020, 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-2021-0101.

(2) For more information about this AD, contact Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: 516-228-7362; fax: 516-794-5531; email: 9-avs-nyaco-cos@faa.gov.

(3) For service information identified in this AD, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free phone: 1-866-538-1247 or direct-dial phone: 1-514-855-2999; email: ac.yul@aero.bombardier.com; Internet: http://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.

Issued on February 18, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
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