

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A-806
Revision 25
Viking Air Limited
DHC-2 Mk. I
DHC-2 Mk. II
DHC-2 Mk. III
September 04, 2014

AIRCRAFT SPECIFICATION NO. A-806

Type Certificate Holder Viking Air Limited
9574 Hampden Road
Sidney, British Columbia
Canada V8L 5V5

Type Certificate Holder Record deHavilland Aircraft of Canada, Limited transferred TC A-806 to Boeing of Canada, Ltd. (de Havilland Div.) on August 02, 1988
Boeing of Canada, Ltd. (de Havilland Div.) transferred TC A-806 to deHavilland Inc. on June 16, 1993
deHavilland Inc. transferred TC A-806 to Bombardier Inc. on January 26, 2006
Bombardier Inc. transferred TC A-806 to Viking Air Limited on January 31, 2006

I. Model DHC-2 Mk. I (L-20A - See Note 4). (Beaver) (Normal Category), approved March 12, 1948

Engine Pratt & Whitney Wasp Jr. R985 SB-3 (See Note 301(a) through 301(j) for optional engines).

Fuel 80/87 octane minimum grade aviation gasoline

Engine limits Maximum continuous:
(Sea level) 34.5 in. Hg. 2200 rpm (400 hp)
(Straight-line manifold-pressure variation with alt. to 5000 ft.)
33.5 in. Hg. 2200 rpm (400 hp)

Takeoff (one minute):
36.5 in. Hg. 2300 rpm (450 hp) Sea level

Propeller and propeller limits Propeller - Hamilton Standard, Counterweight, Hub Model 2D30
Blade Model 6101A-12 to -18.
(Diameter 9 ft. -0 in. max.; 8 ft. - 4 in. min. allowable for repairs)
Pitch setting at 42 inch station: Low 10.5 degrees; high 24 degrees.

Propeller - Hamilton Standard, Hydromatic, Hub Model 22D30
Blade Model 6533A-12 to -18.
(Diameter 9 ft. -0 in. max.; 8 ft. - 4 in. min. allowable for repairs)
(Eligible on Pratt & Whitney R-085-AN-14B)
Pitch setting at 42 inch station: low 10.5 degrees; hig 24 degrees.

Constant speed governor Hamilton Standard Type 1A2-G5 or -A5
Hydromatic propeller governor Hamilton Standard Type 4B2-2.

Airspeed limits (CAS)

	Landplane & Skiplane				Seaplane	
	at 4650 lb.		at 5100 lb.		5090 lb.	
	(mph)	(knots)	(mph)	(knots)	(mph)	(knots)
Vne (never exceed)	195	170	175	152	175	152
Vno (max. structure) cruising)	155	135	140	122	140	122
Vfe (flaps extended)	105	91	105	91	105	91

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I. Model DHC-2 Mk. I (cont'd)

Center of Gravity C.G. Range

(See Note 10.)

Configuration	Aircraft Weight (lb.)	Limits (in.)	
		Fwd.	Aft.
Landplane & Skiplane	5100	-1.25	-8.8
	3800 or less	+6.60	-8.8
Landplane & Skiplane with Items 203 or 204	5100	-1.25	-4.4
	3800 or less	+6.60	-4.4
Landplane & Skiplane with Item 205(d)	4820	-1.25	-7.8
	3800 or less	+6.60	-7.8
Amphibian on wheels (Item 101(a)(i))	5100	-1.25	-6.1
	3800 or less	+6.60	-6.1
Amphibian on Floats (Item 101(a)(i))	5000	-1.25	-6.1
	3800 or less	+6.60	-6.1
Floatplane (Item 101(d)(i))	5090	-1.25	-6.1
	3800 or less	+6.60	-6.1
Floatplane (Item 101(d)(i)) with Items 205 or 206	4820	+0.44	-1.5
	3800 or less	+6.60	-1.5
Floatplane (Item 101(d)(i)) or Amphibian (Item 101(a)(i)) with Item 207	All weights	+0.44	-3.50

The CG. sign convention is the reverse of that normally used, i.e., (+) distance is forward, while (-) distance is aft of datum. Straight line variation between points given.

Empty weight C.G. Range

None

Maximum weights

Landplane

4650 lb. (with Item 201(a))
 4820 lb. (with Items 205(d) and 201(b))
 5100 lbs. (with Item 201(b) or 101(a)(i))

Skiplane

4650 lb. (with Items 205(d) and 201(a))
 4820 lb. (with Items 202(a) and (b), or with
 Items 205(d) and 201(b))
 5100 lb. (with Items 202(c)(iii), (d), (e), (f), (g), (h), and (i))

Floatplane (See Note 5)

4820 lb. (with Items 205 or 206)
 5000 lb. (with Items 101(a)(i)) (See Note 6)
 5090 lb. (with Items 207 or 101(d))

Number of seats

Eight 2 front (+5), 3 center (-31), 3 rear (-66). (See approved loading instructions for alternate arrangements.)

