



No.	<b>CF-2009-17</b>	1/2
Issue Date	<b>22 April 2009</b>	

# 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), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

**Number:** CF-2009-17

**Subject:** Revised Safe Life Limits for Airworthiness Limitation Items

**Effective:** 21 May 2009

**Applicability:** Bombardier Inc. DHC-8 Aircraft, Models 400, 401 and 402, Serial Numbers 4001, 4003, 4004, 4006, 4008 through 4227.

**Compliance:** When indicated, unless already accomplished.

**Background:** Certain main landing gear components have experienced premature failure during certification testing. Revision has been made to the DHC-8-400 Maintenance Requirements Manual, Airworthiness Limitation Items, to incorporate the revised safe life limits for the main landing gear lock actuator assembly, retraction actuator assembly rod end and piston, and the upper bearing in the main landing gear shock strut assembly. Failure of these components could adversely affect the structural integrity of the main landing gear.

This directive is issued to ensure safe operation of the main landing gear during its service life.

**Corrective Actions:**

**A. Main Landing Gear Structural Safe Life Limit Change – Applicable to DHC-8 Aircraft, Models 400, 401 and 402, Serial Numbers 4001, 4003, 4004, 4006, 4008 through 4210**

Within 60 days after the effective date of this directive, amend the Transport Canada approved maintenance schedule by:

- 1) Incorporating the revised safe life limit for the Upper Bearing, Part Number (P/N) 46114-1, as presented in Temporary Revision (TR), ALI-82 of Airworthiness Limitation Items (ALI) of the DHC-8-400 Maintenance Requirements Manual, PSM 1-84-7; and
- 2) For aircraft that has accumulated more than 15,000 flight cycles, replace the Upper Bearing (P/N 46114-1) at the next "C" check or 20,000 flight cycles, whichever occurs first.

**B. Main Landing Gear System Safe Life Limits Change – Applicable to DHC-8 Aircraft, Models 400, 401 and 402, Serial Numbers 4001, 4003, 4004, 4006, 4008 through 4227**

Within 60 days after the effective date of this directive, amend the Transport Canada approved maintenance schedule by:

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 [www.tc.gc.ca/civilaviation/communications/centre/address.asp](http://www.tc.gc.ca/civilaviation/communications/centre/address.asp)



- 1) Incorporating the revised safe life limit for the Retraction Actuator Assembly Rod End (P/N P3A2750 and/or P3A2750-1), Retraction Actuator Assembly Piston (P/N 46570-5), Lock Actuator Cylinder Assembly (P/N 46601-1/-3) and Lock Actuator Assembly (P/N 46600-1/-3/-5/-7) as presented in TR, ALI-89 of ALI of the DHC-8-400 Maintenance Requirements Manual, PSM 1-84-7; and
- 2) For the main landing gear retraction actuator assembly rod end that has accumulated more than 9,850 flight cycles, replace the Rod End (P/N P3A2750 and/or P3A2750-1) within the next 600 flight cycles.

Note: Compliance in accordance with superseding TRs or later revisions of ALI of the DHC-8-400 Maintenance Requirements Manual, PSM 1-84-7, approved by Transport Canada also satisfy the requirements of this directive.

**Authorization:** For Minister of Transport, Infrastructure and Communities

Derek Ferguson  
Acting Chief, Continuing Airworthiness

**Contact:** Mr. Anthony Wan, Continuing Airworthiness, Ottawa, telephone 613-952-4410, facsimile 613-996-9178 or e-mail Anthony.wan@tc.gc.ca or any Transport Canada Centre.