



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2024-0031; Project Identifier MCAI-2022-01307-T]

RIN 2120-AA64

### Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by 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 MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702); CL-600-2C11 (Regional Jet Series 550); CL-600-2D15 (Regional Jet Series 705); and CL-600-2D24 (Regional Jet Series 900) airplanes. This proposed AD was prompted by a determination that a potential crack of the tombstone fitting lug cannot be detected as the bushings remaining in place during accomplishment of the special detailed inspection (SDI) required by a certain airworthiness limitation (ALI) task. This proposed AD would require inspecting the tombstone fitting lug with a new SDI sub-surface ultrasound procedure when accomplishing the ALI task, as specified in a Transport Canada AD, which is proposed for incorporation by reference (IBR). This proposed AD would also require corrective actions if necessary. 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-2024-0031; 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 material that is proposed for IBR in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email [TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca](mailto:TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca). You may find this material on the Transport Canada website at [tc.canada.ca/en/aviation](https://tc.canada.ca/en/aviation). It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0031.

- 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.

**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](mailto: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-2024-0031; Project Identifier MCAI-2022-01307-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 this 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 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. 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-2022-54R1, dated October 4, 2022 (Transport Canada AD CF-2022-54R1) (also referred to after this as the MCAI), to correct an unsafe condition for certain MHI RJ Aviation ULC Model CL-600-2C10 (Regional Jet Series 700, 701 & 702); CL-600-2C11 (Regional Jet Series 550); CL-600-2D15 (Regional Jet Series 705); and CL-600-2D24 (Regional Jet Series 900) airplanes. Transport Canada AD CF-2022-54R1 superseded Transport Canada AD CF-2022-54, dated September 13, 2022 (Transport Canada AD CF-2022-54), to correct a reference to an incorrect maintenance requirements manual number.

Transport Canada AD CF-2022-54R1 states that MHI RJ discovered that the MHI RJ Non-Destructive Testing Manual (NDTM) Part 6, Procedure 53-61-121-250, associated with ALI Task 53-61-121, is not adequate to detect a potential crack of the tombstone fitting lug before the critical crack size is reached as the bushings remain in place during the SDI. Transport Canada AD CF-2022-54R1 mandates the use of new ultrasonic MHI RJ NDTM Part 4, Procedure 53-61-121-270, in conjunction with NDTM Part 6, Procedure 53-61-121-250, during accomplishment of the SDIs required by ALI Task 53-61-121.

The FAA is proposing this AD to address the undetected cracking of the tombstone fitting lug. If the crack is not detected, the tombstone fitting lug will eventually fail. The failure will cause a transfer of load to other engine attachment points, which will then be overloaded and compromised in their structural integrity. This can lead to a rapid failure mode, potentially resulting in the loss of the engine. You may

examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2024-0031.

### **Related Service Information Under 1 CFR Part 51**

Transport Canada AD CF-2022-54R1 specifies procedures for accomplishing a special detailed inspection for cracks of the engine forward support frame's tombstone top and bottom fitting lugs at frame fuselage station (FS) 1051.30, during the accomplishment of the SDIs required by ALI Task 53-61-121. 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 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, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements in this NPRM**

This proposed AD would require accomplishing the actions specified in Transport Canada AD CF-2022-54R1 described previously, except for any differences identified as exceptions in the regulatory text of this proposed AD, and except as discussed under "Difference Between this Proposed AD and the MCAI."

### **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result,

the FAA proposes to incorporate Transport Canada AD CF-2022-54R1 by reference in the FAA final rule. This proposed AD would, therefore, require compliance with Transport Canada AD CF-2022-54R1 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Service information required by Transport Canada AD CF-2022-54R1 for compliance will be available at regulations.gov under Docket No. FAA-2024-0031 after the FAA final rule is published.

**Difference Between this NPRM and the MCAI**

Transport Canada AD CF-2022-54R1 did not specify any corrective action for cracking found during the required inspection. This proposed AD would require repairing all cracks before further flight.

**Costs of Compliance**

The FAA estimates that this AD, if adopted as proposed, would affect 597 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed 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>
2 work-hours X \$85 per hour = \$170 (per interval)	\$0	\$170 (per interval)	\$101,490 (per interval)

The FAA has received no definitive data on which to base the cost estimates for the repairs specified in this proposed AD.

**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:

### **MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.):**

Docket No. FAA-2024-0031; Project Identifier MCAI-2022-01307-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 MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702); CL-600-2C11 (Regional Jet Series 550); CL-600-2D15 (Regional Jet Series 705); and CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category, as identified in Transport Canada AD CF-2022-54R1, dated October 4, 2022 (Transport Canada AD CF-2022-54R1).

#### **(d) Subject**

Air Transport Association (ATA) of America 53, Fuselage.

#### **(e) Unsafe Condition**

This AD was prompted by a determination that the MHI RJ Non-Destructive Testing Manual (NDTM) Part 6, Procedure 53-61-121-250, associated with Airworthiness Limitations (ALI) Task 53-61-121, is not adequate to detect a potential crack of the tombstone fitting lug as the bushings remain in place during the special detailed inspection (SDI). The FAA is issuing this AD to address the undetected cracking of the tombstone fitting lug. If the crack is not detected, the tombstone fitting lug will

eventually fail. The failure will cause a transfer of load to other engine attachment points, which will then be overloaded and compromised in their structural integrity. This can lead to a rapid failure mode, potentially resulting in the loss of the engine.

**(f) Compliance**

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

**(g) Requirements**

Except as required by paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada CF-2022-54R1.

**(h) Exceptions to Transport Canada CF-2022-54R1**

(1) Where Transport Canada AD CF-2022-54R1 refers to the effective date of AD CF-2022-54 (September 27, 2022), this AD requires using the effective date of this AD.

(2) Where paragraph A. of Transport Canada AD CF-2022-54R1 specifies inspecting “For aeroplanes that, as of the effective date of AD CF-2022-54 (27 September 2022), have not been inspected as required by MRM CSP B-053 Part 2 ALI Task 53-61-121,” this AD requires replacing those words with “For all airplanes.”

(3) This AD does not adopt paragraph B. of Transport Canada AD CF-2022-54R1.

(4) Where paragraph A. of Transport Canada AD CF-2022-54R1 specifies inspecting “within the intervals in MRM CSP B-053 Part 2 for ALI Task 53-61-121,” for this AD, the initial compliance time for the task is within the “threshold” specified in the service information identified in paragraph A. Transport Canada AD CF-2022-54R1 or within 90 days after the effective date of this AD, whichever occurs later.

**(i) Crack Repair**

If any cracking is found during the actions required by paragraph (g) of this AD, repair the cracking before further flight using a method approved by the Manager,

International Validation Branch, FAA; or Transport Canada; or MHI RJ Aviation ULC's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DOA-authorized signature.

**(j) No Reporting Requirement**

Although the service information referenced in Transport Canada AD CF-2022-54R1 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(k) 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 the address identified in paragraph (l) of this AD. Information may be emailed to: 9-AVS-NYACO-COS@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 MHI RJ Aviation ULC's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(l) Additional Information**

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.

**(m) 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) Transport Canada AD CF-2022-54R1, dated October 4, 2022.

(ii) [Reserved]

(3) For Transport Canada AD CF-2022-54R1, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca. You may find this Transport Canada AD on the Transport Canada website at [tc.canada.ca/en/aviation](https://tc.canada.ca/en/aviation).

(4) 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.

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

Issued on January 6, 2024.

Caitlin Locke,  
Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.

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