



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) 593.** 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-2009-33 Subject: Thrust Reverser – Transcowl Assembly Cracking Effective: 18 August 2009 **Applicability:** Bombardier Inc. Models: CL-600-2C10, Serial Numbers 10003 through 10265 CL-600-2D15 and CL-600-2D24, Serial Numbers 15001 through 15192 **Compliance:** As indicated below, unless already accomplished. **Background:** Several cases have been reported of cracks in the joint extrusions securing the outer bondment to the acoustic panel of the nacelle transcowl assemblies. Although there is no effect on flight safety (thrust reverser stowed), thrust reverser deployment under rejected take-off or emergency landing load conditions could potentially result in acoustic panel failure and possible runway debris. This directive mandates inspection, repair (if necessary) and reinforcement of the transcowl assemblies. Corrective Part I: Identification Check (Maintenance Records or Visual) Actions: Within 5 000 hours air time or 24 months after the effective date of this directive, whichever comes first, check the part number (P/N), serial number (S/N) and repair status, if applicable, of each transcowl assembly: A. If all transcowl assemblies installed on the aircraft meet one of the following conditions, no further action is required and compliance with this directive is complete: 1) P/Ns KCN624-2003-3, -5 or -7; or 2) P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X: various dash numbers), with S/N SB0965 or higher; or P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X: various dash numbers), 3) and repaired in accordance with one of the Repair Engineering Orders (REOs) listed in paragraph 1.D of Bombardier Service Bulletin (S/B) 670BA-78-008, Revision A, dated 10 July 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. B. If one or more of the transcowl assemblies has P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X: various dash numbers), with S/N SB0964 or lower, and has not been repaired in accordance with one of the Repair Engineering Orders (REOs) listed in paragraph 1.D of Bombardier S/B 670BA-78-008, Revision A, dated 10 July 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, proceed to Part III of this directive. Part II: Inspection Following a High Energy Stop or Rejected Take-Off (RTO) As of the effective date of this directive: Following a high-energy stop or RTO, carry out a detailed visual inspection of each
 - A. Following a high-energy stop or RTO, carry out a detailed visual inspection of each transcowl assembly (left and right, upper and lower) before further flight, as detailed in the Aircraft Maintenance Manual (AMM), Task 05-51-27-210-801.

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

B. If any cracks are detected on one or more of the transcowl assemblies, repair and reinforce the cracked part(s) in accordance with Part III of this directive before further flight.

Notes:

- 1. Part II of this directive is no longer applicable following accomplishment of Part III.
- AMM Temporary Revisions TR 05-0041, dated 6 February 2009, and TR-05-0042, dated 9 February 2009, introduced inspection of the transcowl assemblies into Task 05-51-27-210-801 (Config. A01 and A02).

Part III: Inspection, Repair (if necessary) and Reinforcement

Within 5 000 hours air time or 24 months after the effective date of this directive, whichever comes first, unless required before further flight after a high energy stop or RTO, as specified in Part II:

Inspect, repair (if necessary) and reinforce the joint extrusion on each transcowl, in accordance with the Accomplishment Instructions of Bombardier S/B 670BA-78-008, Revision A, dated 10 July 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Notes:

- 1. Part III is only required as determined in Part I, paragraph B or in Part II, paragraph B of this directive.
- 2. Accomplishment in accordance with the original issue of Bombardier S/B 670BA-78-008, dated 19 September 2008, also meets the intent of Part III of this directive.

Part IV: Replacement Parts

Following compliance with Part I of this directive:

No replacement/spare transcowl assembly, P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X: various dash numbers), with S/N SB0964 or lower, is permitted to be installed on the aircraft, unless it has been repaired in accordance with one of the Repair Engineering Orders (REOs) listed in paragraph 1.D of Bombardier S/B 670BA-78-008, Revision A, dated 10 July 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization: For Minister of Transport, Infrastructure and Communities

Anthony Wan Acting Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4428, facsimile 613-996-9178 or e-mail <u>CAW WEB Feedback@tc.gc.ca</u> or any Transport Canada Centre.