



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-2020-46

Effective Date:

1 December 2020

ATA:

24

Type Certificate:

A-234

Subject:

Electrical Power – Misleading Indication

Applicability:

Bombardier Inc. model BD-100-1A10 aeroplanes, serial numbers 20003 and subsequent.

Compliance:

Within 60 days from the effective date of this AD, unless already accomplished.

Background:

There have been multiple in-service reports of erratic electrical system status on the push button annunciators (PBA) and the engine instrument and crew alerting system (EICAS), while on-ground and during flight. A few of those incidents resulted in the aeroplane experiencing momentary loss of electrical power and loss of flight displays following flight crew actions.

The erroneous indications could mislead the pilots into turning off active electrical power sources, leading to partial or complete loss of electrical power. Loss of electrical power could result in the loss of flight displays and reduced controllability of the aeroplane.

The investigation is ongoing and as mitigating action, this AD mandates the revision of Electrical Emergency and Non-Normal Procedures to the Airplane Flight Manual (AFM) to address the aforementioned unsafe condition. The Quick Reference Handbook (QRH) was also modified by Bombardier.

Corrective Actions:

- A. Amend the applicable AFM in accordance with Table 1 below, by incorporating the revision of the Electrical Emergency and Non-Normal Procedures to inform the pilots not to turn off active generators in the event of an erroneous electrical status indication.

Table 1

Aeroplane Model	AFM Procedure	AFM Revision
BD-100-1A10 CH300	Electrical Emergency and Non-Normal Procedures found in Sections 03-19 and 05-19	AFM CSP 100-1, Revision 58, dated 15 January 2020, or later revisions of this procedure approved by Transport Canada.
BD-100-1A10 CH350	Electrical Emergency and Non-Normal Procedures found in Sections 03-19 and 05-19	AFM CH 350 AFM, Revision 24, dated 15 January 2020, or later revisions of this procedure approved by Transport Canada.

- B. Advise all flight crews of the changes introduced by the approved Transport Canada AFM Revisions listed above and thereafter operate the aeroplane accordingly.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 17 November 2020

Contact:

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