



Supplemental Type Certificate

This approval is issued to:

Thunder Bay Aviation Ltd.
309 Hector Dougall Way
Thunder Bay, Ontario
Canada P7E 6M5

Number: SA97-124

Issue No.: 10

Approval Date: December 22, 1997

Issue Date: March 21, 2024

Responsible Office:

Ontario

Aircraft/Engine Type or Model:

Viking Air Limited DHC-2 Mk.I, DHC-2 Mk.II, DHC-2 Mk.III, DHC-3, DHC-6 SERIES 100, DHC-6 SERIES 110, DHC-6 SERIES 200, DHC-6 SERIES 210, DHC-6 SERIES 300, DHC-6 SERIES 310, DHC-6 SERIES 320, DHC-6 SERIES 400

Canadian Type Certificate or Equivalent:

A-22 (Viking Air Limited DHC-2 Mk.I, DHC-2 Mk.II, DHC-2 Mk.III)
A-27 (Viking Air Limited DHC-3)
A-82 (Viking Air Limited DHC-6 SERIES 100, DHC-6 SERIES 110, DHC-6 SERIES 200, DHC-6 SERIES 210, DHC-6 SERIES 300, DHC-6 SERIES 310, DHC-6 SERIES 320, DHC-6 SERIES 400)

Description of Type Design Change:

Replacement Fixed Wing Control Cables

**Installation/Operating Data,
Required Equipment and Limitations:**

1) Eligible control cables are listed in the continuation sheets appended to this certificate.

- See Continuation Sheet -

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.

DocuSigned by:

C8F2E41099B341A...

Albert Leung
For Minister of Transport



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

- 2) All control cables must be manufactured and tested in accordance with the following Master Drawing Lists (MDL):

Thunder Bay Aviation MDL	Aircraft Model	DOT Approval Date
MDL023 Revision 1	DHC-6 Series 100, 110, 200, 210, 300, 310, 320 and 400	May 28, 2021 *
MDL022 Revision 1	DHC-3	March 1, 2024 *
MDL021 Revision N/C	DHC-2	October 4, 2006 *

* or later DOT approved revisions.

- 3) The Thunder Bay Aviation Ltd. control cables must be installed and maintained in accordance with the documents specified in the following continuation sheets. Compliance with service life limits specified in Viking Air Ltd. DHC-6 Twin Otter All Series Airframe Airworthiness Limitations Manual, PSM 1-6-11, Revision 9, dated April 30, 2018, Transport Canada approved April 30, 2018, is mandatory.

- 4) Some of the original and new cables are qualified to FAR 23 in lieu of CAR 3.

**Installation/Operating Data,
Required Equipment and Limitations (Continued):**

For DHC-2 Aircraft:

The Thunder Bay Aviation Ltd. control cables must be installed and maintained in accordance with Thunder Bay Aviation Instructions for Continued Airworthiness, Document no. ICA0410-1 Revision 1 dated September 14, 2006, or later revisions.

For DHC-3 Aircraft:

The Thunder Bay Aviation Ltd. control cables must be installed and maintained in accordance with Thunder Bay Aviation Instructions for Continued Airworthiness, Document no. ICA0410-2 Revision 3 dated February 28, 2024, or later revisions (Elect to comply: FAR 23; 23.1529, Amdt. 23-8).

- See Continuation Sheet -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

For DHC-6 Aircraft Series 100, 110, 200, 210, 300, 310, 320 and 400:

The Thunder Bay Aviation Ltd. control cables must be installed and maintained in accordance with the following documents:

DOCUMENT / MANUAL #	DESCRIPTION / TITLE	DOCUMENT HOLDER	SECTION
PSM 1-6-2 Revision 7	DHC-6 TWIN OTTER SERIES 100 AND 200 MAINTENANCE MANUAL	Viking Air Limited	Part 1
			Part 2
			Part 5
PSM 1-63-2 Revision 21	DHC-6 TWIN OTTER SERIES 300 MAINTENANCE MANUAL	Viking Air Limited	12-00-00
			20-60-01
			27-00-00
			27-10-00
			27-10-21
			27-20-00
			27-20-11
			27-30-00
			27-30-11
			27-50-00
			32-50-00
			76-00-00
			76-10-00
PSM 1-64-2 Revision 8	DHC-6 TWIN OTTER SERIES 400 MAINTENANCE MANUAL	Viking Air Limited	12-00-00
			20-60-01
			27-00-00
			27-10-00

