



No.	CF-2012-32	1/1
Issue Date	13 December 2012	

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-2012-32
- Subject:** Ice Protection System – Inability to Detect Number 2 Pitot Static Probe Heater Failure
- Effective:** 7 January 2013
- Applicability:** Bombardier Inc. aeroplane models BD-700-1A10 with any of the Transport Canada Civil Aviation (TCCA) supplemental type certificates listed in Table 1, Section 1.A, Effectivity, of the Bombardier Service Bulletin 700-30-021, Revision 01, dated 21 November 2012.
- Compliance:** Within 800 hours air time or 15 months, whichever occurs first, from the effective date of this AD, unless already accomplished.
- Background:** The aeroplane manufacturer has determined that some completion centers used the Heater/Brake Monitoring Unit (HBMU) logic circuit to control the line voltage of the drain mast heaters. This same logic circuit is also used to control the line voltage of the number 2 pitot static (PS) probe heater. Since the drain mast heaters are connected in parallel with the number 2 PS probe heater circuit, a number 2 PS probe heater failure may not be detected by the fault monitoring capabilities of the HBMU.
- The unannounced failure of two PS probe heaters could adversely affect the aeroplane's flight characteristics in icing conditions.
- This AD mandates a modification to the existing drain mast heater wiring to correct the fault-monitoring capabilities of the HBMU and eliminate the potential dormant failure of the number 2 PS probe heater.
- Corrective Actions:** Incorporate the Supplemental Type Certificate (STC) SA12-31. Bombardier Service Bulletin (SB) 700-30-021, Revision 01, dated 21 November 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for incorporating STC SA12-31.
- Aeroplanes that have incorporated the applicable Service Request for Product Support Action (SRPSA) listed in Table 3, and Table 4 as required, contained in Section 1.A, Effectivity, of the above-mentioned SB, meet the requirements of this AD.
- Incorporation of STC SA12-31, prior to the effective date of this AD, in accordance with the Accomplishment Instructions in SB 700-30-021, Basic Issue, dated 28 August 2012, also meets the requirements of this AD.
- Authorization:** For the Minister of Transport, Infrastructure and Communities,
- ORIGINAL SIGNED BY*
- Robin Lau
Acting Chief, Continuing Airworthiness
- Contact:** Robert Farinas, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.

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