

Airworthiness Directive Schedule

Aeroplanes

De Havilland DHC-3 Series (Otter)

24 November 2022

- Notes:**
1. This AD schedule is applicable to Viking Air Limited DHC-3 Otter aircraft (formerly Bombardier Inc. and De Havilland Canada) manufactured under Transport Canada Type Certificate No. A-27.
 2. Transport Canada (TC) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these aircraft. State of Design ADs can be obtained directly from the Transport Canada website at: <http://wwwapps3.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/awd-ly-cs1401.asp?rand>
FAA ADs can be obtained from the FAA website at: [Dynamic Regulatory System \(faa.gov\)](https://www.faa.gov/dynamic-regulatory-system)
 3. The date above indicates the amendment date of this schedule..
 4. New or amended ADs are shown with an asterisk *

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DCA/DHC-3/1 Electrically Heated Engine Pneumatic Lines – Inspection.

Applicability: All model DHC-3 Turbo Otter modified in accordance with FAA STC No. SA3777NM or Canadian Supplemental Type Approval No. SA89-32.

Requirement: To detect and correct the electrical heating blanket wiring configuration of the heated engine pneumatic lines circuit, which could result in loss of pneumatic heating and subsequent loss of engine power or reverse propeller overspeed governing protection, accomplish the following:

1. Inspect the electrical wiring to the P₃ and P_y engine pneumatic line heating blankets and to the P₃ heater warning light to determine if they are wired in a parallel configuration. Drawing no. 20075 Rev. I dated 10 October 2000, as referenced in A.M. Luton SIL-00-10-10 dated 22 March 2001, illustrates the correct wiring configuration.

Note: 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 P₃ 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 requirement 2.

b) If it is determined that the P₃ and P_y engine pneumatic line heating blankets and the P₃ heater warning light are incorrectly wired, modify the wiring to the configuration shown on drawing no. 20075 Rev. I dated 10 October 2000. It is recommended that a similar test be performed as described in the NOTE, after modifying the wiring.

2. Inspect the circuit breaker switch for the heated engine pneumatic lines circuit. If the engine installation utilizes both P₃ and P_y heated pneumatic lines, install a 7.5 Amp circuit breaker switch in accordance with the drawing, unless already accomplished. Potter & Brumfield P/N: W31-X2M1G-7.5, as referenced in the SIL, is an acceptable circuit breaker switch. If the engine installation utilizes only a P₃ 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.
(Transport Canada AD CF-2002-38 refers)

Compliance: 1. Within 300 TIS or by 31 March 2006, whichever occurs first.
2. Within 300 TIS or by 31 March 2006, whichever occurs first.

Effective Date: 31 March 2005

DCA/DHC-3/2 Elevator Servo Tab - Inspection.

Applicability: All model DHC-3 Otter aircraft incorporating the flutter prevention modification installed in accordance with STC Number SA99-219, issue 1 or 2.

Requirement: To prevent structural failure of the R/H Elevator Servo Tab Balance Assembly (Viking p/n VALTOC1136-2), which could result in vibration and flutter of the elevator servo tab, incorporate the redesigned elevator servo tab, introduced by Viking Air Ltd. retro kit No. V3MK1151, in accordance with Viking Air Ltd. SB V3/01.
(Transport Canada AD CF-2002-48 refers)

Compliance: Within 300 hours TIS.

Effective Date: 31 March 2005

DCA/DHC-3/3A Elevator Servo-Tab Assembly – Modification

Applicability: Model DHC-3 'Otter' aircraft fitted with a turbine engine and embodied with Supplemental Type Certificates (STCs) SA01-111, SA89-32 or SA02-15 and Model DHC-3 'Otter' aircraft fitted with a PZL ASZ-621R-MI8 engine and embodied with STC SA83-18.

Note: The applicability of this AD revised to include those DHC-3 aircraft with STC SA83-18 embodied. The AD title amended to reflect that the AD affects the elevator servo-tab and not the trim-tab.

Requirement: To reduce the probability of elevator servo-tab failure due to flutter, install one of the following elevator flutter prevention kits:

A Viking Air Ltd. Retro Kit No. V3MK1148, issue 3 or later approved revisions per Viking Air Ltd., STC SA99-219 issue 3 or later approved revisions, or

American Automotives Inc. Supplemental Type Certificate No. SA03-99 (FAA STC No. SA01059SE) with a new elevator servo-tab and redundant control linkage, or

A modification approved by the CAA designed to prevent elevator servo-tab flutter. (Transport Canada AD CF-2006-02R1 refers)

Compliance: Within the next 300 hours TIS or by 26 December 2008, whichever occurs sooner.

Effective Date: DCA/DHC-3/3 - 27 April 2006
DCA/DHC-3/3A - 26 June 2008

DCA/DHC-3/4 Magneto Firewall Connector – Inspection

Applicability: Model DHC-3 aircraft fitted with a radial engine and firewall magneto connector plugs as described in Viking Air Limited Service Bulletin (SB) No. V3/0001.

Requirement: To prevent failure of the magnetos and ignition system due to the lock wire hole on the ignition connector plug located on the firewall breaking, which could result in the plug vibrating loose and the magneto being grounded, accomplish the following:

1. Inspect the firewall ignition plug and receptacle for correct wire locking and security per the instructions in Bombardier Alert Service Bulletin A3/53 revision A or later approved revisions.

