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-2012-26**

Subject: **Flap Actuator Seal Replacement**

Effective: **14 November 2012**

Applicability: **Bombardier Inc. aeroplane model CL-600-2B19 equipped with Eaton Flap Actuators part numbers (P/N):**

P/N 601R93101-23/-25 (vendor P/N 852D100-23, -25),
P/N 601R93103-23/-24 (vendor P/N 853D100-23, -24),
P/N 601R93104-23/-24 (vendor P/N 854D100-23, -24)

Compliance: **Within 30 days from the effective date of this AD, unless already accomplished.**

Background: The CL-600-2B19 aeroplane flap actuator inboard pinion seal is prone to leak which can cause internal contamination of the actuator braking mechanism and subsequent actuator failure. This condition, if not corrected, can cause flap system failure. In certain weather and runway conditions, frequent flap system failures pose a safety concern.

To improve the internal actuator sealing, the flap actuator manufacturer has redesigned the inboard pinion seal. Transport Canada Civil Aviation (TCCA) has been monitoring, through an actuator sampling program, the performance of the flap system since the introduction of actuators equipped with this new inboard pinion seal. Based on this sampling program and recent flap reliability data, TCCA is mandating a restoration task to install the redesigned flap actuator inboard pinion seal on all applicable actuators.

Corrective Actions: Revise the CL-600-2B19 TCCA approved Maintenance Schedule by incorporating tasks C27-50-111-15 and C27-50-111-17 as introduced by Temporary Revision (TR) 2A-48, dated July 06, 2012 of the Aircraft Maintenance Requirement Manual, Part 2 – Appendix A, Certification Maintenance Requirements.

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

Compliance in accordance with superseding TRs or later revisions of the above mentioned Maintenance Requirement Manual approved by Transport Canada also satisfies the requirements of this AD.

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

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.