



# AIRWORTHINESS DIRECTIVE

*This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) with ADs.*

**Number:**

CF-2022-54R1

**Effective Date:**

18 October 2022

**ATA:**

53

**Type Certificate:**

A-276

**Subject:**

Fuselage – Forward Engine Support Frame Fuselage Station 1051.30 – Inadequate Special Detailed Inspection of the Tombstone Fitting Part Numbers MM670-36153/36154 and MM690-36153/36154

**Revision:**

Supersedes AD CF-2022-54, issued 13 September 2022.

**Applicability:**

MHI RJ Aviation ULC. (MHIRJ) (formerly Bombardier Inc.) aeroplanes:

Model CL-600-2C10 and CL-600-2C11, serial numbers 10002 and subsequent,

Model CL-600-2D15 and CL-600-2D24, serial numbers 15001 and subsequent.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

MHIRJ discovered that the Non Destructive Testing Manual (NDTM) Part 6 surface Special Detailed Inspection (SDI) 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 before the critical crack size is reached as the bushings remain in place during the SDI. In order to properly inspect the tombstone fitting lug with the bushings in place, a new SDI sub-surface ultrasound procedure was developed.

If not corrected, undetected cracking of the tombstone fitting lug could lead to a loss of engine attachment to the airframe.

AD CF-2022-54 mandated the use of the new Ultrasonic NDTM Part 4 Procedure 53-61-121-270 in conjunction with NDTM Part 6 Procedure 53-61-121-250 when performing the SDIs required by ALI Task 53-61-121.

After AD CF-2022-54 was issued, a typographical error was discovered in the Maintenance Requirements Manual (MRM) number referenced in the Corrective Actions section. This AD revision corrects this error and otherwise maintains the requirements of AD CF-2022-54.

**Corrective Actions:**

- A. 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; within the intervals specified in MRM CSP B-053 Part 2 for ALI Task 53-61-121, inspect the tombstone fitting Part Number (P/N) MM670-36153/36154 or P/N MM690-36153/36154 in accordance with ALI Task 53-61-121 using NDTM Part 4 Procedure 53-61-121-270 as published in NDTM CSP B-010 Part 4, dated 25 August 2021, in conjunction with NDTM Part 6 Procedure 53-61-121-250.
- B. For aeroplanes that, as of the effective date of AD CF-2022-54 (27 September 2022), have been

inspected as required by MRM CSP B-053 Part 2 ALI Task 53-61-121 but used only NDTM Part 6 Procedure 53-61-121-250; inspect the tombstone fitting P/N MM670-36153/36154 or P/N MM690-36153/36154 in accordance with ALI Task 53-61-121 using NDTM Part 4 Procedure 53-61-121-270 as published in NDTM CSP B-010 Part 4, dated 25 August 2021, no later than 2 years from the effective date of this AD.

Note: The SDI required by Corrective Action B. does not affect the interval at which the next SDI, required by MRM CSP B-053 Part 2 ALI Task 53-61-121, is to be performed.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Philippe Ngassam  
Director, National Aircraft Certification  
Issued on 4 October 2022

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