Replace any damaged parts before further flight.

2. Amend the periodic inspections section of the maintenance schedule in the Maintenance Manual PSM 1-3-2 by inserting temporary revision TR14, dated 24 August 2001.

3. Replace the firewall ignition connector per the instructions in Viking Air Limited SB V3/0001 dated 27 June 2007 or later approved revisions.

(Transport Canada AD CF-2001-37R1 refers)

Compliance:

1. Within the next 50 hours TIS or by 26 September 2008, whichever occurs sooner.
2. By 26 September 2008.
3. By 26 December 2008.

Effective Date: 26 June 2008

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If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ, they will be added to the list below.

CF-53-16 Modifications

Effective Date: 1 March 1953

CF-54-03 Modifications

Effective Date: 30 December 1954

CF-54-04 Compression Strut

Effective Date: 30 December 1954

CF-54-07 Cargo Doors

Effective Date: 1 June 1954

CF-54-09 Modifications

Effective Date: 1 July 1954

CF-55-03 Modifications

Effective Date: 30 December 1955

CF-55-06 Engine Breather Pipe Assembly

Effective Date: 30 December 1955

CF-56-03 Modifications

Effective Date: 30 December 1956

CF-56-08 Tailplane Trim

Effective Date: 30 December 1956

CF-56-11 Flap Hydraulic Circuit Check Valve

Effective Date: 30 December 1956

CF-56-12 Exhaust System Support

Effective Date: 30 December 1956

CF-56-13 Propeller Counterweight Bearing Shaft

Effective Date: 30 December 1956

CF-57-06 Modifications

Effective Date: 30 December 1957

CF-57-08 Sintered Metal Filter Assembly

Effective Date: 30 December 1957

CF-58-04 Clinch Nuts

Effective Date: 30 December 1958

CF-58-15 Flap Control Rods

Effective Date: 30 December 1958

CF-59-03 Modification

Effective Date: 30 December 1959

CF-59-07 Bellcrank Assemblies

Effective Date: 30 December 1959

CF-60-03 Wing Strut Spar

Effective Date: 30 December 1960

CF-61-04 Main Ski Axle Pins and Bushings

Effective Date: 30 December 1961

CF-61-05 Oil Delivery Lines

Effective Date: 30 December 1961

CF-62-05 Firewall Assemblies

Effective Date: 30 December 1962

CF-68-13 Elevator Tab Flutter

Effective Date: 30 December 1968

CF-69-12 Skis and Wheel Skis

Effective Date: 30 December 1969

CF-82-26R1 Tie Bar Assemblies

Effective Date: 30 December 1982

CF-82-34 Control Column Assemblies

Effective Date: 30 December 1982

CF-85-03R1 Cabin Utility Seats

Effective Date: 30 December 1985

CF-85-04 Elevator Pushrod

Effective Date: 30 December 1985

CF-89-20R1 Tailplane Rib Cracking

Effective Date: 30 December 1989

CF-91-16 Fuel Control Detent

Effective Date: 30 December 1991

FAA AD 98-18-08 A.M. Luton STC Mod

Effective Date: 30 December 1998

CF-99-05 Electrical System

Effective Date: 30 December 1999

CF-1999-06R1 Fire Detection

Effective Date: 30 December 1999

FAA AD 2011-01-09 PBE P/N 119003-11

Effective Date: 9 February 2011

CF-2014-14R1 Horizontal Stabiliser Actuator – Inspection

Effective Date: 2 September 2014

CF-2014-29 Turboprop Installations - Placards and Markings

Effective Date: 11 September 2014

CF-2015-05 Upper Wing Skin and Main Spar Lower Cap – Inspection

Effective Date: 31 March 2015

CF-2016-05R1 Levelling and Weighing – AFM Amendment

Applicability: DHC-3 aircraft, all S/N embodied with Baron Short Take Off and Landing (STOL) kit (STC SA 94-114 or STC SA 0028NY).

Effective Date: CF-2016-05 - 8 February 2016
CF-2016-05R1 - 29 June 2017

CF-2017-11 Wing Strut Attach Bolts – Inspection

Effective Date: 23 March 2017

CF-2017-29 Main Wing Spar Lug Fitting and Tie-bar – Inspection

Applicability: Viking Air Ltd. (formerly Bombardier Inc.) DHC-3 aeroplanes, all S/N.

Effective Date: 7 September 2017

CF-2018-04 Airframe Corrosion and Cracking – Inspection

Applicability: Viking Air Ltd. (formerly Bombardier Inc.) DHC-3 aeroplanes, all S/N.

Effective Date: 2 February 2018

CF-2020-20 Wing Strut – Inspection

Applicability: Viking Air Ltd. (formerly Bombardier Inc.) DHC-3 aeroplanes, all S/N.

Effective Date: 25 June 2020

CF-2022-41 Engine Mount Pickup Fittings – Inspection

Applicability: Viking Air Ltd. (formerly Bombardier Inc.) DHC-3 aeroplanes, all S/N.

Effective Date: 31 August 2022

*** FAA AD 2022-23-08 Horizontal Stabiliser Actuator – Inspection**

Applicability: Viking Air Ltd. (formerly Bombardier Inc.) DHC-3 aeroplanes, all S/N.

Effective Date: 3 November 2022