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No. CF-91-15R2

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-91-15R2 DE HAVILLAND

Applies to Boeing Canada, de Havilland Division DHC-8, Series 300, Model 311 aircraft, serial numbers 202, 210, 216, 221, 224, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 257, 259, 261, 262, 264, 266, 267, 269, 271, 272, 274, 276, 278, 279, 281, 283, 284, 286 and 288.

Compliance is required as indicated.

Fuel leaks have been found on a number of aircraft, from the drains located in the dry bay (Station YW 139.0 to YW 171.20) inboard of the fuel tanks. It has been determined that the leaks originate from the inboard sealed end rib (Station YW 171.20) where the stringers intersect the rib. This leaking problem may result in an accumulation of fuel vapours in the dry bay area, presenting a potential risk of explosion in the event of a lightning strike.

To ensure that there are no leaks from the fuel tanks, accomplish the following:

1. Within 24 hours after the effective date of this directive unless already accomplished, and thereafter at intervals not exceeding 300 flight hours or 30 days, whichever comes first, externally inspect the wing dry bay drains for blockage in accordance with paragraph B of Accomplishment Instructions of Boeing/de Havilland Alert Service Bulletin A8-28-16, dated 30 May 1991, or later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.
2. Within 24 hours after the effective date of this directive unless already accomplished, and daily thereafter, externally inspect the dry bay drains to ensure that there is no evidence of fuel leaks.
3. Within 7 days after the effective date of this directive unless already accomplished, and thereafter at intervals not exceeding 14 days, or if fuel is detected at the dry bays by the inspection of paragraph 2 above, remove the top dry bay access panels and perform an internal inspection in accordance with paragraph C of Accomplishment Instructions of Boeing/de Havilland Alert Service Bulletin A8-28-16, dated 30 May 1991, or later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

If there is evidence of a fuel leak, and depending on the results of the inspection, accomplish the following:

- (a) If the leakage is determined to be a stain (no larger than 1-1/2 inches based on 15-minute examination method), repair is to be performed in accordance with paragraph C.7 of Accomplishment Instructions of the above service bulletin within 14 days.

Pending the repair of the detected leakage, the aircraft may be returned to service, subject to the following conditions:

- (i) Repeat the internal inspection every 7 days to ensure that the leakage remains within allowable limits; and
- (ii) Before further flight, advise flight crews of the flight limitation below and incorporate this limitation into the limitations section of the aircraft flight manual (AFM).

This may be accomplished by including a copy of this directive in the AFM:

"Flight is prohibited in areas where lightning or thunderstorms are observed or reported within 5 nautical

miles of the flight path or when the existing weather conditions may reasonably be expected to result in a lightning strike."

(b) If the leakage is determined to be greater than the limit defined in paragraph 3(a) above, repair the leaks in accordance with paragraph C.7 of Accomplishment Instructions of the above service bulletin before further flight.

The repetitive internal inspection of the wing dry bays above may be discontinued upon incorporation of Boeing/de Havilland Modification 8/1767.

4. Before 31 December 1992, unless already accomplished, incorporate de Havilland Modification No. 8/1776 in accordance with Service Bulletin No. 8-57-20 dated 27 September 1991 or later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

Accomplishment of the modification of paragraph 4 above provides terminating action for the repetitive inspections of paragraphs 1, 2 and 3 of this directive.

Alternative 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 revision supersedes Airworthiness Directive CF-91-15R1 which was issued on 20 June 1991.

This directive becomes effective 6 January 1992.

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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