



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-2022-66

Effective Date:

8 December 2022

ATA:

26

Type Certificate:

A-276

Subject:

Fire Protection – Inspection and Replacement of Defective Cargo Fire Extinguisher Containers

Applicability:

MHI RJ Aviation ULC. (formerly Bombardier Inc.) model 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:

The manufacturer, Collins (Kidde), of the high rate of discharge (HRD) and low rate of discharge (LRD) cargo fire extinguisher containers has issued a notice of escape identifying a manufacturing quality escape concerning the installation of the Halon metering device within a limited batch of components. During assembly, the Halon metering device was not fully seated in the discharge head of some cargo fire extinguisher containers. The threads in the discharge neck were not re-tapped after the discharge disc was welded. The re-tap acts as a stress relief and also ensures final thread dimensions. This omission resulted in an insufficient thread depth, which prevented the Halon metering device from being fully seated. This will result in an insufficient seal and could cause an increased Halon mass flow rate through the metering device during discharge, which in turn could reduce the duration of the Halon flow. This condition, if not corrected and when combined with a cargo fire, could lead to a reduction in the fire extinguishing and suppression capabilities of the system.

This AD mandates the inspection of the cargo fire extinguisher container serial numbers and the replacement of the affected container(s) with a serviceable part in accordance with the MHI RJ Aviation (MHIRJ) Service Bulletin (SB).

Corrective Actions:

For the purpose of this AD, the following definition applies:

The SB: MHIRJ SB 670BA-26-014, dated 28 July 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part I – Inspection of Cargo Fire Extinguisher Container Serial Numbers

Within 1000 hours air time or 6 months, whichever occurs first, from the effective date of this AD, inspect the serial numbers of the HRD and LRD cargo fire extinguisher containers in accordance with Section 2.B. of the Accomplishment Instructions of the SB, to determine if they are affected by this AD.

- A. If the HRD and/or LRD container serial numbers are listed in Section 2.B. of the Accomplishment Instructions of the SB, proceed to Part II of this AD.
- B. If the HRD and/or LRD container serial numbers are not listed in Section 2.B. of the Accomplishment Instructions of the SB, Part II of this AD is not required. Proceed to Part III of this AD.

Part II – Replacement of Cargo Fire Extinguisher Containers

- A. If the serial numbers of **both** the HRD and LRD containers are listed in Section 2.B. of the Accomplishment Instructions of the SB, within 4500 hours air time from the effective date of this AD, remove and replace the HRD and LRD cargo fire extinguisher containers in accordance with Section 2.B. of the Accomplishment Instructions of the SB.
- B. If the serial number of **either** the HRD or the LRD container is listed in Section 2.B. of the Accomplishment Instructions of the SB, within 8800 hours air time from the effective date of this AD, remove and replace the affected HRD or LRD cargo fire extinguisher container in accordance with Section 2.B. of the Accomplishment Instructions of the SB.

Part III – Installation Prohibition of Affected Parts

As of the effective date of this AD, it is prohibited to install an HRD or LRD cargo fire extinguisher container with a serial number listed in Section 2.B. of the Accomplishment Instructions of the SB, as a replacement part, unless it is ink-stamped with a circled “G” signifying the incorporation of Kidde SB Fire Extinguisher-26-A.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Daniel Gosselin
Acting Chief, Continuing Airworthiness
Issued on 24 November 2022

Contact:

Danilo Verrelli, 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.