



No.	CF-2014-21	1/2
Issue Date	10 July 2014	

EMERGENCY AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 521 Division X**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2014-21

ATA: 28 **Type Certificate:** A-131

Subject: Fuel - Fuel Leak From the Auxiliary Power Unit Fuel Boost Pump Electrical Conduit in the Right Landing Light Compartment

Effective Date: 10 July 2014

Applicability: Bombardier Inc. model CL-600-2B16 aeroplanes, serial numbers 5906, 5910, 5912, 5917, 5919 to 5932, 5934, 5935, 5939, 5940, 5942 and 5948.

Compliance: As indicated below, unless already accomplished.

Background: Bombardier Inc. has discovered fuel leakage in the auxiliary power unit (APU) fuel Boost Pump (BP) canister connector cavity. On some of those aeroplanes, leakage was also noticed at the APU fuel BP electrical conduit connection in the right hand landing light compartment. The root cause of the subject fuel leak is identified to be the improper length of the female connector keyway located in the fuel BP canister, causing a shift of the electrical harness and its seals.

Available data indicates that on a hot day, due to the heat generated by the taxi light and/or landing lights on the ground, temperature in the landing light compartment can reach the fuel auto ignition temperature. Therefore, presence of any fuel in the right hand landing light compartment is considered to be a safety hazard that warrants mitigating action.

In order to help mitigate the potential safety hazard precipitated by any fuel leakage in the right hand landing light compartment, Bombardier Inc., has revised the Aircraft Flight Manual (AFM) through Temporary Revisions (TRs) 604/38 and 605/20 dated 16 June 2014 to restrict the operation of Taxi and Landing lights on the ground. Transport Canada issued Emergency AD CF-2014-17 to mandate incorporation of the above AFM TRs.

To address the root cause of the subject fuel leakage from the APU fuel boost pump canister wiring conduit, Bombardier Inc. issued Alert Service Bulletin (ASB) A605-28-008 that requires periodic inspection for fuel leaks and eventual the replacement of the discrepant fuel BP canister connectors on affected aeroplanes. The ASB has been revised to include an additional inspection of the new connector wiring for damage and this AD is issued to mandate the compliance with ASB A605-28-008 Revision 2 requirements.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

Canada

**Corrective
Actions:**

Part I – Fuel Leak Check

Within 25 hours air time from the effective date of this AD and at intervals not exceeding 8 hours air time thereafter, inspect the right hand landing lights compartment for any fuel leaks from the APU fuel BP conduit outlet in accordance with Part A requirements of Bombardier ASB A605-28-008, Revision 2, dated 9 July 2014, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.,

Part II – APU Fuel Boost Pump Canister Connector Replacement

Within 6 months or 150 hours air time, whichever occurs first, from the effective date of this AD, inspect and replace the connector on the APU fuel BP canister in accordance with Part B instructions of Bombardier ASB A605-28-008, Revision 2, dated 9 July 2014, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

For aeroplanes that have new connectors installed in accordance with Part B instructions of Bombardier ASB A605-28-008, Basic Issue, dated 21 April 2014, inspect the connector wiring for the serviceability, as per the part B requirement of ASB 605-28-008 Revision 2, dated 9 July 2014.

Compliance with Part II of this AD constitutes the terminating action for inspection requirements per Part I of this AD.

Compliance with ASB A605-28-008 Revision 1, meets the requirement of Part II of this AD.

Authorization: For the Minister of Transport,

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: A.K. Durrani, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.