- See Continuation Sheet -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

For DHC-6 Aircraft Series 100, 110, 200, 210, 300, 310, 320 and 400 (Continued):

DOCUMENT / MANUAL #	DESCRIPTION / TITLE	DOCUMENT HOLDER	SECTION
			27-10-21
			27-20-00
			27-20-11
			27-30-00
			27-30-11
			27-50-00
			32-50-00
			76-00-00
			76-10-00
PSM 1-6-7 Revision 20	DHC-6 TWIN OTTER ALL SERIES INSPECTION REQUIREMENTS MANUAL	Viking Air Limited	-27 SYSTEM & ITEM 4. (1), (2), (3), (4) 9. c., f. 11.b.
			-32 SYSTEM & ITEM 4. 7.
			-76 SYSTEM & ITEM 1.
PSM 1-6-11 Revision 9	DHC-6 TWIN OTTER ALL SERIES AIRFRAME AIRWORTHINESS LIMITATIONS MANUAL	Viking Air Limited	
S/B No. 6/523 Revision 'A'	DHC-6 (TWIN OTTER) SERVICE BULLETIN 6/523	Viking Air Limited	
S/B No. 6/453 Revision Dated 24 Feb 1984	DHC-6 (TWIN OTTER) SERVICE BULLETIN 6/453	Viking Air Limited	

- Refer to Continuation Sheets for Eligibility List -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

**Installation/Operating Data,
Required Equipment and Limitations (Continued):**

ELIGIBILITY LIST:

**DHC-6 SERIES 100, 110
DHC-6 SERIES 200, -210
DHC-6 SERIES 300, 310, 320, 400**

AILERON CONTROL

OEM Part Number	TB Part Number	Description
C6CF1124-1	TB-C60F1124-1	Aileron quadrant, lower groove, left-hand forward
C6CF1124-3	TB-C6CF1124-3	Aileron quadrant, upper groove, right-hand forward
C6CF1125-1	TB-C6CF1125-1	Aileron quadrant, lower groove, left-hand rear
C6CF1125-3	TB-C6CF1125-3	Aileron quadrant, upper groove, right-hand rear
C6CF1152-1	TB-C6CF1152-1	Control column to station 150.0, right hand side
C6CF1153-3	TB-C6CF1153-3	Station 150.0 to aileron quadrant, right hand side
C6CF1155-3	TB-C6CF1155-3	Station 150.0 to aileron quadrant, left hand side
C6CF1452-1	TB-C6CF1452-1	Aileron quadrant, lower groove, left hand forward (Mod 6/1435)
C6CW1031-1	TB-C6CW1031-1	Left hand wing forward, and right hand wing rear
C6CW1032-1	TB-C6CW1032-1	Left hand wing rear, and right hand wing forward
EO 69053-10	TB-EO 69053-10	Control column to station 150.0, right hand side
EO 69053-11	TB-EO 69053-11	Station 150.0 to aileron quadrant, right hand side
EO 69053-12	TB-EO 69053-12	Station 150.0 to aileron quadrant, left hand side
EO 69053-13	TB-EO 69053-13	Aileron quadrant, upper groove, right-hand forward
EO 69053-14	TB-EO 69053-14	Aileron quadrant, lower groove, left-hand rear
EO 69053-15	TB-EO 69053-15	Aileron quadrant, upper groove, right-hand rear
EO 69053-16	TB-EO 69053-16	Aileron quadrant, lower groove, left-hand forward (Mod 6/1435)
EO 69053-17	TB-EO 69053-17	Left hand wing forward, and right hand wing rear
EO 69053-18	TB-EO 69053-18	Left hand wing rear, and right hand wing forward
C6CF1512-1	TB-C6CF1512-1	Control Column to Sta. 150.0 Left Hand Side
C6CF1512-3*	TB-C6CF1512-3	Control Column to Sta. 150.0 Left Hand Side

***Applicable to DHC-6 SERIES 300, 310, 320, 400 Only**

- See Continuation Sheet -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

ELIGIBILITY LIST (Continued):

