



No.	CF-2005-23	1/2
Issue Date	29 June 2005	

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), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2005-23

Subject: Aileron Power Control Unit Links

Effective: 29 July 2005

Applicability: Bombardier CL-600-2C10, serial numbers 10003 and subsequent.
Bombardier CL-600-2D15 and CL-600-2D24, serial numbers 15001 and subsequent.

Compliance: As indicated below, unless already accomplished.

Background: Transport Canada has received reports of aileron power control unit (PCU) link fractures on in-service CL-600-2B19 aircraft. The same links are also used on the CL-600-2C10, CL-600-2D15 and CL-600-2D24 aircraft. Failure of one PCU link may result in a dormant failure; failure of both PCU links to an aileron could result in reduced lateral control of the aircraft.

Corrective Actions: **A. Initial Inspection Schedule.**

1. Comply with the following schedule:

- (a) Aircraft that have accumulated 2000 hours air time or more upon the effective date of this directive; prior to accumulating 550 hours air time from the effective date of this directive; and
- (b) Aircraft with less than 2000 hours air time upon the effective date of this directive; prior to reaching 2000 hours air time or prior to accumulating 550 hours air time from the effective date of this directive, which ever is reached later.

B. Inspection and Special Checks for Fractured/Cracked Links.

- 1. Accomplish the following in accordance with Bombardier ASB A670BA-27-023, Revision A, dated 18 May 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada:
 - (a) Conduct a detailed visual inspection of the four aileron PCU output links for fractures/cracks and replace any fractured/cracked links prior to further flight;
 - (b) As part of the replacement of any fractured/cracked link, perform the following checks:
 - (i) Measure the torque value of the forward and aft attachment bolts for both the damaged PCU output link and the adjacent PCU output link;
 - (ii) For any damaged link, check for and if required, measure, any mismatch between PCU output link and the aileron lugs;

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

- (iii) For any damaged link, perform an eddy current inspection of the aileron lugs and the flange bushings of the aileron lug; and if crack found or suspected, contact the Technical Help Desk, Bombardier Aerospace for instructions; and
- (iv) Record the information requested in Appendix A of the above mentioned Bombardier ASB.

Note: Inspections and checks carried out in accordance with Bombardier ASB A670BA-27-023, dated 03 May 2005, also meet the requirements of paragraph B.1. of this directive.

C. Reporting.

Within 14 days of completing the inspection, forward the information requested in Appendix A of the above mention ASB, to Bombardier Aerospace at the address provided in the ASB.

D. Repeat Inspection.

Repeat the visual inspection and if required, the special check for fractured/cracked links, detailed above in paragraph B.1.(a) and B.1.(b) of this directive at intervals not to exceed 1000 hours air time.

Authorization: For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Ian McLellan, Continuing Airworthiness, Ottawa, telephone 613 952-4362, facsimile 613 996-9178 or e-mail mclelli@tc.gc.ca or any Transport Canada Centre.