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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-0031; Project Identifier MCAI-2022-01307-T; Amendment 39-22729; AD 2024-07-08]

RIN 2120-AA64

Airworthiness Directives; MHI RJ Aviation ULC (Type Certificate Previously Held by Bombardier, Inc.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting 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 AD was prompted by a determination that a potential crack of the tombstone fitting lug cannot be detected as the bushings remain in place during accomplishment of the special detailed inspection (SDI) required by a certain airworthiness limitation (ALI) task. This AD requires 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 incorporated by reference. This AD also requires corrective actions if necessary. 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 a certain publication 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-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 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 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; website tc.canada.ca/en/aviation.

- 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](https://www.regulations.gov) under Docket No. FAA-2024-0031.

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.

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 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. The NPRM published in the *Federal Register* on January 16, 2024 (89 FR 2517). The NPRM was prompted by Transport Canada AD CF-2022-54R1, dated October 4, 2022, issued by Transport Canada, which is the aviation authority for Canada (Transport Canada AD CF-2022-54R1) (also referred to as the MCAI). Transport Canada AD CF-2022-54R1 superseded Transport Canada AD CF-2022-54, dated September 13, 2022, to correct a reference to an incorrect maintenance requirements manual number. The MCAI 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.

In the NPRM, the FAA proposed to require inspecting the tombstone fitting lug with a new SDI sub-surface ultrasound procedure when accomplishing the ALI task, as specified in Transport Canada AD CF-2022-54R1. The NPRM also proposed to require corrective actions (repairing cracks) if necessary. 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.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0031.

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 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 the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 597 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
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 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

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:

2024-07-08 MHI RJ Aviation ULC (Type Certificate Previously Held by

Bombardier, Inc.): Amendment 39-22729; Docket No. FAA-2024-0031; Project

Identifier MCAI-2022-01307-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 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 that text 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. of 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.

(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 or email fr.inspection@nara.gov.

Issued on April 2, 2024.

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

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