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No. CF-91-34

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-91-34 DE HAVILLAND

Applies to Boeing Canada, de Havilland Division, DHC-8 aircraft, serial numbers 3 through 216.

Compliance is required as indicated, unless already accomplished.

It has been found, from recent test programs carried out on DHC-8 aircraft at de Havilland, that the flap loads may not be evenly distributed into the flap ball screws. This condition, if not corrected, could lead to accelerated wear, reduced fatigue life, and possible overloading of some components of the flap structure whose failure could result in an asymmetric flap condition.

To prevent and control possible damage to the flap structure due to uneven distribution of flap loads into the flap ball screws, accomplish the following:

1. Within 50 flight hours following the effective date of this directive, inspect the inboard flaps for free play and roller "rattle" in accordance with the Accomplishment Instructions, Paragraph A, of de Havilland Service Bulletin 8-27-53 dated 11 May 1990, or later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

2. Re-rig the flap system in accordance with the Accomplishment Instructions, Paragraph B of the aforementioned service bulletin, according to the following schedule, which is dependent on the findings of the inspection in paragraph 1 of this directive:

- If free play and roller "rattle" are evident, re-rig the flap system within six (6) months following the effective date of this directive.

- If free play and roller rattle are not evident, re-rig the flap system within 250 flight hours following the effective date of this directive.

3. For aircraft meeting both Criteria (a) and (b) below at the time the flaps are re-rigged as required by paragraph 2 of this directive, within 50 flight hours after the flap re-rigging, commence repeat inspections of the structurally significant items (SSIs) in the vicinity of the re-rigged inner flap in accordance with the applicable maintenance program.

Criteria

(a) No evidence of free play and roller rattle found by the inspection in paragraph 1 of this directive; and

(b) Aircraft cycles in excess of 5,000 flights at the time of the flap re-rigging.

The affected SSIs in the vicinity of the re-rigged inner flaps are as shown in the accompanying table.

AIRCRAFT	MAINTENANCE PROGRAM	DHC SSI TASK IDENTIFICATION NO.
DHC8 Series 100 All Models	DHC8 Series 100 Maintenance Program PSM 187, Part 2, Airworthiness Limitations Listings.	WF01, WF02, WF03, WF05, WF06, WF07, WF08, WF09, WF10, WF28, WF29, WF30 and WF31.
DHC8 Series 300 Model 301	DHC8 Series 300 Maintenance Program PSM 18327, Part 2, Airworthiness Limitations.	WF01, WF02, WF03, WF05, WF06, WF07, WF08, WF09, WF10, WF28, WF29, WF30 and WF31.

If the flaps were previously re-rigged in accordance with the aforementioned service bulletin, and if the aircraft met both Criteria (a) and (b) at that time, the SSI inspections specified above must commence within 250 flight hours following the effective date of this directive.

Alternate means of compliance with the requirements of this directive may be used only if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa. Any application should be made to the appropriate regional office.

This directive becomes effective 4 November 1991.

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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