



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-2019-04

Effective Date:

19 February 2019

ATA:

30

Type Certificate:

A-131

Subject:

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

Applicability:

Bombardier Inc. model CL-600-2A12 (Challenger 601 Variant) and CL-600-2B16 (Challenger 601-3A/3R Variant) aeroplanes, serial numbers 3001 through 3066 and 5001 through 5194.

Compliance:

As indicated below, unless already accomplished.

Background:

Accumulation of snow, slush or ice on the wing leading edges and upper wing surfaces due to 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 Inc. implemented a design change that enables activation of the low temperature ground wing anti-ice system for ground operation when the crew activates the engine cowl anti-ice system. The modification mandated by this AD, along with actions mandated by 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
3001-3066	PSP 601-1A	Revision 123	06 July 2017
3001-3066 with SB 601-0360 incorporated	PSP 601-1A-1	Revision 77	06 July 2017
3001-3066 with -3A engine	PSP 601-1B	Revision 81	06 July 2017
3001-3066 with -3A engine and SB 601-0360 incorporated	PSP 601-1B-1	Revision 79	06 July 2017
5001-5194	PSP 601A-1	Revision 101	06 July 2017
5001-5194 with SB 601-0360 incorporated	PSP 601A-1-1	Revision 90	06 July 2017

Part II – Time Limits Maintenance Checks (TLMC) Change

Within 30 days from the effective date of this AD, amend the aeroplane Maintenance Schedule by incorporating tasks 30-11-00-103* and 30-11-00-104* as detailed in the table below or later revisions of these tasks approved by Transport Canada.

Aeroplane Serial Number	TLMC Manual	Revision	Issue Date
3001-3066	PSP 601-5	Revision 45	28 March 2017
5001-5194	PSP 601A-5	Revision 41	28 March 2017

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 Service Bulletin (SB) 601-0641, Basic Issue, dated 20 March 2018, or later revisions of this SB approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for installation of the LTGWAIS.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 5 February 2019

Contact:

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