



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-2020-07

Effective Date:

31 March 2020

ATA:

33

Type Certificate:

A-177

Subject:

Lights – Emergency Light Battery Pack Corrosion

Applicability:

Bombardier Inc. model BD-700-1A10 aeroplanes, serial numbers 9002, 9003, 9011, 9016, 9020, 9022 through 9025, 9029, 9031, 9032, 9036, 9039 through 9044, 9046 through 9058, 9060 through 9065, 9067 through 9081, 9083 through 9106, 9108 through 9122, 9124 through 9126, 9128, 9129, 9133, 9134, 9136 through 9139, 9141 through 9148, 9150, 9151, 9153, 9159, 9162, 9163, 9165, and 9169.

Compliance:

As indicated below, unless already accomplished.

Background:

The presence of smoke and signs of an overheating condition from the Emergency Light Battery pack (ELB) has been reported in-service. The investigation found excessive corrosion surrounding the internal lead acid batteries, which caused an electrical short circuit that led to the observed smoke and overheating condition. The reported event occurred in 2018 and the affected batteries were manufactured in 2004. The ELB manufacturer recommends a preventative replacement of the internal ELB batteries every 48 months, as this is considered the maximum life span for these batteries.

Bombardier Inc. (BA) has issued a service bulletin (SB) to inspect and replace the ELBs if their internal batteries are 4 years old or older. This AD mandates compliance with the aforementioned SB and requires incorporation of the new restoration task into the aeroplane maintenance schedule in order to minimize the risk of onboard fire.

Corrective Actions:

Part I – Inspection by SB

Within 15 months from the effective date of this AD, inspect and if necessary replace the ELB in accordance with BA SB 700-33-024, Basic Issue, dated 13 May 2019, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Aeroplanes that have performed the restoration task identified in Part II of this AD, before the effective date of this AD, already meet the intent of Part I of this AD, and are not required to perform the inspection by SB.

Part II – Supplemental Time Limits/Maintenance Checks (STLMC) Task Incorporation

Within 60 days from the effective date of this AD, amend the aeroplane maintenance schedule by incorporating STLMC Chapter 5 Task Number 33-51-54-603, Restoration of the Emergency Lighting Batteries, into the BD-700-1A10 STLMC, in accordance with the applicable STLMC Temporary Revision (TR) as indicated in Table 1 below.

Initial compliance with STLMC task 33-51-54-603 is required as follows:

- a) If at the time of compliance with Part I of this AD both ELBs were replaced: not to exceed 48 months from compliance with Part I of this AD.
- b) If neither ELB or one ELB was replaced at the time of compliance with Part I of this AD: not to exceed 48 months from the earliest of the following dates:
 - i. For each ELB, the battery replacement date, if it is indicated; or
 - ii. For each ELB that does not have a battery replacement date indicated, the date of manufacture.

Thereafter, repeat STLMC task 33-51-54-603 at the interval specified within that task.

The following STLMC TRs misidentified the required restoration task as task 33-51-54-602:

- a) TR 05-19040401, dated 4 April 2019;
- b) TR 05-19040301, dated 3 April 2019; or
- c) TR 05-19032701, dated 27 March 2019.

Aeroplanes that have performed the restoration task required by STLMC task 33-51-54-602, in accordance with one of the above TRs before the effective date of this AD, meet the intent of the Part I and the initial compliance requirement of Part II of this AD. These aeroplanes are required to perform STLMC task 33-51-54-603 within 48 months from completing STLMC task 33-51-54-602 and thereafter at intervals indicated within STLMC task 33-51-54-603.

Table 1

Aeroplane Serial Number	STLMC TR
9002, 9003, 9011, 9016, 9020, 9022 through 9025, 9029, 9031, 9032, 9036, 9039 through 9044, 9046 through 9058, 9060 through 9065, 9067 through 9081, 9083 through 9106, 9108 through 9122, and 9124	TR 05-19091701, dated 17 September 2019
9125, 9126, 9128, 9129, 9133, 9134, 9136 through 9139, 9141 through 9148, 9150, 9151, and 9153	TR 05-19091704, dated 17 September 2019
9159, 9162, 9163, 9165, and 9169	TR 05-19091705, dated 17 September 2019

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 17 March 2020

Contact:

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