

## LUFTVÄRDIGHETSDIREKTIV (LVD)

A Motordrivna Luftfartyg Bombardier (DeHavilland) LVD Nr 2-3272

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

Kontroll av el-installation.

**GÄLLER:** 

Bombardier Inc DHC-3 "Turbo Otter" samtlifa modeller modifierade i enlighet med A.M. Luton FAA STC No. SA3777NM eller Kanadensiska

motsvarigheten STA No. SA89-32.

**ÅTGÄRD:** 

Utför åtgärd enligt bifogad kopia av Transport Canada AD 2002-38.

TID FÖR ÅTGÄRD:

Om ej tidigare utfört, inom 300 flygtimmar räknat från 11 oktober 2002

eller senast 31 december 2002 vilket först inträffar.

**UNDERLAG:** 

A.M. Luton Service Information Letter SIL-00-10-10 daterad 22 mars

2001 eller senare utgåva.

**REFERENS:** 

Transport Canada AD CF-2002-38

**BESLUTSDATUM:** 

17 september 2002

**LFS** 

2002:122

Åtgärder enligt LVD utgör nödvändig förutsättning för ifrågavarande flygmateriels luftvärdighet. Referens BCL M 1.11.
Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senast gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS. Transports Canada TP 7245E

No. CF-2002-38	1/2
Issue Date	
29 August 2002	

## 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.

Number:

CF-2002-38

Subject:

Bombardier DHC-3 - Electrically Heated Engine Pneumatic Lines

Effective:

11 October 2002

Applicability:

Applies to Bombardier Inc. [formerly de Havilland] DHC-3 "Turbo Otter" aircraft, all series, modified in accordance with A.M. Luton, FAA Supplemental Type Certificate (STC) No. SA3777NM or the Canadian equivalent Supplemental Type Approval No. SA89-32.

Compliance:

Within the next 300 hours air time, after the effective date, or December 31, 2002, whichever occurs first, unless already accomplished.

Background:

The original issue and Revisions A to F on Sheet 1 of 3 of A.M. Luton Electrical System Schematic Drawing No. 20075 correctly shows the wiring to the electrical heating blankets on  $P_3$  and  $P_y$  pneumatic lines and to the "Push to Test" function lights to be wired in parallel. Revisions G and H show incorrect [series] wiring; this incorrect [wired in series] wiring configuration can result in the current being absorbed by the light bulbs with no current for the heating blankets. Loss of pneumatic heating can result in loss of engine power or reverse propeller overspeed governing protection. Revision I corrects this mistake.

## Corrective Actions:

- Inspect the electrical wiring to the P<sub>3</sub> and P<sub>y</sub> engine pneumatic line heating blankets and to the P<sub>3</sub> heater warning light to determine if they are wired in a parallel configuration. Sheet 1 of Drawing No. 20075 "Electrical System Schematic" Rev. I dated October 10, 2000 [hereafter referred to as "The Drawing"] as referenced in A.M. Luton Service Information Letter SIL-00-10-10 dated March 22, 2001 [hereafter referred to as the "SIL"] illustrates the correct wiring configuration.
  - NOTE 1 It is recommended that the electrical inspection wiring include a continuity check of the heating blanket line(s) to ensure they are serviceable. Then, after selecting the P<sub>3</sub> heater switch to the "On" position, if the line(s) quickly feel warm to the touch, this is an indication that the line(s) are correctly configured.
  - (a) If the lines are correctly wired in a parallel configuration, proceed to paragraph 2.
  - (b) If it is determined that the P<sub>3</sub> and P<sub>y</sub> engine pneumatic line heating blankets and the P<sub>3</sub> heater warning light are incorrectly wired, modify the wiring to the configuration shown on The Drawing.



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NOTE 2 It is recommended that a similar test be performed as described in NOTE 1 after modifying the wiring.

- 2. Inspect the circuit breaker switch for the heated engine pneumatic lines circuit.
  - (a) If the engine installation utilizes both P<sub>3</sub> and P<sub>y</sub> heated pneumatic lines, install a 7.5 Amp circuit breaker switch in accordance with The Drawing, unless already accomplished. Potter & Brumfield part number (P/N) W31-X2M1G-7.5, as referenced in the SIL, is an acceptable circuit breaker switch.
  - (b) If the engine installation utilizes only a P<sub>3</sub> heated pneumatic line, install a 5.0 Amp circuit breaker switch in accordance with The Drawing, unless already accomplished. Potter & Brumfield P/N W31-X2M1G-5.0 is an acceptable circuit breaker switch.

**Authorization:** For Minister of Transport

B. Goyaniuk

Chief, Continuing Airworthiness

**Contact:** 

Mr. Ramon A. Raoux, Continuing Airworthiness, Ottawa, telephone (613) 952-4365, facsimile (613) 996-9178 or e-mail RAOUXR@tc.gc.ca or any Transport Canada Centre.