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No. CF-75-11

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-75-11 DE HAVILLAND

Applies to DHC-6 Twin Otter Aircraft - All Series.

Compliance required as indicated.

Two recent in flight incidents of overheat and failure of reverse current relays, Hartman Part Number A700-AAP or A700-AP, due to contact welding and melting, have resulted in severe burning of wiring and components in the generator control box containing these relays causing the complete or partial loss of electrical power.

Therefore, to preclude the possibility of partial or total electrical failure due to contact welding of reverse current relays, Hartman Part A700AAP or A700AP on the DHC-6 aircraft, accomplish the following:

a) For aircraft containing reverse current relays which have accumulated between 1000 and 2400 hours time since new or overhauled, or aircraft containing relays with less than 1000 hours time in service since new or overhauled which have been used for cross generator engine starts, unless already accomplished, within the next 25 hours time in service.

i) Remove reverse current relays from aircraft;

ii) inspect contact points under a ten power glass for signs of pitting, corrosion or other surface irregularities;

iii) examine relay for indications of overheat.

If any of the above conditions are present, before further flight replace with unit of known serviceability, or repair and bench test the relay in accordance with de Havilland Aircraft of Canada Ltd. Maintenance Manual PSM 1-6-2, Part 7, or PSM 1-63-2, Chapter 24-30-00.

b) For aircraft containing reverse current relays with more than 2400 hours time in service since new or overhauled:

i) Unless already accomplished, inspect as required in para (a) within the next 25 hours time in service, and

ii) Unless accomplished within the previous 2400 hours, conduct bench test of reverse current relays within the next 100 hours time in service in accordance with de Havilland Aircraft of Canada Ltd. PSM 1-6-2, Part 7, or PSM 1-63-2, Chapter 24-30-00.

c) For the appropriate series DHC-6 Aircraft Flight Manual, insert the following "CAUTION" in the Normal Operating Procedures Section:

CAUTION

"CROSS GENERATOR STARTING IS DETRIMENTAL TO GENERATOR BRUSHES AND TO REVERSE CURRENT CUT-OUT OPERATION (MAY CAUSE EVENTUAL CONTACT WELDING). THEREFORE, EXCEPT IN AN EMERGENCY, CROSS GENERATOR STARTING IS PROHIBITED."



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d) Following a flight for which an emergency cross-generator engine start was made, within the next 25 hours time in service, accomplish the inspection required by para (a).

Inspection required by para (d) of this directive may be discontinued when means of providing an equivalent level of safety has been approved by the Chief, Airworthiness, Department of Transport.

This directive becomes effective 1 December 1975.

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)

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