



# 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-2017-07

**Effective Date:**

22 February 2017

**ATA:**

30

**Type Certificate:**

A-131

**Subject:**

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

**Applicability:**

Bombardier Inc. model CL-600-2B16 (604 variant) aeroplanes, serial numbers 5301 through 5665, 5701 through 5990, 6050 through 6062, and 6066.

**Compliance:**

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

**Background:**

Accumulation of snow, slush or ice on the wing leading edges and upper wing surfaces caused by prolonged ground operations can severely reduce the controllability of the aeroplane during take-off. This accumulation could cause a premature stall with an uncontrollable wing drop at low altitude, which in turn could result in the loss of the aeroplane.

To prevent take-off with contaminated wings, Bombardier implemented a design change that enables activation of the low temperature ground wing anti-ice system for ground operation when the crew activates the cowl anti-ice system. The modification mandated by this AD, along with actions mandated by the AD CF-2005-03 and AD CF-2008-16R1, completes the actions undertaken by Transport Canada to improve safety of the Challenger fleet when operated in adverse weather conditions.

**Corrective Actions:**

**Part I – Aircraft Flight Manual (AFM) Change**

Within 30 days from the effective date of this AD, amend the Transport Canada approved AFM as detailed in the table below or later revisions of these procedures approved by Transport Canada.

Aeroplane Serial Number	Airplane Flight Manual	Revision	Issue date
5301 through 5665	PSP 604-1	Revision 103	28 November 2016
5701 through 5990	PSP 605-1	Revision 41	28 November 2016
6050 through 6061	PSP 650-1	Revision 6	28 November 2016

**Part II – Time Limits Maintenance Checks (TLMC) Change:**

Within 30 days from the effective date of this AD, amend the aeroplane TLMC Manual by incorporating tasks 30-12-00-103, 30-12-00-102 and 30-22-00-101 as detailed in the table below or later revisions of these tasks approved by Transport Canada.

<b>Aeroplane Serial Number</b>	<b>TLMC Manual</b>	<b>Revision</b>	<b>Issue Date</b>
5301 through 5665	CH 604 TLMC	Revision 26	9 June 2016
5701 through 5990	CH 605 TLMC	Revision 14	9 June 2016

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

Within 60 months from the effective date of this AD, install the LTGWAIS. Bombardier Aerospace Service Bulletins (SBs) listed in the table below, or later revisions of these SBs approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for installation of the LTGWAIS.

<b>Aeroplane Serial Number</b>	<b>SB Number</b>	<b>Revision</b>	<b>Issue Date</b>
5301 through 5665	604-30-004	Revision 2	18 October 2016
5701 through 5990	605-30-001	Revision 2	18 October 2016
6050 through 6058, 6060 through 6062, and 6066	650-30-001	Basic Issue	27 May 2016

SBs 604-30-006 Basic Issue, dated 21 September 2016 or 605-30-003, Basic issue, dated 21 September 2016, as applicable, or later revisions of these SBs approved by the Chief, Continuing Airworthiness, Transport Canada, meets the intent of this AD only when all parts in each SB from A through F have been accomplished.

Accomplishment of SB 604-30-004, Basic Issue, dated 29 March 2016, and Revision 1 of this SB dated 9 June 2016, also meet the requirements of this AD.

Accomplishment of SB 605-30-001 Basic Issue, dated 29 March 2016, and Revision 1 of this SB dated 18 October 2016, also meet the requirements of this AD.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 8 February 2017

**Contact:**

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