Maximum baggage

See approved loading instructions.

Fuel capacity

79 Imperial Gallons (95 U.S. gallons) total (under cabin floor)
 One tank - 29 Imperial Gallons (35 U.S. gallons) (+4.5 inches)
 One tank - 29 Imperial Gallons (35 U.S. gallons) (-19.6 inches)
 One tank - 21 Imperial Gallons (25 U.S. gallons) (-40.0 inches)
 See Item 200 for external long range and wing tip fuel tanks.

Oil capacity

Maximum 5.2 Imperial Gallons (6.2 U.S. gallons) (+37 inches)

I. Model DHC-2 Mk. I (cont'd)

Manufacturer's serial numbers	1 to 79 inclusive; 81 and subsequent (see Notes 3 and 4). The Canadian Department of Transport Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made. (Not required for those surplus military aircraft certificated in accordance with Note 4.)
Import requirements	A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by or for the Minister of Transport. This form must contain the following statement: "This certifies that the aircraft described below has been manufactured in conformity with data forming the basis of D.O.T. Type Approval No. A-22, issue 26 (FAA Type Certificate No. A-806)."
Certification basis	CAR 10 in conformity with data forming the basis for DOT Aircraft Type Approval No. A-22 based on British Civil Airworthiness Requirements as amended to June 1, 1947, Normal Category, and Information Circular T/4/48 dated March 3, 1948. (This certification equivalent to CAR 3 dated November 13, 1945). FAA Airplane Type Certificate No. A-806 issued on March 12, 1948. Date of application for Type Certificate March 21, 1947 (to the DOT).
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment must be in each aircraft at all times:</p> <ol style="list-style-type: none"> 1. Canadian approved DeHavilland DHC-2 Mk. I Beaver Flight Manual dated March 31, 1956. 2. Current deHavilland Beaver Weight and Balance Report, including list of Equipment in Certificated Weight Empty. (Items listed as required equipment must not be removed unless replaced by approved equipment items).

II. Model DHC-2 Mk. II, (Beaver) (Normal Category) approved May 6, 1953.

Same As DHC-2 Mk. I, except for engine installation and larger fin and rudder in accordance with deHavilland Modification No. 2/950 dated May 20, 1953. (See Note 3 for conversion of DHC-2 Mk. I).

Engine	Alvis “Leonides” 502/4																											
Fuel	100/130 octane minimum grade aviation gasoline. Max. lead content 5.5 milliliters Tetraethyl-lead per Imperial Gallon (4.6 mi. T.E.L. per U.S. gallon).																											
Engine limits	<table><thead><tr><th></th><th>HP</th><th>RPM</th><th>MP In.Hg.</th><th>ALT</th></tr></thead><tbody><tr><td rowspan="2">Takeoff (5 min.)</td><td>540/560</td><td>3000</td><td>46.2</td><td>S.L.</td></tr><tr><td>570</td><td>3000</td><td>46.2</td><td>1750 ft.</td></tr><tr><td rowspan="2">Maximum continuous</td><td>425</td><td>2900</td><td>37.1</td><td>S.L.</td></tr><tr><td>455</td><td>2900</td><td>37.1</td><td>7250 ft.</td></tr></tbody></table> <p>Maximum Overspeed Condition Overspeeds of up to 3150 rpm are permissible for periods not exceeding 20 seconds.</p>						HP	RPM	MP In.Hg.	ALT	Takeoff (5 min.)	540/560	3000	46.2	S.L.	570	3000	46.2	1750 ft.	Maximum continuous	425	2900	37.1	S.L.	455	2900	37.1	7250 ft.
	HP	RPM	MP In.Hg.	ALT																								
Takeoff (5 min.)	540/560	3000	46.2	S.L.																								
	570	3000	46.2	1750 ft.																								
Maximum continuous	425	2900	37.1	S.L.																								
	455	2900	37.1	7250 ft.																								
Propeller and propeller limits	Propeller three-blade deHavilland Type PD184/313/1 Hydromatic constant speed diameter 9 ft. - 0 inches Low pitch: 19 degrees, high pitch 41 degrees																											

II. Model DHC-2 Mk. II (cont'd)

Airspeed limits (CAS)

	<u>MPH</u>	<u>Knots</u>
Vne (never exceed)	175	152
Vno (max. structural cruising)	140	122
Vfe (flaps extended)	105	91

Center of gravity C.G. range (See Note 10.)

