



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-2023-31

Effective Date:

22 May 2023

ATA:

25

Type Certificate:

A-236

Subject:

Equipment/Furnishings – Fixed Emergency Locator Transmitter (ELT)

Applicability:

Airbus Canada Limited Partnership (formerly C Series Aircraft Limited Partnership, Bombardier Inc.) aeroplanes:

Model BD-500-1A10, serial numbers 50010 through 50018 and 50020 through 50047;

Model BD-500-1A11, serial numbers 55003 through 55016, 55018 through 55068 and 55071 through 55074.

Compliance:

Within 48 months from the effective date of this AD, unless already accomplished.

Background:

A design review of the fixed ELT containing lithium batteries found that certain original design assumptions were incorrect. It was found that the heat generated by a thermal runaway event, caused by the ELT lithium batteries, would not be sufficiently mitigated by the cooling of the aircraft structure by the outside air. As a result, a thermal runaway could lead to an uncontrolled fire of the fixed ELT, Part Number (P/N) 51090170-1, which may compromise the structural integrity of the aircraft structure in the area where the fixed ELT is installed.

This AD is issued to require a replacement of the ELT with a new part number (P/N). The new ELT, P/N 51090130-2, does not rely on cooling from the outside air to mitigate the possibility of damage to the structure relating to the potential of a thermal runaway event.

Corrective Actions:

Replace the ELT P/N 51090170-1 with ELT P/N 51090130-2, in accordance with the Accomplishment Instructions of Airbus Canada Service Bulletin (SB) BD500-256006 Issue 003, dated 2 February 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

This paragraph gives credit for the replacement of ELT P/N 51090170-1 with ELT P/N 51090130-2 before the effective date of this AD when done in accordance with the Accomplishment Instructions of Airbus Canada SB BD500-256006 Issue 001, dated 15 March 2021, or Issue 002, dated 24 November 2021.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 8 May 2023

Contact:

Scott W. Wales, 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.