



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-2022-32

Effective Date:

27 June 2022

ATA:

26

Type Certificate:

A-276

Subject:

Fire Protection – Fire Extinguishing System – Fire Extinguisher (FIREX) Bottle Tests Omitted (Cargo/Engine/Auxiliary Power Unit (APU))

Applicability:

MHI RJ Aviation ULC. (formerly Bombardier Inc.) model CL-600-2B19, CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes, all serial numbers.

Compliance:

As indicated below, unless already accomplished.

Background:

During a meeting with MHI RJ Aviation ULC. (MHIRJ) operators, it was discovered that the 10-year (120 months) periodic hydrostatic tests of the engine and APU fire extinguishing bottles on CL-600-2B19 aeroplanes (Maintenance Review Board (MRB) tasks 26-21-07-06 and 26-22-07-06) and the engine/APU and cargo compartment fire extinguishing bottles on CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes (MRB tasks 262000-202 and 262500-201) were not performed. This could mean that the functional test of the pressure switch (CL-600-2B19 aeroplanes in accordance with Meggitt Component Maintenance Manual (CMM) 26-22-49 and CMM 26-23-31, and CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes in accordance with KIDDE CMM 26-21-86 and CMM 26-21-87), which should be performed as part of the MRB tasks listed above, may have been omitted on several aeroplanes in service. Failure to perform the pressure switch test and the 10-year overhaul/restoration of the FIREX bottles could result in a dormant loss of fire extinguishing capability.

To address this unsafe condition, this AD mandates new Certification Maintenance Requirement (CMR) tasks C26-25-115-02 and C26-20-131-04 for CL-600-2B19 aeroplanes, and requires changes to the existing Candidate Certification Maintenance Requirement (CCMR) interval limitations for the tasks identified as I.D. #132/136 Restoration (Pressure Switch test) of the Engine and APU Extinguisher Bottles and I.D. #115/116 Restoration (Pressure Switch test) of the Cargo Compartment Fire Extinguisher Bottles for CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes. These two CCMR interval limitations are identified along with the MRB task numbers 262000-202 and 262500-201 for ease of tracking by the operator.

Corrective Actions:

Part I – Applicable to CL-600-2B19 aeroplanes

A. New CMR task C26-25-115-02 Restoration (Pressure Switch test) of the Cargo fire extinguisher bottle

1. Unless already accomplished, within 60 days from the effective date of this AD, incorporate the new CMR task number C26-25-115-02 Restoration (Pressure Switch test) of the Cargo fire extinguisher bottle, as introduced by Temporary Revision (TR) 2A-74, dated 5 June 2020, in

MRM CSP A-053 Part 2 Appendix A.

2. Within the thresholds and intervals in the task identified above, accomplish the applicable maintenance task. TR 2A-74 provides the phase-in period for performing the first inspection in accordance with CMR task C26-25-115-02.
 3. Compliance with superseding TRs or later revisions of the MRM, approved by Transport Canada, also meets the intent of Part I.A. of this AD.
- B. New CMR task C26-20-131-04 Restoration (Pressure Switch test) of Engine and APU fire extinguisher bottles
1. Unless already accomplished, within 60 days from the effective date of this AD, incorporate the new CMR task number C26-20-131-04 Restoration (Pressure Switch test) of Engine and APU fire extinguisher bottles, as introduced by TR 2A-73, dated 5 June 2020, in the MRM CSP A-053 Part 2 Appendix A.
 2. Within the thresholds and intervals in the task identified above, accomplish the applicable maintenance task. TR 2A-73 provides the phase-in period for performing the first inspection in accordance with CMR task C26-20-131-04.
 3. Compliance with superseding TRs or later revisions of the MRM, approved by Transport Canada, also meets the intent of Part I.B. of this AD.

Part II – Applicable to CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600- 2E25 aeroplanes

- A. New CCMR Interval Limitation Item I.D. #115/116 Restoration (Pressure Switch test) of the Cargo Compartment Fire Extinguisher Bottles (MRB task number 262500-201)
1. Unless already accomplished, within 60 days from the effective date of this AD, incorporate the new CCMR Interval Limitation Item I.D. #115/116 Restoration (Pressure Switch test) of the Cargo Compartment Fire Extinguisher Bottles, as introduced by TR ALI-0749, dated 27 April 2021, in the MRM CSP B-053 Part 2 Appendix A2.
 2. For cargo compartment fire extinguisher bottles that had the restoration (previously called hydrostatic test) performed on or before 5 June 2014, accomplish the applicable maintenance task within 48 months from the issue date of TR ALI-0749 (27 April 2021).
 3. For cargo compartment fire extinguisher bottles that had the restoration (previously called hydrostatic test) performed after 5 June 2014, accomplish the applicable maintenance task within the interval limitation in the task identified above.
 4. Compliance with superseding TRs or later revisions of the MRM, approved by Transport Canada, also meets the intent of Part II.A. of this AD.
- B. New CCMR Interval Limitation Item I.D. #132/136 Restoration (Pressure Switch test) of the Engine and APU Extinguisher Bottles (MRB task number 262000-202)
1. Unless already accomplished, within 60 days from the effective date of this AD, incorporate the new CCMR Interval Limitation Item I.D. #132/136 Restoration (Pressure Switch test) of the Engine and APU Extinguisher Bottles, introduced by TR ALI-0747, dated 27 April 2021, in the MRM CSP B-053 Part 2 Appendix A2.
 2. For engine and/or APU fire extinguisher bottles that had the restoration (previously called hydrostatic test) performed on or before 5 June 2014, accomplish the applicable maintenance task within 48 months from the issue date of TR ALI-0747 (27 April 2021).
 3. For engine and/or APU fire extinguisher bottles that had the restoration (previously called hydrostatic test) performed after 5 June 2014, accomplish the applicable maintenance task within the interval limitation in the task identified above.
 4. Compliance with superseding TRs or later revisions of the MRM, approved by Transport Canada, also meets the intent of Part II.B. of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Matthew Weeks
Acting Chief, Continuing Airworthiness
Issued on 13 June 2022

Contact:

Mihaela Kramer, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.