Configuration	Aircraft Weight (lb.)	Limits (in.)	
		Fwd.	Aft.
		of Datum	
Landplane	4066	+6.3	-7.7
	4325	+5.0	-7.7
	5100	+1.2	-7.7

Empty weight C.G. range None

Maximum weight Landplane 5100 lb. (with Item 201(b)).

Number of seats Eight - 2 front (+5), 3 center (-31), 3 rear (-66). (See approved loading instructions for alternate arrangements.)

Maximum baggage See approved loading instructions.

Fuel capacity 79 Imperial Gallons (95 U.S. gallons) total (under cabin floor).
 One tank - 29 Imperial Gallons (35 U.S. gallons) (+4.5 inches)
 One tank - 29 Imperial Gallons (35 U.S. gallons) (-19.6 inches)
 One tank - 21 Imperial Gallons (25 U.S. gallons) (-40.0 inches)
 See Item 200 for external long range and wing tip fuel tanks.

Oil capacity Maximum 5.2 Imperial Gallons (6.2 U.S. gallons) (+37 inches).

Manufacturer's serial numbers 80, provided Canadian Department of Transport Certificate of Airworthiness for Export is submitted as noted under "Import Requirements."

Import requirements A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by or for the Minister of Transport. This form must contain the following statement: "This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for DOT Type Approval No. A-22, Issue 26 (FAA Type Certificate No. A-806)."

Certification basis CAR 10 in conformity with data forming the basis for DOT Aircraft Type Approval No. A-22 based on British Civil Airworthiness Requirements as amended to June 1, 1947, Normal Category, and Information Circular T/4/48 dated March 3, 1948. (This certification equivalent to CAR 3 dated November 13, 1945). FAA Airplane Type Certificate No. A-806 amended to May 6, 1953 was issued. Date of application for Type Certificate March 21, 1947 (to the DOT).

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment must be in each aircraft at all times:

1. Canadian approved deHavilland DHC-2 Mk. II Flight Manual dated April 1953.
2. Current deHavilland Beaver Weight and Balance Report, including list of Equipment in Certificated Weight Empty. (Items listed as required equipment must not be removed unless replaced by approved equipment items).

Specifications Pertinent to Models DHC-2 Mk. I and DHC-2 Mk. II

Datum	17.5 inches aft of the wing leading edge. (See Note 10.) Values in inches shown in parenthesis after each item represent horizontal arms to the C.G. of the item measured minus (-) aft and plus (+) forward of the datum.			
Mean Aerodynamic Chord (MAC)	62.5 inches			
Leveling means	Cabin floor level laterally and longitudinally.			
Control surface movements	Elevator	Up	28° + or -2°	Down 20° + or -2°
	Elevator trim tab	Up	1.1 in. + or -0.1 in.	
		Down	1.6 in. + or -0.1 in.	
	Rudder	Right	25° + or -2°	Left 25° + or -2°
	Ailerons	Up	4.2 in. + or -0.4 in.	
		Down	2.5 in. + or -0.4 in.	
	Stabilizer fixed flaps	Down	12.3 in. + or -0.7 in.	
Production basis	(Ref. deHavilland DHC-2 Beaver Maintenance Manual dated February 1, 1959, Part 2, Table VI). Does not apply.			

III. Model DHC-2 Mk. III (Turbo-Beaver) (Normal Category), approved January 18, 1965 by the Canadian Department of Transport (DOT) and February 18, 1966 by the FAA.

This aircraft is identical to the DHC-2 Mk. I, with the exception of DHC modification 2T/2000. (See Note 8 for conversion of DHC-2 Mk. II.

Engine	United Aircraft of Canada Ltd. Model PT6A-6A (see Item 301(k) for optional engine).
Fuel	MIL-J-5624E, JP-1, JP-4, or JP-5 (MIL-G-5572 AVGAS), all grades. Emergency only - limited to 150 hours' use in any one overhaul cycle).
Oil	United Aircraft of Canada Ltd. Specification CPW 202.
Engine limits	

	Rating	Time Limit		
		<u>E.S.H.P.</u>	<u>S.H.P.</u>	<u>Minutes</u>
Takeoff		578	550*	5
	Max. continuous	525	550**	
Unlimited	Max. climb	525	500**	
Unlimited				

*Available to 70 degrees F (21 degrees C) ambient temperature.

