



No.	CF-2013-15R1	1/2
Issue Date	3 December 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-2013-15R1

Subject: In-flight Operation of Propeller in Beta Range

Effective: 17 December 2013

Revision: Supersedes AD CF-2013-15, issued 5 June 2013.

Applicability: Bombardier Inc. model DHC-8-102, -103, -106, -201, -202, -301, -311, -314, -315 aeroplanes, serial numbers 003 through 672.

Excluding aeroplanes with Customer Request (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 the flight crews have operated the propellers in Ground Beta range during flight on DHC-8-100/200/300 aeroplanes. In-flight Beta range operation of the propeller can and has resulted in over-speeding of the propeller(s). This condition, not only can cause the associated engine to fail, but the high drag resulting from the over-speeding propeller can adversely affect the controllability of the aeroplane.

Notwithstanding the fact that affected models of DHC-8 aeroplanes are equipped with Beta warning (horn) system as mandated by Transport Canada AD CF-99-18, to alert the flight crew of impending Ground Beta range operation during flight, the existing system design does not prevent propeller operation in Beta range during flight.

In order to prevent the operation of propellers in Ground Beta range during flight on the affected aeroplanes, Bombardier Inc. has issued Service Bulletin (SB) 8-76-35 to install new electrical circuits (Beta Lockout System) that are designed to prevent the propellers from entering the Beta range of operation during flight. The AD CF-2013-15 was issued on 5 June 2013 to mandate the incorporation of SB 8-76-35 to install a Beta Lockout System on all affected aeroplanes.

Bombardier Inc. has now revised SB 8-76-35 to correct an error in the CR number noted in the Effectivity section of the SB. Accordingly, this revised AD is issued to reflect the correct CR number in the Applicability section of this AD to read 873CH00011, in accordance with SB 8-76-35 Rev A, dated 11 September 2013.

Corrective Actions: Within 6000 hours air time or 3 years, whichever occurs first, from the effective date of this AD, install a Beta Lockout System in accordance with Bombardier Inc. SB 8-76-35 Rev. A dated 11 September 2013, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at **Place de Ville, Ottawa, Ontario K1A 0N8**, or **1-800-305-2059**, or **www.tc.gc.ca/civilaviation/communications/centre/address.asp**

Compliance with the original issue of SB 8-76-35 dated 15 May 2013 meets the mandated requirements of this revised AD.

Authorization: For the Minister of Transport,

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: A K Durrani, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.