ELEVATOR CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CF1146-1	TB-C6CF1146-1	Front of elevator lever to station 426.75
C6CF1147-1	TB-C6CF1147-1	Rear of elevator lever to station 426.75
C6CF1148-1	TB-C6CF1148-1	Upper cable, station 426.75 to elevator quadrant
C6CF1149-1	TB-C6CF1149-1	Upper cable, station 426.75 to elevator quadrant
C6CF1100-11	TB-C6CF1100-11	Elevator lever stop cable
EO 69053-1	TB-EO 69053-1	Front of elevator lever to station 426.75
EO 69053-2	TB-EO 69053-2	Rear of elevator lever to station 426.75
EO 69053-3	TB-EO 69053-3	Upper cable, station 426.75 to elevator quadrant
EO 69053-4	TB-EO 69053-4	Upper cable, station 426.75 to elevator quadrant
EO 69053-5	TB-EO 69053-5	Elevator lever stop cable

ELEVATOR CONTROL CABLE COMPONENTS

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CF1465-29	TB-C6CF1465-29	Strap
C6CF1465-27	TB-C6CF1465-27	Strap
C3CF243-3	TB-C3CF243-3	Fitting
C3CF241-3	TB-C3CF241-3	Arm
C3CF240-4	TB-C3CF240-4	Washer
C3CF240-3	TB-C3CF240-3	Stop

- See Continuation Sheet -



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ELIGIBILITY LIST (Continued):

FLAP CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CF1038-1	TB-C6CF1038-1	Flap indicator cable, forward (Pre Mods 6/1254 and 6/1404)
C6CF1039-1	TB-C6CF1039-1	Flap indicator cable, rear
C6CF1040-1	TB-C6CF1040-1	Flap selector lever to section 162.0
C6CF1042-1	TB-C6CF1042-1	Flap selector lever to section 162.0
C6CF1122-3	TB-C6CF1122-3	Flap selector valve follow up cable
C6CF1123-3	TB-C6CF1123-3	Flap selector valve upper cable
C6CF1148-1	TB-C6CF1148-1	Upper cable, station 426.75 to elevator quadrant
C6CF1451-13	TB-C6CF1451-13	Flap indicator cable, forward cable assembly (Mod 6/1404)
EO 69053-19	TB-EO 69053-19	Flap selector lever to station 162.0
EO 69053-20	TB-EO 69053-20	Flap selector lever to station 162.0
EO 69053-21	TB-EO 69053-21	Flap selector valve upper cable
EO 69053-22	TB-EO 69053-22	Flap selector valve follow up cable
C6CF1513-1	TB-C6CF1513-1	Flap Selector Valve Lower Cable
C6CF1513-3*	TB-C6CF1513-3	Flap Selector Valve Lower Cable

*Applicable to DHC-6 SERIES 300, 310, 320, 400 Only

NOSEWHEEL STEERING

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CF1242-1	TB-C6CF1242-1	Nosewheel steering cable in control column (Pre Mod 6/1194)
C6CF1242-5	TB-C6CF1242-5	Nosewheel steering cable in control column (Mod 6/1194)
C6CF1251-3	TB-C6CF1251-3	Left cable to steering valve lever drum

- See Continuation Sheet -



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ELIGIBILITY LIST (Continued):

