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No. CF-99-18

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) 593. 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), Aircraft Certification Branch, Transport Canada, Ottawa, telephone (613) 952-4357.

CF-99-18 BOMBARDIER

Applies to Bombardier Inc. (formerly de Havilland) DHC-8 Series 100, 200 and 300 aircraft, serial numbers 003 to 524, except those aircraft incorporating the UK CAA flight idle gate configurations per Bombardier (de Havilland) Customer Requests CR873SOO8112, CR873CH00003 and CR873CH00005.

Compliance is required before 31 October 2001 unless already accomplished.

There have been a few incidents of in-flight selection of ground Beta on the DHC-8 aircraft; one of these incidents led to an engine failure. In addition, the in-flight selection of ground Beta may lead to propeller overspeed.

The operation of the existing DHC-8 Series 100, 200 and 300 aircraft power levers requires a separate and distinct operation (3.5 lb is required to pull the trigger up 0.75 inch, then the crew has to overcome the detent at flight idle position with a 4.5-lb force) to prevent the unintentional displacement of the power levers below the flight idle position. In addition, the DHC-8 Aircraft Flight Manuals prohibit in-flight operation of the power levers aft of the flight idle gate, and states that failure to observe this limitation will cause propeller overspeed and possible engine failure.

To provide an additional means of warning the flight crew against the inadvertent selection of ground Beta, and to deter the unlikely intentional movement of the power lever aft of the flight idle gate, a Beta warning horn has been introduced by Bombardier. If a flight idle gate trigger is raised while either power lever is at any position on the quadrant and the aircraft is above 20 feet, the warning horn will sound. To incorporate the Beta warning horn system, accomplish the following modifications:

1. For DHC-8 aircraft, serial numbers 003 to 509, install Bombardier Modification 8/3083 (Modification of Honeywell AA-300 Radio Altimeter). Approved instructions for the incorporation of Modification 8/3083 are provided in Bombardier Service Bulletin (SB) 8-34-126 dated 1 May 1998, or later revisions approved by the Director, Aircraft Certification, Transport Canada.

2. For DHC-8 aircraft, serial numbers 003 to 509 (excluding S/N 130), install Bombardier Modification 8/2852 (Addition of Warning Horn to the Flight Idle Gate). Approved instructions for the incorporation of Modification 8/2852 are provided in Bombardier SB 8-76-15 dated 22 January 1999 or later Transport Canada approved revisions.

3. For DHC-8 Series 100 aircraft, serial numbers 003 to 390 with ground spoilers, install Bombardier ModSum 8Q100795 (Installation of Weight on Wheels Disarming Logic in Aircraft with Ground Spoilers). Approved instructions for the incorporation of ModSum 8Q100795 are provided in Bombardier SB 8-76-18 dated 7 January 1999 or later Transport Canada approved revisions.

4. For DHC-8 Series 100 and 200 serial numbers 391 to 524 (excluding S/N 511) without ground spoilers (Post Mod. 8/1860), and DHC-8 Series 300 aircraft, serial numbers 100 to 523 (excluding S/N 521), install Bombardier ModSum 8Q100794. Approved instructions for the installation of ModSum 8Q100794 are provided in Bombardier SB 8-76-17 dated 25 January 1999, SB 8-76-17 Revision A dated 14 May 1999, or later Transport Canada approved revisions.

5. Amend the DHC-8 Minimum Equipment List (MEL) in accordance with Temporary Revision No. 40 and 41 of the Master Minimum Equipment List (MMEL), to provide three flight days of operation without the

system as long as the trigger system is still functional. This revision may be accomplished by including a copy of this directive in the MEL.

This directive becomes effective 20 August 1999.

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 <http://www.tc.gc.ca/civilaviation/communications/centre/address.asp>.

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