**Available to 65 degrees F (18 degrees C) ambient temperature.

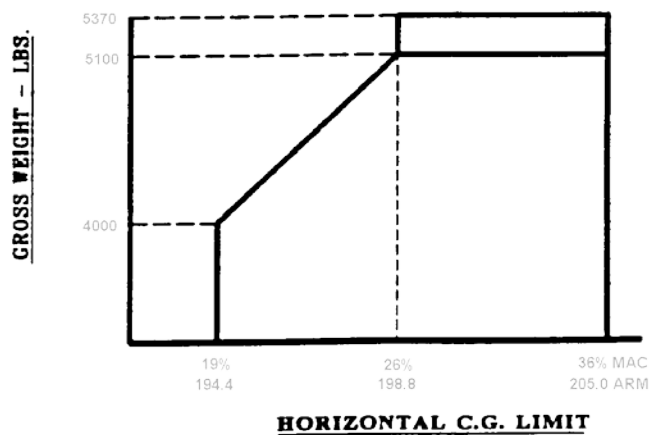
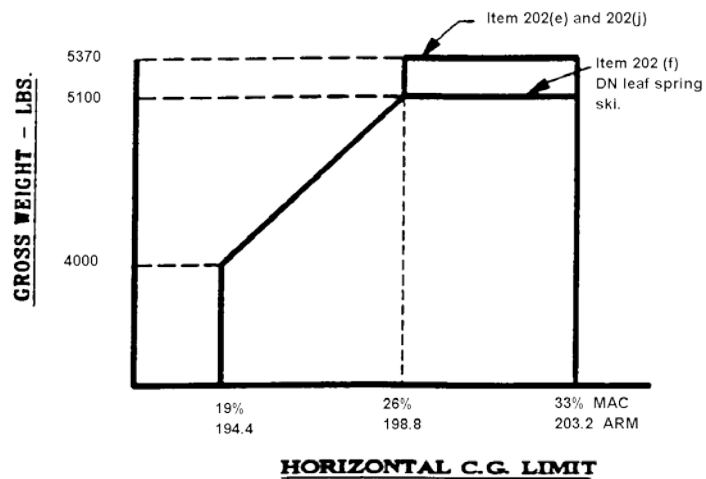
Propeller and propeller limits	Propeller - Hartzell Reversing Hub Model HC-B3TN-3, -3B, or -3BY Blade Model T10173C + 1 Diameter 8 ft. 6 in. nominal (8 ft. 4 in. min. after repairs) - pitch settings at 30 in. blade station: +11 degrees + or -1/2 degrees low pitch (effective) +15 degrees + or -1/2 degrees low pitch (effective) +87 degrees + or -1/2 degrees high pitch -14-1/2 degrees + 1-1/2 degrees reverse pitch 0 degrees + 1 degree + or -1 degree zero thrust pitch (blade latch propeller) Constant speed governor - Woodward Type 210508 (PT6A-6A engine) or Type 210574 (PT6A-20 engine) Overspeed governor - Woodward Type 210507, 210536, A210507 or A210536
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III. Model DHC-2 Mk. III (cont'd)

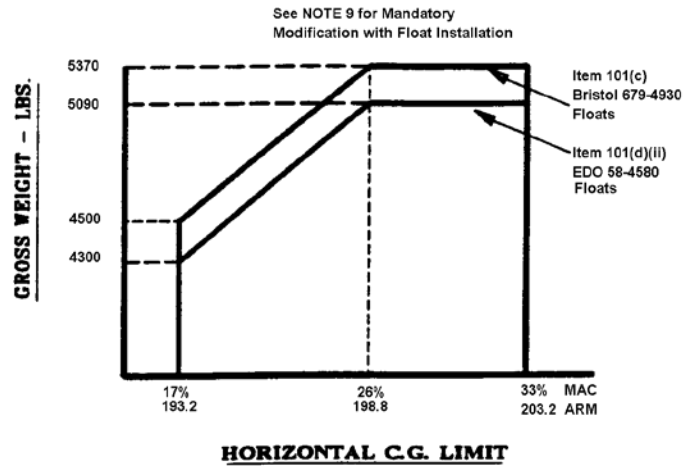
Airspeed limits (CAS)

Landplane, Skiplane and Floatplane at 5370 lbs.

