No. CF-2012-33 Issue Date 13 December 2012

## 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-2012-33

Subject: In-Flight Operation of Propellers In Beta Range

Effective: 7 January 2013

Applicability: Bombardier Inc. DHC-8 aeroplanes models 102, 103, 106, 201, 202, 301, 311, 314, 315,

serial numbers 003 through 672.

Excluding aeroplanes with CR 873CH00011 (Service Bulletin 8-76-24) incorporated.

Compliance: As indicated below, unless already accomplished.

**Background:** There have been a number of reported incidents, where flight crew operated the propellers in

Beta range during flight on DHC 100/200/300 aeroplanes. In-flight Beta range operation of the propeller can result in over-speeding of the propeller. This condition can cause the associated engine to fail and the high drag resulting from the over-speeding propeller can adversely affect

the controllability of the aeroplane.

Bombardier Inc. is in the process of introducing a Beta lockout system modification that will prevent the operation of propellers in Beta range during flight mode. Transport Canada will mandate incorporation of the Beta lockout modification when it becomes available. As an interim action to mitigate the risk of in-flight Beta range operation, Bombardier Inc. has issued Service Bulletin (SB) 8-11-115 to install a warning label in the flight compartment.

This AD is issued to mandate compliance with SB 8-11-115 requirements that a warning label be installed in the flight compartment to warn the crew against the operation of the propellers

in Beta range during flight.

**Corrective**Within 400 flight hours or 60 days, whichever occurs first, from the effective date of this AD, install a warning label in accordance with the instructions in SB 8-11-115, Revision A,

dated 03 December 2012, or later revisions approved by the Chief, Continuing Airworthiness,

Transport Canada,

Compliance with earlier version of SB 8-11-115 meets the intent of this AD.

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

ORIGINAL SIGNED BY

Robin Lau

Acting Chief, Continuing Airworthiness

Contact: A.K Durrani, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile

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

