



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-2005-20

Subject: Horizontal Stabilizer Trim Actuator (HSTA) - Lower Gimbal Pin

- Effective: 18 July 2005
- Applicability: Bombardier Inc. Models:

CL-600-1A11 - Serial numbers 1004 through 1085 CL-600-2A12 - Serial numbers 3001 through 3066 CL-600-2B16 - Serial numbers 5001 through 5194

- **Compliance:** As indicated below, unless already accomplished.
- **Background:** Two failures have been reported of the lower gimbal primary pin of the HSTA. In both failure cases, each found during routine maintenance, the primary pin had not migrated to the extent that the operation of the HSTA was impaired. Analysis indicates that safety will be enhanced if additional pin retainer brackets are installed to mitigate lower gimbal pin migration.

Corrective Anti-Migration Bracket Modification

Actions:

- 1. Within 600 hours air time from the effective date of this directive but not later than 30 November 2006, whichever is reached first, accomplish the following in accordance with the applicable Service Bulletin (SB) listed below in paragraph 2, or later revision of the SB approved by Chief, Continuing Airworthiness:
 - (a) Immediately prior to proceeding with the HSTA modification in paragraph 1.(c) below, carry out a special check of the HSTA lower gimbal pin for migration by measuring the clearance between the yoke and the lower side of the gimbal pinhead.
 - (b) If gimbal pin migration is evident, replace the HSTA before further flight. Within seven (7) days of the inspection, notify Bombardier of the failure by completing and forwarding the Feedback form provided with the applicable SBs.
 - (c) If there is no evidence of gimbal pin migration, modify the HSTA by installing the gimbal pin kit (Bombardier P/N 600K0720; Goodrich P/N 52-210050) and re-identify the HSTA as per Goodrich VSB 21207-00X-27-05; or replace the installed HSTA with a HSTA that has previously been modified with the gimbal pin kit (Bombardier P/N 600K0720; Goodrich P/N 52-210050).
- 2. Applicable Service Bulletins:
 - CL-600-1A11 SB 600-0720, dated 31 January 2005
 - CL-600-2A12 SB 601-0555, dated 31 January 2005
 - CL-600-2B16 SB 601-0555, dated 31 January 2005

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



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 As of the effective date of this directive, replacement/spare HSTAs shall be modified with the gimbal pin kit (Bombardier P/N 600K0720; Goodrich P/N 52-210050) and re-identified as per Goodrich VSB 21207-00X-27-05, prior to being installed on any aircraft.

Authorization: For Minister of Transport

B. Hoyanuk

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.