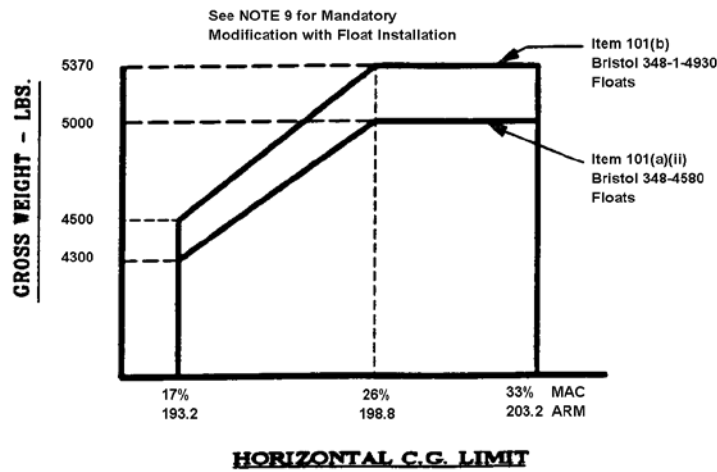
Vne (never exceed)	175 mph	152 knots
Vno (max. structural cruising)	140 mph	122 knots
Vp (maneuvering)	135 mph	117 knots
Vfe (flaps extended)	105 mph	91 knots

Center of gravity
(C.G.) RangeLandplaneSkiplane

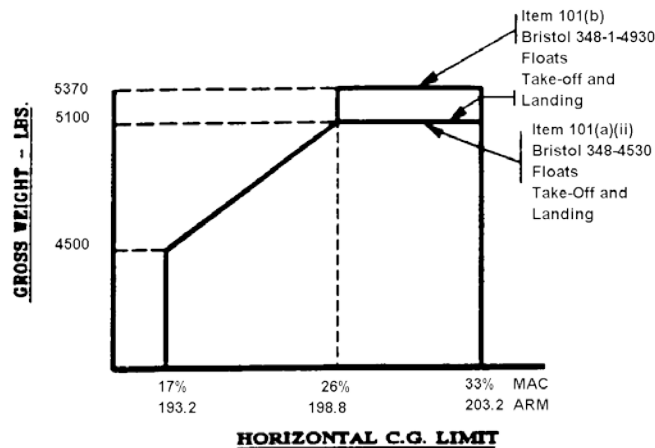
III. Model DHC-2 Mk. III (cont'd) Floatplane



Amphibian of Floats



Amphibian on Wheels



III. Model DHC-2 Mk. III (cont'd)

Empty weight C.G. range None

Datum 17.5 inches aft of the wing leading edge. For weight and balance purposes, due to the longer nose of the DHC-2 Mk. III aircraft, this point has been designated as Horizontal Arm 200 inches.

Mean Aerodynamic Chord (MAC) 62.5 inches
The leading edge of MAC coincides with the leading edge of the wing and is located at Arm 182.5 inches.

Leveling means Cabin floor level laterally and longitudinally.

Maximum weights		<u>Takeoff</u>	<u>Landing</u>
	Landplane (with Item 201(b))	5370 lb.*	5100 lb.
	Skiplane (with Item 202(f))	5100 lb.	5100 lb.
	Skiplane (with Item 202(e)) or 202(j)	5370 lb.*	5100 lb.
	Floatplane (with Item 101(c))	5370 lb.*	5370 lb.*
	Floatplane (with Item 101(d)(iii))	5090 lb.	5090 lb.
	Amphibian on wheels (with Item 101(a)(iii))	5100 lb.	5100 lb.
	Amphibian on floats (with Item 101(a)(iii))	5000 lb.	5000 lb.
	Amphibian on wheels (with Item 101(b))	5370 lb.*	5100 lb.
	Amphibian on floats (with Item 101(b))	5370 lb.*	5370 lb.*

**For structural reasons all aircraft weight above 5100 lb. must be fuel in tip tanks.*

Number of seats Eleven. 2 at Arm 163, 3 at Arm 196, 3 at Arm 229, 3 at Arm 262.
(See approved loading instructions for alternate arrangements.)

Maximum baggage See approved loading instructions.

Fuel capacity Total: 159 Imperial gallons (191 U.S. gallons) (usable).
Front tank: 44 Imperial Gallons (53 U.S. gallons) (+169 in.)
Center tank: 58 Imperial Gallons (70 U.S. gallons) (+207.5 in.)
Rear tank: 21 Imperial Gallons (25 U.S. gallons) (+240 in.)
Tip tanks: 36 Imperial Gallons (43 U.S. gallons) (+210 in.)

(Unusable fuel: 2 Imperial gallons (2.4 U.S. gallons) in center tank forward cell)
(at Arm 195).

Oil capacity Trapped and usable: 2.4 Imperial gallons (2.9 U.S. gallons)
(21.7 lb.) (+116.0 in.)

