



No.	CF-1985-08R4	1/2
Issue Date	28 September 2006	

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-1985-08R4
- Subject:** Stress Corrosion Cracking in the Wing Lift Strut Lower Clevis Fitting
- Effective:** 1 November 2006
- Revision:** Supersedes Airworthiness Directive (AD) CF-85-08R3, issued 22 July 1993
- Applicability:** Applies to all models of Viking Air Ltd. (formerly Bombardier Inc.) DHC-2 "Beaver" aircraft fitted with wing lift strut, part numbers C2W1103, C2W1103A, C2W1104 or C2W1104A.
- Compliance:** Compliance with Part A or Part B is required as indicated below.
- Background:** A report has been received of stress corrosion cracking occurring in the wing lift strut lower clevis fitting, part number C2W-1097A. Viking Air Ltd. has issued a Revision C to Service Bulletin (SB) 2/41, dated 23 June 2006, to reflect the repetitive inspection requirements of this airworthiness directive (AD) and to specify the use of a fluorescent penetrant inspection (FPI) method. They have also issued a new SB 2/55, dated 23 June 2006, which provides operators an eddy current (ET) inspection method as an alternative to SB 2/41.

This AD revision is being issued to allow operators the option of continuing with the existing inspection intervals in accordance with CF-85-08R3 (Part A) or incorporating the improved alternate inspection method in accordance with Part B, to permit an increase in inspection intervals.

Corrective Actions: To preclude failure of the wing lift strut, accomplish either Part A or Part B as follows:

Part A - Inspection Using Fluorescent Penetrant Method Service Bulletin 2/41.

Perform the Accomplishment Instructions of the Viking Air Ltd. service bulletin (SB) No. 2/41, Revision C, dated 23 June 2006, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

1. For aircraft operating in a salt water environment:
 - a) For aircraft which have complied with Airworthiness Directive (AD) CF-85-08R3, within one calendar year since the previous inspection, and subsequently at intervals not to exceed one calendar year; and
 - b) For aircraft which have not complied with AD CF-85-08R3, within 100 flight hours or one calendar year of the effective date of this directive, whichever comes first, and subsequently at intervals not to exceed one calendar year.

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



2. For all other aircraft:
 - a) For aircraft which have complied with AD CF-85-08R3, within two calendar years since the previous inspection, and subsequently at intervals not to exceed two calendar years; and
 - b) For aircraft which have not complied with AD CF-85-08R3, within 100 flight hours or one calendar year of the effective date of this directive, whichever comes first, and subsequently at intervals not to exceed two calendar years.

Part B – Inspection Using Eddy Current (ET) Method Service Bulletin 2/55.

Perform the Accomplishment Instructions of the Viking Air Ltd. SB No. 2/55, dated 23 June 2006, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

1. For aircraft operating in a salt water environment:
 - a) For aircraft which have complied with Airworthiness Directive (AD) CF-85-08R3, within one calendar year since the previous inspection, and subsequently at intervals not to exceed two calendar years; and
 - b) For aircraft which have not complied with AD CF-85-08R3, within 100 flight hours or one calendar year of the effective date of this directive, whichever comes first, and subsequently at intervals not to exceed two calendar years.
2. For all other aircraft:
 - a) For aircraft which have complied with AD CF-85-08R3, within two calendar years since the previous inspection, and subsequently at intervals not to exceed five calendar years; and
 - b) For aircraft which have not complied with AD CF-85-08R3, within 100 flight hours or one calendar year of the effective date of this directive, whichever comes first, and subsequently at intervals not to exceed five calendar years.

If cracks are found as a result of inspections performed by either Part A or Part B, the strut must be removed from service before further flight. Conditions of struts found to be defective are to be reported to Transport Canada using a Service Difficulty Report.

Authorization: Minister of Transport, Infrastructure and Communities

B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Bill Miller, Continuing Airworthiness, Ottawa, telephone 613-952-4388, facsimile 613-996-9178 or e-mail millerw@tc.gc.ca or any Transport Canada Centre.