



Transport  
Canada

Transports  
Canada

Canada

## No. CF-68-09

### 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-68-9 DE HAVILLAND (Originally CF-DHC-6-68-9)

Applies to DHC-6 Twin Otter Aircraft Numbers 1 to 105 inclusive.

Compliance required as indicated unless already accomplished.

Due to flutter of the left elevator trim tab the aircraft shall be restricted to flight at speeds below 125 knots IAS (144 mph IAS) and the following must be accomplished.

(a) Prior to the next flight, install the following placard in full view of the pilot:

"SPEED SHALL NOT EXCEED 125 KNOTS IAS (144 MPH IAS)"

(b) Prior to the next flight, accomplish the following one time inspections on the left elevator trim tab assembly:

(1) to ensure clearance between tab and elevator, remove the bolt between the push rod and the tab operating lever and operate the trim tab control in the cockpit until the screw jack in the elevator is fully retracted. Lower the tab until the bolt can be inserted through the operating arm and the push rod without exerting pressure on the trim tab. If this can be accomplished, reconnect the tab to the push rod. If the holes do not align, adjust the push rod sufficiently to allow assembly without exerting pressure on the trim tab.

(2) Set the trim tab in the neutral position and measure the trailing edge free play in the vicinity of the operating lever. If the free play exceeds one-tenth (0.1) inch in the vertical direction, the cause must be determined and corrected prior to further flight.

(c) Before each flight, visually inspect the left elevator trim tab top and bottom skins for diagonal buckling or concavity other than the manufactured swages. Trim tabs found to contain diagonal buckles or concavities must be replaced before further flight with a tab of the same part number which has been inspected in accordance with this paragraph. The repetitive inspection required by this paragraph also applies to replacement parts.

(d) Not later than 25 hours air time after the effective date of this airworthiness directive:

(1) Visually inspect the aft face of the left hand elevator rear spar web adjacent to the outboard end of the trim tab piano hinge (elevator station 97.75 in.) and the aft face of the lower bend radius of the left hand elevator rear spar from elevator station 7.5 in. to 97.75 in. to detect cracks or local damage.

These inspections may be accomplished by manually trimming the tab to the full up position or in conjunction with the inspection procedure detailed in paragraph (b) (1).

(2) Cut an inspection hole in accordance with the instructions in de Havilland Modification Bulletin No. 6/1134 and de Havilland Drawing No. C6Z 1356 in the lower skin surface of the left hand elevator. Visually inspect the forward face and upper and lower flanges of the elevator rear spar web in the area of the joggle (elevator station 95 in. to 101 in.) to detect cracks.

(e) If cracks are detected by the inspections of paragraphs (d) (1) and (d) (2), replace the elevator before

further flight with an elevator of the same part number which has been inspected in accordance with paragraphs (d) (1) and (d) (2) and modified in accordance with paragraph (f). Details of any cracks found must be forwarded immediately to the local Department of Transport Regional Office and to the Service Manager, The de Havilland Aircraft of Canada, Limited, Downsview, Ontario, Canada.

(f) If no cracks are detected by inspecting in accordance with paragraphs (d) (1) and (d) (2), install the reinforcing straps, Part Number C6Z 1357-27 on the upper and lower surfaces of the left hand elevator in accordance with the instructions in de Havilland Modification Bulletin No. 6/1134 and de Havilland Drawing No. C6Z 1356.

(g) When Modification No. 6/1134 is incorporated:

- (1) Repeat the inspection detailed in paragraph (d) (1) once in each day on which the aircraft is operated.
- (2) Repeat the inspection detailed in paragraph (d) (2) at intervals not to exceed 100 hours air time.

(h) When the modifications referenced in paragraph (i) are incorporated in the aircraft, the speed restriction of this directive is withdrawn and:

- (1) the placard required by paragraph (a)(1) may be removed from the cockpit, and
- (2) the repetitive inspections required by paragraphs (c), (g)(1) and (g)(2) may be discontinued.

(i)(1) Mod. 6/1120 - This modification is described by de Havilland Modification Bulletin No. 6/1120 Issue 2 dated 14 December 1967 and transmitted by de Havilland Service Bulletin No. 6/69.

(2) Mod. 6/1135 - This modification is described by de Havilland Modification Bulletin No. 6/1135 Issue 2 dated 23 January 1968 and transmitted by de Havilland Service Bulletin No. 6/65 dated 12 December 1967.

(3) Mod. 6/1142 - This modification is described by de Havilland Modification Bulletin No. 6/1142 dated 8 December 1967 and transmitted by de Havilland Service Bulletin No. 6/68 dated 8 December 1967.

This Directive supersedes Airworthiness Directive 67-7 issued by telegraphic message SDA 44 dated November 6, 1967 and 67-8 issued by telegraphic message SDA 49 dated December 1, 1967.

This Directive becomes effective 1 July, 1968.

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>.

24-0022 (01-2001)