Control surface movements	Elevator	Up	28° + or 2°	Down	23° + or 2°
			-0°		-0°
	Elevator trim tab	Up	20°	Down	20°
	Rudder	Right	25° + or -1°	Left	20° + or -1/2°
		Right	18° + or -2°	Left	18° + or -2°
	Rudder trim tab				
	Ailerons	Up	18° + or -2°	Down	11° + or -2°
Wing flaps	Droop	15° + 1-1/2° (with flaps fully down)			
	Down	58° (port) + or -2°			
		59° (starboard)			

(Ref. deHavilland DHC-2 Mk. III Maintenance Manual, Supplement No. 6, Table III).

Manufacturer's serial numbers 1 to 79 inclusive, 81 and subsequent. (See Note 8.)
New Turbo-Beavers (i.e. Turbo-Beavers not originating from modified standard Beavers), are identified by double-serial numbers. For example, 1649-TB23 identifies the aircraft as Beaver number 1649 and Turbo-Beaver number 23. When deHavilland Modification 2T/2000 is incorporated on a Mk. 1, however, the serial number remains unchanged. The Canadian Department of Transport Certificate of Airworthiness for Export endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for certification is made.

Import requirements	A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by or for the Minister of Transport. This form must contain the following statement: "This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for DOT Type Approval No. A-22, Issue 26 (FAA Type Certificate No. A-806).
Certification basis	FAR Part 21.29(a)(1)(iii). The DHC-2 Mk. III airplane has been developed as a modification to the basic DHC-2 Beaver Mk. I airplane and as such complies with the British Civil Airworthiness Requirements as amended to June 1, 1947, Normal Category, Information Circular T/4/48 dated March 3, 1948, (this certification is equivalent to CAR 3 dated November 13, 1945), and Special Conditions for single engine turbine powered aircraft in accordance with FAA Civil Air Regulations, Part 3, dated March 1964 except for Special Condition No. 23(i). Type Certificate No. A-806, amended to February 18, 1966, was issued.
Production basis	Does not apply.
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment must be in each aircraft at all times:</p> <ol style="list-style-type: none"> 1. Canadian approved deHavilland DHC-2 Mk. II Flight Manual, PSM-1-2T-1A. 2. Current deHavilland DHC-2 Mk. III Weight and Balance Handbook, including list of Equipment in Certificated Weight Empty. (Items listed as required equipment must not be removed unless replaced by approved equipment items.)

APPROVED INSTALLATIONS

Item 100.	Auxiliary ventral fin installation according to deHavilland Drawing No. C2-UF-235A. (See Note 5.)
Item 101.	<p><u>Float Installations</u> (See NOTE 9 for DHC-2 Mk. III Mandatory Mod.)</p> <ol style="list-style-type: none"> (a) Bristol Amphibious Float Model 348-4580 installed to: <ol style="list-style-type: none"> (i) deHavilland Modification 2/1192 on DHC-2 Mk. I aircraft by Drawing C2UF2455; or, (ii) deHavilland Modification S.O.O. 2044 on DHC-2 Mk. III Turbo-Beaver Aircraft by Drawing CT2-Z-1042-3. (b) Bristol Amphibious Float Model 348-1-4930 installed to deHavilland Modification S.O.O. 2050 on DHC-2 Mk. III Turbo-Beaver Aircraft by Drawing CT2UF1002 Revision D. (c) Bristol Float Model 679-4930 installed to deHavilland Modification S.O.O. 2052 on DHC-2 Mk. III Turbo-Beaver Aircraft by Drawing CT2UF1001. (See Item 207(d) for Water Bombing.) (d) Edo Float Model 58-4580 or Bristol Model 901 installed to: <ol style="list-style-type: none"> (i) deHavilland Drawing C2UF3A on DHC-2 Mk. I aircraft; or, (ii) deHavilland Modification S.O.O. 2044 on DHC-2 Mk. III Turbo-Beaver aircraft by Drawing CT2UF1000.
Item 200.	<ol style="list-style-type: none"> (a) 36 Imperial Gallons (43 U.S. gallon) external long range fuel tank installation (under center fuselage) to deHavilland Drawing C2-P-801A -26 lb. (-15 in.). (b) Wing tip long range fuel tank to deHavilland Modification 2/743.
Item 201.	<ol style="list-style-type: none"> (a) 7.50 X 10 main wheel tires and tubes, DHC-2 Mk. I aircraft; (b) 8.50 X 10 main wheel tires and tubes, DHC-2 Mk. I, II, or III aircraft.

Item 202.

