No. CF-2006-18
Issue Date 17 July 2006

## 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-2006-18

Subject: Autopilot Servo Engagement

**Effective:** 15 August 2006

**Applicability:** All Bombardier Inc./Viking Air Ltd., models DHC-7-1, 100, and 150 aircraft.

**Compliance:** Compliance is required within 12 months after the effective date of this directive, unless

already accomplished.

Background: Investigation revealed that some SM-200 servo drive units within certain date codes

installed on the automatic flight control system of the de Havilland DHC-7 aircraft, were mislabeled as having been manufactured to MOD H configuration when, in fact, they did

not have MOD H installed.

MOD H prevents the possibility of internal clutch fasteners from backing out, which can cause an inadvertent servo engagement. Installation of the units without this MOD can

affect the controllability of the aircraft.

Corrective Action:

To ensure proper labeling of the SM-200 servo motor and housing assembly accomplish the following:

- a) Inspect the SM-200 power servo motor and housing assembly, part numbers 4006719-904, -913 and -933, and modify them in accordance with Bombardier Inc. Alert Service Bulletin (ASB) No. 7-22-20, dated 19 April 2005, or later revision approved by the Chief, Continuing Airworthiness, Aircraft Certification, Transport Canada.
- Incorporation of the Bombardier Inc. ASB 7-22-20 constitutes terminating action to this airworthiness directive.

**Authorization:** For Minister of Transport, Infrastructure and Communities

B. Goyaniuk

Chief, Continuing Airworthiness

**Contact:** Mr. Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4363,

facsimile 613-996-9178 or e-mail jeremig@tc.gc.ca or any Transport Canada Centre.