POWER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CE1241-3	TB-C6CE1241-3	Fuel shutoff, left wing. To front of control pulley
C6CE1242-3	TB-C6CE1242-3	Fuel shutoff, left wing. To rear of control pulley
C6CE1243-3	TB-C6CE1243-3	Throttle, left wing. To rear of engine control pulley
C6CE1244-3	TB-C6CE1244-3	Throttle, left wing. To front of engine control pulley
C6CE1245-3	TB-C6CE1245-3	Propeller pitch, left wing. To rear of propeller control pulley
C6CE1246-3	TB-C6CE1246-3	Propeller pitch, left wing. To front of propeller control pulley
C6CE1247-3	TB-C6CE1247-3	Fuel shutoff, right wing. To front of control pulley
C6CE1248-3	TB-C6CE1248-3	Fuel shutoff, right wing. To rear of control pulley
C6CE1249-3	TB-C6CE1249-3	Throttle, right wing. To rear of engine control pulley
C6CE1250-3	TB-C6CE1250-3	Throttle, right wing. To front of engine control pulley
C6CE1251-3	TB-C6CE1251-3	Propeller pitch, right wing. To rear of propeller control pulley
C6CE1252-3	TB-C6CE1252-3	Propeller pitch, right wing. To front of propeller control pulley
C6CE1253-1	TB-C6CE1253-1	Fuel shutoff, left hand lever to wing. Upper cable, fuselage
C6CE1254-1	TB-C6CE1254-1	Fuel shutoff, left hand lever to wing. Lower cable, fuselage
C6CE1255-1	TB-C6CE1255-1	Throttle, left hand lever to wing. Lower cable, fuselage
C6CE1256-1	TB-C6CE1256-1	Throttle, left hand lever to wing. Upper cable, fuselage
C6CE1257-1	TB-C6CE1257-1	Propeller pitch, left hand lever to wing. Upper cable, fuselage
C6CE1258-1	TB-C6CE1258-1	Propeller pitch, left hand lever to wing. Lower cable, fuselage
C6CE1259-1	TB-C6CE1259-1	Fuel shutoff, right hand lever to wing. Lower cable, fuselage
C6CE1260-1	TB-C6CE1260-1	Fuel shutoff, right hand lever to wing. Upper cable, fuselage
C6CE1261-1	TB-C6CE1261-1	Throttle, right hand lever to wing. Lower cable, fuselage
C6CE1262-1	TB-C6CE1262-1	Throttle, right hand lever to wing. Upper cable, fuselage
C6CE1263-1	TB-C6CE1263-1	Propeller pitch, right hand lever to wing. Lower cable, fuselage
C6CE1264-1	TB-C6CE1264-1	Propeller pitch, right hand lever to wing. Upper cable, fuselage
C6CE1336-1	TB-C6CE1336-1	Fuel shutoff, left wing. To front of control pulley
C6CE1336-3	TB-C6CE1336-3	Fuel shutoff, left wing. To rear of control pulley
C6CE1336-5	TB-C6CE1336-5	Fuel shutoff, right wing. To front of control pulley
C6CE1336-7	TB-C6CE1336-7	Fuel shutoff, right wing. To rear of control pulley

- See Continuation Sheet -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

ELIGIBILITY LIST (Continued):

RUDDER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C6CF1150-1	TB-C6CF1150-1	Station 455.0 to right hand side rudder control attachment
C6CF1151-1	TB-C6CF1151-1	Station 455.0 to left hand side rudder control attachment
EO 69053-6	TB-EO 69053-6	Station 455.0 to right hand side rudder control attachment
EO 69053-7	TB-EO 69053-7	Station 455.0 to left hand side rudder control attachment
C6CF1511-1	TB-C6CF1511-1	Rudder quadrant inboard grove to Sta. 455.0
C6CF1511-5*	TB-C6CF1511-5	Rudder quadrant inboard grove to Sta. 455.0
C6CF1511-3	TB-C6CF1511-3	Rudder quadrant inboard grove to Sta. 455.0
C6CF1511-7*	TB-C6CF1511-7	Rudder quadrant inboard grove to Sta. 455.0

*Applicable to DHC-6 SERIES 300, 310, 320, 400 Only

DHC-3

AILERON CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3CF201-5	TB-C3CF201-5	TB-C3CF201-5R	Forward aileron control
C3CF204-5	TB-C3CF204-5	TB-C3CF204-5R	Aileron in wing
C3CF205-5	TB-C3CF205-5	TB-C3CF205-5R	LH aileron balance
C3CF259-5	TB-C3CF259-5	TB-C3CF259-5R	RH aileron balance
C3CF202-5	N/A	TB-C3CF202-5R	Rear aileron control
C3CF203-5	N/A	TB-C3CF203-5R	Aileron reduction quadrant

- See Continuation Sheet -



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ELIGIBILITY LIST (Continued):