Ski Installations

- (a) deHavilland Drawing C2-US-201 Issue B, DHC-2 Mk. I aircraft
- (b) Northwest Industries Limited Drawing NWI 450001 Issue E, DHC 2 Mk. I aircraft
- (c) Saskatchewan Government Airways' Drawings:
 - (i) S.G.A. 49, DHC-2 Mk. I aircraft
 - (ii) S.G.A. 50 or 121, DHC-2 Mk. I aircraft
- (d) Federal Aircraft Works Drawing 11R845 Issue N or 11F1078 Issue E, DHC-2 Mk. I aircraft
- (e) deHavilland retractable installation to deHavilland Drawing C2-US-611A, DHC-2 Mk. I and III aircraft
- (f) deHavilland leaf-spring installation to deHavilland Drawing C2-US-553A, DHC-2 Mk. I and III aircraft
- (g) Department of Lands and Forest Installation to Drawing 1488-B-2, DHC-2 Mk. I aircraft;
- (h) Federal Ski and Engineering Drawing 11R-1472 Issue C, DHC-2 Mk. I aircraft
- (i) FluiDyne Engineering Corporation wheel ski to FluiDyne Drawing List 6300-3 dated May 14, 1963, for DHC-2 Mk. I aircraft
- (j) FluiDyne Engineering Corporation C5500 wheel ski to FluiDyne Installation Drawing 11R-1650 for DHC-2 Mk. III aircraft, and 11G-1472 for DHC-2 Mk. I aircraft.

Item 203.

Spraying Installations

- (a) Crop spray to deHavilland Drawing C2-M-339 or C2-M-2507;
- (b) Brush spray to deHavilland Drawing C2-M-2505.

Item 204.

Dusting Installation

- (a) deHavilland Drawing C2-M-1001A or C2-M-2503.

Item 205.

Canoe Carrying Installation on Port Side of Aircraft:

- (a) deHavilland Drawing C2-UF-416 (see Note 7(a)), DHC-2 Mk. I
- (b) Ontario Provincial Air Services Universal Carrier Drawing 1561. (See NOTE 7(a)).
- (c) A. Fecteau Transport Aerien Ltee. Drawing 1006, Revision 1. (See Note 7(b)).
- (d) Saskair Drawings SGA-78 and 79-A revised March 1964, and 79-B revised March 1963. (See NOTE 7(c)). Saskair Flight Manual Supplement dated March 1964 required. For DHC-2 Mk. I aircraft.

Item 206.

Lumber or Freight Carrying Installations:

For DHC-2 Mk. I aircraft.

Ontario Provincial Air Services Drawing 1501.

Lumber or freight must not exceed 16' 0"

Length, 12' width, 1' -8" height and 800 lb.

Lumber or freight carried must be symmetrically distributed by weight and dimensions on each side of aircraft. Fore and aft distribution midway between carrier struts.

Item 207.

Water Dropping Tank Installations: (See Note 6.)

- (a) Ontario Department of Lands and Forest Drawing No. 2492
- (b) deHavilland Drawing C2-M-5705A, Sheets 1 and 2
- (c) Manitoba Government Air Services Drawing AS-115
- (d) Edo 679-4930 floats modified in accordance with Field Aviation Company Limited Report 4822 to provide water bombing capability of a maximum of 140 Imperial Gallons (168 U.S. gallons) of water. Approved for DHC-2 Mk. III aircraft at a gross weight of 5370 lb. Aircraft to be operated in accordance with Field Aviation Flight Manual Supplement, Appendix 2 of Field Aviation Report 4822.

Item 301.

Engines:

- (a) Military R-985-AN2
- (b) Military R-985-AN4
- (c) Military R-985-AN6
or -AN6B
- (d) Military R-985-AN8
- (e) Military R-985-AN10
- (f) Military R-985-AN12
or -AN12B
- (g) Military R-985-AN14B
- (h) Military R-985-AN-1
- (i) Military R-985-AN-3
- (j) Military R-985-39
or -39A

Engine limits (a) through (g) same as
SB-3 (see DHC-2 Mk.1 Engine Limit Data)

(Provided that the alternator fitted to the
engine is compatible with 2:1 drive ratio)

Engine Limits (h) through (j)

	HP	RPM	MP	
			In.Hg.	ALT
Takeoff (5 min.)	450	2300	37.5	S.L.
Maximum continuous	400	2300	34.5	S.L.
Maximum continuous	400	2300	33.0	5000 ft.

Straight line manifold pressure variation with Alt. to 5000 ft.

- (k) United Aircraft of Canada Ltd. PT6A-20
(DHC-2 Mk. III only) to DeHavilland Modification T2/2035.
Engine to be operated to same limits as PT6A-6A. (Ref. page 5).

