

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:	Effective Date:
CF-2016-19R2	1 May 2019
ATA:	Type Certificate:
30	A-131

Subject:

Cold Weather Operations - Introduction of Low Temperature Ground Wing Anti-Ice System

Revision:

Supersedes AD CF-2016-19R1, issued 17 June 2016

Applicability:

Bombardier Inc. model CL-600-2B19 aeroplanes, serial numbers 7003 and subsequent.

Compliance:

As indicated below, unless already accomplished.

Background:

Accumulation of snow, slush or ice on the wing leading edges and upper wing surfaces during aeroplane prolonged ground operation can severely reduce the controllability of the aeroplane during take-off by causing premature stall with an uncontrollable wing drop at low altitude and subsequent loss of the aeroplane.

To prevent take-off with contaminated wings, Bombardier implemented a design change that provides automatic activation of the wing anti-ice system while on the ground under certain weather conditions. This AD mandates this modification as an additional safety measure when the aeroplane is operated in adverse weather conditions.

Revision 1 of this AD was issued to correct the statement in Corrective Actions section, Part I, paragraph A.2 that makes an erroneous reference to an Aircraft Flight Manual (AFM) Temporary Revision (TR) instead of an AFM Revision.

Revision 2 of this AD incorporates the following changes:

- Mandates Revision B of Bombardier Service Bulletin (SB) 601R-30-034 which includes missing instructions and hardware for the cockpit control panel connector. It also includes instructions to inspect the connector installation and install proper hardware for aeroplanes that have incorporated a previous issue of the SB.
- 2. Incorporates a new Certification Maintenance Requirements (CMR) task for the functional check of the Left Low Heat Monitoring Test Relay.

Corrective Actions:

Part I – Aircraft Flight Manual Change

A. Within 30 days from the effective date of Revision 1 of this AD (24 June 2016), accomplish the following:



- 1. Amend the Transport Canada AFM CSP A-012 by incorporating revision 66, dated 22 April 2016, or later revisions of this procedure approved by Transport Canada.
- 2. Following incorporation of the above mentioned procedures, advise all flight crews of the changes detailed in the above mentioned AFM Revision.

Part II – Maintenance Requirement Manual (MRM) Change

- Within 30 days from the effective date of Revision 1 of this AD (24 June 2016), amend the aeroplane MRM by incorporating tasks C30-12-141-01 and C30-10-141-05 as detailed in the TR 2A-64 and 2A-65, dated 14 April 2016 or later revisions of these tasks approved by Transport Canada.
- 2. Within 30 days from the effective date of Revision 2 of this AD, amend the aeroplane MRM by incorporating task C30-12-141-02 as detailed in the TR 2A-70, dated 13 July 2018, or later revisions of this task approved by Transport Canada.

Part III – Installation of Supplemental Low Temperature Ground-Wing Anti-Icing System (LTGWAIS) for Take-Off Safety Enhancement (TOSE)

Within 11 000 hours air time or 5 years, whichever occurs first, from the effective date of Revision 1 of this AD (24 June 2016), modify the wing anti-ice system by installing the LTGWAIS. SB 601R-30-034, Revision B dated 7 June 2018, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for installation of the LTGWAIS.

Part IV - Installation of Electrical Connector J903/P903 Attaching Hardware of the LGTWAIS Panel

Aeroplanes that have incorporated SB 601R-30-034, Revision A, dated 24 February 2017, or earlier revision: within 11 000 hours air time or 5 years, whichever occurs first, from the effective date of Revision 1 of this AD (June 24 2016), perform Part F of SB 601R-30-034, Revision B, dated 7 June 2018, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Aeroplanes that have incorporated SB 601R-30-034, Revision B, dated 7 June 2018 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada meet the requirements of Part IV of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr Chief, Continuing Airworthiness Issued on 17 April 2019

Contact:

Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail <u>AD-CN@tc.gc.ca</u> or any Transport Canada Centre.