ELEVATOR CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3CF195-7	TB-C3CF195-7	TB-C3CF195-7R	Elevator control up
C3CF193-5	TB-C3CF193-5	TB-C3CF193-5R	Elevator control down
C3CF194-9	TB-C3CF194-9	TB-C3CF194-9R	Elevator control down
C3CF196-5	TB-C3CF196-5	TB-C3CF196-5R	Elevator control up
C3CF580-3	TB-C3CF580-3	TB-C3CF580-3R	Inboard front trim interconnect
C3CF581-3	TB-C3CF581-3	TB-C3CF581-3R	Inboard rear trim interconnect
C3CF582-3	TB-C3CF582-3	TB-C3CF582-3R	Outboard front trim interconnect
C3CF583-3	N/A	TB-C3CF583-3R	Outboard rear trim interconnect
C3CF240-9	TB-C3CF240-9	TB-C3CF240-9R	Elevator lever stop cable
C3CF348-7	N/A	TB-C3CF348-7R	Elevator trim 646.85"
C3CF349-7	N/A	TB-C3CF349-7R	Elevator trim 653.50"

ELEVATOR CONTROL CABLE COMPONENTS

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3CF411-3	TB-C3CF411-3	N/A	Strap
C3CF242-3	TB-C3CF242-3	N/A	Strap
C3CF243-3	TB-C3CF243-3	N/A	Fitting
C3CF241-3	TB-C3CF241-3	N/A	Arm
C3CF240-4	TB-C3CF240-4	N/A	Washer
C3CF240-3	TB-C3CF240-3	N/A	Stop

- See Continuation Sheet -



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

ELIGIBILITY LIST (Continued):

RUDDER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3CF197-5	TB-C3CF197-5	TB-C3CF197-5R	LH front rudder control
C3CF198-5	TB-C3CF198-5	TB-C3CF198-5R	LH rear rudder control
C3CF199-5	TB-C3CF199-5	TB-C3CF199-5R	RH front rudder control
C3CF200-5	TB-C3CF200-5	TB-C3CF200-5R	RH rear rudder control
C3CF329-7	N/A	TB-C3CF329-7R	Rudder trim

WATER RUDDER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3UF60-9	TB-C3UF60-9	N/A	Water rudder control
C3UF61-9	TB-C3UF61-9	N/A	Water rudder control
C3UF76-6	TB-C3UF76-6	N/A	Rudder retraction fwd
C3UF44-7	TB-C3UF44-7	N/A	Retraction center RH
C3UF43-7	TB-C3UF43-7	N/A	Retraction center LH
C3UF42-7	TB-C3UF42-7	N/A	Retraction aft
C3UF46-5	TB-C3UF46-5	N/A	Balance
C3UF132-5	TB-C3UF132-5	N/A	Cable-water rudder, used on C3UF140-5
C3UF152-3	TB-C3UF152-3	N/A	Water rudder
C3UF153-3	TB-C3UF153-3	N/A	Water rudder retraction centre LH
C3UF155-3	TB-C3UF155-3	N/A	Water rudder retraction centre RH

FUEL SELECTION

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>TB CRES Part Number</u>	<u>Description</u>
C3CE12-5	N/A	TB-C3CE12-5R	Fuel tank selector control
C3CE67-5	N/A	TB-C3CE67-5R	Fuel tank selector control

- See Continuation Sheet -



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ELIGIBILITY LIST (Continued):

DHC-2

AILERON CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C2CF1121AND	TB-C2CF1121AND	LH aileron control
C2CF1133AND	TB-C2CF1133AND	RH aileron control

ELEVATOR CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C2CF813A	TB-C2CF813A	Elevator control
C2CF815A	TB-C2CF815A	Elevator control
C2CF1563A	TB-C2CF1563A	Forward elevator trim tab

RUDDER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C2CF741AND	TB-C2CF741AND	Forward rudder control
C2CF1235AND	TB-C2CF1235AND	Rear rudder control
C2CF1461A	TB-C2CF1461 A	Rudder trim tab control

WATER RUDDER CONTROL

<u>OEM Part Number</u>	<u>TB Part Number</u>	<u>Description</u>
C2UF181A	TB-C2UF181A	Port water rudder retraction
C2UF183A	TB-C2UF183A	Starboard water retraction
C2UF193A	TB-C2UF193A	Rudder control balance
C2UF417A	TB-C2UF417A	Water rudder control

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