



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) to ADs.

Number:

CF-2020-04

Effective Date:

23 March 2020

ATA:

28

Type Certificate:

A-236

Subject:

Fuel – Accumulation of Electrostatic Charge Inside the Fuel Tank During Refueling

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.

Compliance:

As indicated below, unless already accomplished.

Background:

Design review identified rib 0 of the Center Wing Box (CWB) as an area where a single failure of a clamshell type refuel/defuel line coupling could potentially lead to the accumulation of dangerous levels of electrostatic charges within the fuel tank, which can lead to fuel tank ignition. Airbus Canada developed a redesign of the centre tank refuel/defuel line installation, which replaces the clamshell type refuel/defuel line coupling with a threaded type fuel coupling at rib 0 and installs an additional support bracket and clamp at rib 0 in order to minimize the risk of fuel line disconnect. This AD mandates the incorporation of this redesign to mitigate the risk of fuel tank ignition. This AD also prohibits use of a maintenance procedure to ensure that the support clamp introduced by this redesign is within the scope of Fuel System Limitation (FSL) F28-23-00-01.

Corrective Actions:

Part I – Applicable to BD-500-1A10 and BD-500-1A11 Aeroplanes, Serial Numbers 50001 Through 50018, 50020 Through 50041, 55001 Through 55016, 55018 Through 55054, and 55056 Through 55057 – Fuel System Modifications

Within 12 months or 4000 hours air time, whichever occurs first, from the effective date of this AD, replace the clamshell type refuel/defuel line coupling in the CWB at rib 0 with a threaded type fuel coupling and install an additional support bracket and clamp in the CWB at rib 0, in accordance with Airbus Canada Service Bulletin (SB) BD500-282003 Issue 002, dated 12 December 2019, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Compliance with Airbus Canada SB BD500-282003 Issue 001, dated 23 August 2019, prior to the effective date of this AD, satisfies the requirements of Part I of this AD.

Part II – Applicable to BD-500-1A10 and BD-500-1A11 Aeroplanes, Serial Numbers 50001 and Subsequent and 55001 and Subsequent – Maintenance Task Prohibition

As of the effective date of this AD, it is prohibited to use Airbus Canada Aircraft Maintenance Publication (AMP) Data Module (DM) BD500-A-J28-23-40-01AAA-310D-A, Issue 001, dated 22 June 2016 or earlier,

on BD-500-1A10 and BD-500-1A11 aeroplanes. Airbus Canada AMP DM BD500-A-J28-23-40-01AAA-310D-A, Issue 002, dated 4 September 2019 or later, must be used instead.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 9 March 2020

Contact:

Hilary Ross, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.