No. 1/1 CF-2013-22 Issue Date 12 August 2013

## 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-2013-22

Subject: **Rudder Controls - Yaw Damper Uncommanded Movement** 

Effective: 23 August 2013

Applicability: Bombardier Inc. model CL-600-2B16 (604 Variant) aeroplanes, serial numbers 5301

through 5665 and 5701 and subsequent.

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

There have been several reported incidents where Bombardier Regional Jet aeroplanes Background:

experienced in-flight uncommanded rudder movements. Investigation revealed that a failure of the voltage regulator inside the yaw damper actuator could lead to uncommanded yaw movement. If not corrected, this condition could lead to structural failure and the subsequent

loss of the aeroplane.

Since the Challenger 604 aeroplanes have the same system, and can also experience a similar problem of uncommanded yaw movement, Transport Canada is issuing this AD that mandates the introduction of an emergency procedure to the Aeroplane Flight Manual (AFM)

to address the above-mentioned unsafe condition.

Corrective Actions:

A. Amend the applicable AFM by incorporating the emergency procedure for uncommanded yaw motion:

Aeroplane Model	AFM Procedure	AFM Revision
CL-600-2B16 (604 Variant) S/N 5301 through 5665	Emergency Procedures - Uncommanded Yaw Motion	AFM Revision 89 dated 8 July 2013, or later revisions of this procedure approved by Transport Canada
CL-600-2B16 (604 Variant) S/N 5701 and subsequent	Emergency Procedures - Uncommanded Yaw Motion	AFM Revision 25 dated 8 July 2013, or later revisions of this procedure approved by Transport Canada

B. Advise all flight crews of the changes introduced by AFM Revisions listed above.

**Authorization:** For the Minister of Transport,

ORIGINAL SIGNED BY

Philip Tang

Acting Chief, Continuing Airworthiness

Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-Contact:

996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.

