



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-2021-10

Effective Date:

1 April 2021

ATA:

25

Type Certificate:

A-236

Subject:

Equipment/Furnishings – Vibration on Fuselage and Emergency Locator Transmitter (ELT) Antenna

Applicability:

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

Model BD-500-1A10, serial numbers 50001 and subsequent;

Model BD-500-1A11, serial numbers 55001 and subsequent,

equipped with a Gogo 2Ku antenna radome part number (P/N) P23743-605 or P/N P23743-606.

Compliance:

As indicated below, unless already accomplished.

Background:

Two ELT antenna failures have been reported, including one case where the antenna departed the aeroplane causing minor damage to the vertical stabilizer skin. The investigation revealed that these ELT antenna failures were caused by vibration loads induced by air vortices shed by the Gogo 2Ku antenna radome. Uncorrected, this situation can lead to the loss of the ELT antenna and the development of fuselage cracks that can result in an inability to maintain cabin pressure.

To mitigate the risks associated with the loss of the ELT antenna and inability to maintain cabin pressure, this AD requires replacement of the ELT antenna with a new ELT antenna at a specified interval and a repetitive inspection of the exterior fuselage skin around the ELT antenna attachment area.

Corrective Actions:

A. Within the applicable compliance time indicated in Table 1 below:

Replace the ELT antenna with a new ELT antenna and inspect the exterior fuselage skin around the ELT antenna attachment holes for damage, repairing any damage found, in accordance with the Accomplishment Instructions of Airbus Canada Limited Partnership Service Bulletin (SB) BD500-256008 Issue 001, dated 15 January 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: The above-mentioned SB requires removed ELT antennas and associated information to be returned to Airbus Canada Limited Partnership. This AD does not require removed ELT antennas or associated information to be returned to Airbus Canada Limited Partnership, though doing so will assist the investigation and possible development of further corrective actions.

Table 1: Compliance Time

For aeroplanes with ELT Antenna Usage, as of the effective date of this AD	Compliance Time
3500 total hours air time or more accumulated on the ELT antenna	Within 200 hours air time from the effective date of this AD
1650 total hours air time or more accumulated on the ELT antenna, but less than 3500 total hours air time accumulated on the ELT antenna	Within 850 hours air time from the effective date of this AD, or before the ELT antenna has accumulated 3700 total hours air time, whichever occurs first
Less than 1650 total hours air time accumulated on the ELT antenna	Before the ELT antenna has accumulated 2500 total hours air time

- B. Following the initial ELT antenna replacement and inspection required by Paragraph A of this AD, at intervals not to exceed 2500 hours air time, repeat the ELT antenna replacement and inspection required by Paragraph A of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 18 March 2021

Contact:

Hilary Ross, 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.