



CIVIL AVIATION SAFETY AUTHORITY OF PAPUA NEW GUINEA

PNG Airworthiness Directive issued under the
Civil Aviation Act 2000 (as amended) section 17 &
The Civil Aviation Rule (as amended) Part 39

PNG AD/DHC8/22: In-flight Selection of ground Beta-Inspection/Protection

Issue 2 (a): 04/11/11

Applicability:

(a) Applies to Bombardier Inc.(formerly de Havilland) DHC-8 Series 100, 200 and 300 aircraft, certificated in any category, except those aircraft incorporating the FAA Beta lock-out system per the latest revision of FAA AD 2005-13-35.

The operation of existing DHC-8 Series 100, 200 and 300 aircraft power levers requires a separate and distinct operation (pulling a trigger mechanism and overcoming the flight idle detent position) to prevent the unintentional operation of the power levers aft of the flight idle position. In addition, the DHC-8 Flight Manuals prohibit in-flight operation of the power levers aft of the flight idle position and clearly states "*Selecting the power levers below flight idle, while in flight, will cause propeller overspeed, possible engine failure and may result in loss of aircraft control.*"

To provide an additional means of warning and deterring the flight crew against the unintentional operation of the power levers aft of the flight idle position, a Beta warning horn installation per Bombardier (de Havilland) Service Bulletins (SB) 8-34-126, 8-76-15, 8-76-17/8-76-18 were mandated by Transport Canada Airworthiness Directive CF-99-18. 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.

This AD requires revisions to certain Operator maintenance documentation to mandate several Bombardier (de Havilland) 'optional' maintenance inspections. Several amendments to Minimum Equipment List (MEL) are included.

This AD also requires all Operators to install a system that will prevent the selection of Beta range during flight.

Requirement:

(b) Before further flight and at intervals not exceeding 50 hours thereafter, accomplish the following in accordance with Bombardier (de Havilland) maintenance requirements document reference PSM 1-8-7 TC revision 19 or later Transport Canada approved revision:

1. An operational check of the beta warning horn.
2. An operational check of the beta-backup system.
3. An operational check of the propeller overspeed governors.

4. Install placard in a prominent location on the instrument panel of the cockpit that states:

“Positioning of the power levers below flight idle stop during flight is prohibited. Such action may lead to loss of aircraft control, or may result in an engine overspeed condition and consequent loss of engine power”.

- (c) Within seven (7) days of the effective date of this AD - amend the DHC-8 Minimum Equipment List (MEL) in accordance with the requirements of this AD listed in the following table:

System Affected	M MEL reference	M MEL category	Action required
AFCS Autopilot functions	22-1	C	Change to category A.
	22-1	C	(M) Maybe inoperative for two (2) flight sectors only, provided weather minimums or operating procedures are not dependent on its use.
	22-1	C	(M) Aircraft must not depart an airport where repairs or replacements can be accomplished.
Radio Altimeter System	34-2	A	Remove from MEL
Reverse Beta Warning Horn System	61-4	A	Remove from MEL

- (d) Within 120 days after 5 November 2011, install a system that will prevent the selection of Beta range during flight, in accordance with the latest revision of FAA AD 2005-13-35. Following accomplishment of that installation, all the requirements of paragraph (b) and (c) of this AD may be removed.

Compliance:

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been accomplished.

This AD is effective from 04 November, 2011.

Note: This AD is based on the latest approved revision of FAA AD 2005-13-35.



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