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No. CF-92-06R2

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-92-06R2 DE HAVILLAND

Applies to de Havilland Inc. DHC-8 Series 300 aircraft, Models 301 and 311, serial numbers 100 through 296.

Compliance is required before further flight, unless already accomplished.

There have been five instances of internal engine fires on several types of aircraft powered by certain models of Pratt & Whitney Canada (P&WC) PW100 Series engines, subsequently resulting in the fire exiting the engine case.

In order to alert the flight crew of an internal engine fire, accomplish the following:

1. Incorporate the fire wire detection loop modification on the PW123 engine in accordance with P&WC Service Bulletin (SB) No. 21113 dated 23 February 1992 or its later revisions, or superseding service bulletins that are "DOT Approved".
2. Connect the fire wire detection loop, installed in accordance with paragraph 1 above, to the aircraft fire detection system in accordance with the Accomplishment Instructions of de Havilland SB 8-26-14 dated 6 March 1992 or later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

Amend the Dash 8 Flight Manual (PSM 1-83-1A), Section 4, "ABNORMAL PROCEDURES", page 4-10-1, by adding the following step immediately after step 1 of paragraph 4.10, "ENGINE FIRE DETECTION SYSTEM FAILURES":

Mod 8/1835 airplanes only:

2. FAULT A advisory light illuminated - Land as soon as practicable.

4. Amend the Dash 8 Minimum Equipment List, ATA Chapter 26, "FIRE PROTECTION", Item 26-1, "Power Plant Fire Detection System" (Series 300 only) to indicate that loop "B", mounted on the intercompressor case air tube, may be inoperative for three consecutive calendar days provided the modification described in P&WC SB 21065 (flow deflector) has been incorporated in the engine. The requirements for Series 100 aircraft remain unchanged.

Incorporation of the No. 5 Bearing Air System introduced by P&WC SB 21211 or its later revisions, or superseding service bulletins that are "DOT Approved" is an alternative means of compliance with the requirements of paragraphs 1, 2, 3 and 4 above.

Note 1: Compliance with paragraph 1 of this directive (incorporation of P&WC SB 21113) is an alternative means of compliance with Part A, paragraph 3 of Airworthiness Directive CF-91-26R1 (incorporation of P&WC SB 20914R3).

Note 2: Incorporation of Revision 20 to the DHC-8-301 Aircraft Flight Manual or incorporation of Revision 25 to the DHC-8-311 Aircraft Flight Manual accomplishes the amendment requirement of paragraph 3 of this directive.

Note 3: Insertion of a copy of this directive in the Minimum Equipment List accomplishes the amendment requirements of paragraph 4 of this directive.

Note 4: Engines incorporating the No. 5 Bearing Air System specified by P&WC SB 21211 may be installed in aircraft nacelles that have the aircraft fire detection system in the pre de Havilland SB 8-26-14 configuration.

Note 5: On aircraft previously in compliance with paragraphs 1, 2, 3 and 4 of this directive, and which now incorporate the No. 5 Bearing Air System as per the above, the following actions may be taken:

- (a) Remove from the engine the fire wire detection loop introduced by P&WC SB 21113;
- (b) Return the aircraft fire detection system to the pre de Havilland SB 8-26-14 configuration; and
- (c) Remove the amendments to the Dash 8 Aircraft Flight Manual (PSM 1-83-1A) and the Dash 8 Minimum Equipment List, introduced by directives CF-92-06 and CF-92-06R1.

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-92-06R1 issued 8 April 1993.

This directive becomes effective 16 December 1994.

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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