No. CF-2011-05
Issue Date 24 March 2011

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- 2011-05

Subject: Horizontal Stabilizer Trim Actuator – Airworthiness Limitation Tasks

Effective: 13 April 2011

Applicability: All Bombardier Inc. Model BD-100-1A10 (Challenger 300) Aeroplanes

Compliance: As indicated below unless already accomplished

Background: It was discovered that the Horizontal Stabilizer Trim Actuator (HSTA) No Back and the

Number 1 Motor Brake Assembly (MBA) can both fail dormant. A failure of the HSTA No Back and the Brake System along with additional component failure could result in an uncontrollable horizontal stabilizer surface runaway without the ability to retrim. This

condition, if not corrected, could lead to the loss of the aeroplane.

As a result, new Airworthiness Limitation Tasks, consisting of a functional test of the HSTA No Back and a functional test of the HSTA Brake System, have been introduced to

ensure that a dormant failure of either component is detected and corrected.

This directive mandates the revision of the approved maintenance schedule to include

these new tasks, including phase-in schedules.

Corrective Actions:

Within 30 days after the effective date of this directive, revise the Transport Canada approved maintenance schedule by incorporating Task Numbers 27-40-00-107 (Functional Test of the HSTA No Back) and 27-41-05-105 (Functional Test of the HSTA Brake System), as introduced by the Temporary Revision (TR) 5-2-59 of Challenger 300 (Model BD-100-1A10) Time Limits/Maintenance Checks (TLMC) Manual, CH 300 TLMC.

The above referenced tasks contain phase-in schedules, as necessary, for aeroplanes with actuators that have exceeded the initial task interval.

Compliance with superseding TR or later revisions of the above TLMC Manuals approved by Transport Canada, also satisfies the requirements of this directive.

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

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Chief, Continuing Airworthiness

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