



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-2016-12

Effective Date:

11 May 2016

ATA:

33

Type Certificate:

A-142

Subject:

Lights – Emergency Lighting – Heat Damage to Emergency Lights Power Supply Negative Interlock and Ground Wires

Applicability:

Bombardier Inc. model DHC-8-400, -401 and -402 aeroplanes, serial numbers 4001, 4003 through 4507.

Compliance:

Within 6000 hours air time or 36 months, whichever occurs first, from the effective date of this AD.

Background:

There have been several reports of Interior Emergency Lights remaining “ON” following routine operational checks of the Emergency Light System. During these events, the system could not be deactivated and the associated circuit breaker was also found tripped. The events were caused by the overheating of the negative interlock and ground wires at the Emergency Light System Power Supplies.

Investigation has determined that the wire gauge of the negative interlock and ground wiring is incompatible with the current load experienced during the Emergency Light System operational check and this has led to the degradation of the wiring insulation.

This AD is being issued to mandate the change of the wiring gauge from 22 to 20 American wire gauge (AWG) for the affected Emergency Lights Power Supplies wiring.

Corrective Actions:

Incorporate Bombardier Modsum 4-126620 to change the wire gauge. Bombardier Service Bulletin (SB) 84-33-12, revision A, dated 19 January 2016, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for installation of the wiring.

Aeroplanes that have incorporated Bombardier SB 84-33-12, initial revision, dated 29 September 2015, meet the intent of this AD, and no further action is required.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 27 April 2016

Contact:

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