



AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.

Number:	Effective Date:
CF-2018-10	18 April 2018
ATA:	Type Certificate:
53	A-22

Subject:
Fuselage – Cracking of Forward and Aft Wire Pull Fittings

Applicability:
All Viking Air Limited (formerly Bombardier Inc.) model DHC-2 Mk. I aeroplanes incorporating the 5600 lb gross weight increase kit installed in accordance with Supplemental Type Certificate (STC) SA92-63 or SA00299NY with float strut wire pull fittings VALTBS1245-1/-2 and/or VALTBS1244-1.

All Viking Air Limited (formerly Bombardier Inc.) model DHC-2 Mk. III aeroplanes incorporating the 6000 lb gross weight increase kit installed in accordance with STC SA91-18 or SA945NE with float strut wire pull fittings part number (P/N) VALTBS1245-1/-2 and/or VALTBS1244-1.

Compliance:
As indicated below, unless already accomplished.

Background:
Cracks have been reported on the Forward and Aft float strut wire pull fittings on DHC-2 Mk. I aeroplanes equipped with the 5600 lb gross weight increase kit installed in accordance with STC SA92-63 or SA00299NY and on DHC-2 Mk. III aeroplanes equipped with the 6000 lb gross weight increase kit installed in accordance with STC SA91-18 or SA945NE. An investigation found that the forward and aft wire pull fittings (P/N VALTBS1245-1/-2 and P/N VALTBS1244-1, respectively) are prone to stress corrosion cracking at low cycles/hours.

Failure of these wire pull fittings will reduce the strength of the float undercarriage below the required structural capability and could result in a failure of the undercarriage causing the aeroplane to tip over and be submerged.

Therefore this AD requires that the forward and aft wire pull fittings be replaced with P/N VALTBS1245-3/-4 and P/N VALTBS1244-3/-4 (LH/RH) fittings respectively. These fittings are geometrically similar to the legacy fittings and are made of a different aluminum alloy that is less susceptible to stress corrosion cracking.

In addition to replacing the fittings, it is necessary to implement a recurring visual inspection of the fittings to assure continuing airworthiness.

Corrective Actions:

Part A – Fitting Replacement

1. Within 90 days from the effective date of this AD, replace the forward wire pull fittings in accordance with the applicable Viking Air Ltd. Service Bulletin (SB) or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada using Table 1:

Table 1: Forward Wire Pull Fitting Part Replacement

Component	Existing P/N	Replacement P/N	Replace in accordance with
DHC-2 Mk. I Forward wire pull fitting	VALTBS1245-1/-2	VALTBS1245-3/-4	SB V2/003 Revision NC, paragraph II.A
DHC-2 Mk. III Forward wire pull fitting			SB V2/002 Revision A, paragraph II.A

2. Within 180 days from the effective date of this AD, replace the aft wire pull fittings in accordance with the applicable Viking Air Ltd. SB or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada using Table 2:

Table 2: Aft Wire Pull Fitting Part Replacement

Component	Existing P/N	Replacement P/N	Replace in accordance with
DHC-2 Mk. I Aft wire pull fitting	VALTBS1244-1	VALTBS1244-3/-4	SB V2/003 Revision NC, paragraph II.B
DHC-2 Mk. III Aft wire pull fitting			SB V2/002 Revision A, paragraph II.B

3. As of the effective date of this AD, it is prohibited for anyone to allow installation of wire pull fittings VALTBS1245-1, VALTBS1245-2 or VALTBS1244-1 on DHC-2 Mk. I or DHC-2 Mk. III aeroplanes.

Part B – Recurring Inspection

1. At intervals not exceeding 110 hours air time, carry out a visual inspection of the forward and aft wire pull fittings for signs of corrosion and/or cracking in accordance with paragraph IV of the applicable Viking Air Ltd. SB (V2/003 Revision NC or V2/002 Revision A) or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 4 April 2018

Contact:

Ross McGowan, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.