NOTES

- NOTE 1. The following must be in the aircraft at all times:
Approved deHavilland Beaver DHC-2 Flight Manual, Current Weight and Balance Report,
including List of equipment in certificated empty weight, and Loading Instructions.
- NOTE 2. The following placards must be displayed in front and in clear view of the pilot
- (a) "THIS AEROPLANE MUST BE OPERATED AS A NORMAL CATEGORY AEROPLANE
IN COMPLIANCE WITH THE OPERATING LIMITATIONS SPECIFIED IN THE APPROVED
FLIGHT AND MAINTENANCE MANUAL."
 - (b) For DHC-2 Mk. I with Item 201(b):
"NORMAL CATEGORY (G.W. 5100 LB. AS LANDPLANE OR SKIPLANE, 5090 LB. AS
FLOATPLANE). ACROBATIC MANEUVERS INCLUDING SPINS NOT APPROVED."
 - (c) For DHC-2 Mk. I with Item 201(a):
"NORMAL CATEGORY (G.W. - 4650 LB. AS LANDPLANE OR SKIPLANE, 5090 LB. AS
FLOATPLANE). ACROBATIC MANEUVERS INCLUDING SPINS NOT APPROVED."
- NOTE 3. DHC-2 Mk. I eligible for conversion to DHC-2 Mk. II when modified in accordance with deHavilland
Modification No. 2/950, dated May 20, 1953, and with Item 201(b).
- NOTE 4. Those surplus military deHavilland models L-20A/YL-20/U-6A aircraft identified by civil and military
serial numbers in deHavilland Report QA/DHC-2/G11, are eligible for a U.S. Standard Airworthiness
Certificate without requiring a Canadian Certificate of Airworthiness for Export when all of the following
conditions have been satisfied.
- (a) Aircraft records must indicate, or a determination must be made, that the aircraft has been
subjected to FAA initial screening inspection. The screening inspection record must show that
the aircraft has a reasonable potential for standard certification. (Those aircraft dispositioned as
having no reasonable potential for standard certification are not certifiable unless the reasons
for no reasonable potential can be reconciled. These aircraft are sold by U.S. Department of
Defense only for the purpose of "Recovery of Parts or Reduction to Scrap.")

- (b) The aircraft must be converted to deHavilland Model DHC-2MK.I in accordance with deHavilland Modification SOO-2022, Issue 8, and deHavilland Service Bulletin No. 2/10, Revision B, February 7, 1975.
- (c) The applicant shows, and the FAA finds, that the aircraft conforms to the type design and is in a condition for safe operation.
- (d) A satisfactory "100 hour" type inspection has been accomplished and recorded.
- (e) Any deviations to the type design must be appropriately approved by an FAA Supplemental Type Certificate or other methods acceptable to the FAA.

Upon satisfying all the foregoing conditions, and when all other pertinent U.S. regulatory requirements have been met, a U.S. Standard Airworthiness Certificate may be issued. Certification basis is FAR 21.183(c) since these are import aircraft.

Technical data needed for conversion purposes are available to the applicant through deHavilland of Canada Limited. Inquiries for this data should be submitted to The Product Support Department, deHavilland of Canada, Limited, Downsview, Ontario, Canada.

- NOTE 5. A floatplane must have Item 100 installed if it is to be exported to the United States of America, but Item 100 is not required in Canada. The addition of Item 100 does not affect maximum weight of C.G. limits.
- NOTE 6. The maximum-all-up-to-weight for the aircraft equipped with amphibious floats, (Item 101(a)(iii)), plus the water dropping tanks (Item 207) may be increased from 5000 lbs. to 5090 lbs. if the 90 lb. extra weight is entirely water picked up while the aircraft is taxiing on the step at speeds in excess of 40 mph.
- NOTE 7. (a) Canoe not to exceed 16' -6" length, 3' -5" beam and 95 lb. (Ref. Item 205(a) and (b)). Canoe bow to be between propeller disc and 18 in. forward of propeller disc.
- (b) Canoe not to exceed 18' -0" length, 4' -2" beam and 150 lb. (Ref. Item 205(c)).
- (c) Canoe not to exceed 18' -0" length, 36" beam and 150 lb. Saskair Flight Manual Supplement dated March 1964, required. (Ref. Item 205(d)).
- NOTE 8. DHC-2 Mk. I aircraft may be converted to a DHC-2 Mk. III in accordance with deHavilland Modification 2T/2000.
- NOTE 9. All DHC-2 Mk. III aircraft equipped with floats or amphibious gear must have deHavilland Modification 2T/2059 incorporated.
- NOTE 10. All DHC-2 Mk. I and Mk. II aircraft use a revised Weight and Balance Manual PSM 1-2-8 that uses a C.G. reference datum 100.0 inches ahead of the original datum. Refer to instructions contained in PSM 1-2-8 for an acceptable method of conversion.

....END....