START

ROLL

195

TRANSPORT CANADA

REGIONAL OFFICES

CANCELLED AIRCRAFT REGISTRY FILES

SERIES 5008

DATE: 3-4-85

FILED by: A.M.

25X

FILE No. 5008 - T 4 - 24 VOLUME No. 1

VOL. 1 — 5008 - T 4 - 24

DEPARTMENT OF TRANSPORT

FROM JUNE, 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TDX - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
	3816	ARL		LJ	MAY 5 - 1950
JUN 4 6 1950	7237	ARL		LJ	JUN 6 1950
MAY 13 1957	5144	ARL		LJ	MAY 13 1957
	18334	SRL			SEP 24 1958
SEP 24 1958	—	SAFA		CL	SEP 26 1958

1 IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

3-46
K.F. 58825
D. & L. Co.

FILE No. 5008 - T4 - 24

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JUNE 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND ORDERS

FILE TITLE CF - TDX — DOUGLAS DC-3.

5008 - T4 - 24 VOL.

THIS COVER MUST NOT BE FOLDED] UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUL 23 1946	14716	J.G.R.	10-8-46	LOJ	AUG 26 1946
AUG 26 1946		Tyson	30-9-46 REV	Dr Ley	SEP 3 19
SEP 6 1946	15031	J.G.R.		BD	SEP 7 19
SEP 12 1946	20052	J.G.R.		GJ	SEP 14 1946
SEP 14 1946	BEch 16	J.R.R.	17-12-46	GJ	
DEC 5 1946	CAR Ox.	B-Hyd 30	Treas	D.	DEC 6 19
DEC 16 1946		BF Dec 17	J.G.R.	H.H.	MAY 23 1947
MAY 23 1947		BE Feb 15	Treas		MAY 30 1947
MAY 26 1947			L.R.J.	H.O.	MAY 30 19
			C.A.J.		MAY 23 1947
28 1947	10288	CAR		GJ	JUL 16 1947
JUN 18 48	11838	CAR		GJ	JUN 18 48
JUN 16 1949	11241	CAR		GJ	JUN 16 1949
JUN 2 - 1950	9200	CAR		GJ	JUN 6 - 1950
		CAE		— " —	JUN 6 - 1950
MAY 15 1951	9573	CAR		GJ	MAY 17 1951
MAY 17 1951		CAE		— " —	MAY 15 1951
MAY 8 1952	11099	CAR		GJ	MAY 28 1952
MAY 28 1952		CAE		— " —	MAY 29 1952
MAY 30 1953	14735	CAR		GJ	JUN 1 1953
JUN 1 1953		CAE		— " —	JUN - 3 1953
MAY 20 1954	6143	CAR.		GJ	MAY 26 1954

Form ACA 502
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
(Rev. 3-1-44)

CF-TDX

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: Douglas
MODEL: C47A
MANUFACTURER'S SERIAL NO.: 12141
C. A. A. IDENTIFICATION MARK:

MANUFACTURER OF ENGINE: Pratt & Whitney
MODEL: R1830 S1C3G (-92)
SERIAL NO.: LE: 21638 RE: CP350808

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows:

NONE
(Mortgage, mechanic's lien, etc.) in the sum of $....., in favor of

..... whose address is .....

For and in consideration of the sum of One Dollar & other valuable consideration ~~DOLLARS~~
WAR ASSETS CORPORATION
(Seller), the undersigned, whose address is 4095 St. Catherine St. W., Montreal, Quebec., does this 1st day of May, 1946, sell, grant, transfer, and deliver all of his above-described right, title, and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto .....
(Purchaser)

TRANS-CANADA AIR LINES

whose address is P.O. Box 2973, Winnipeg, Manitoba, and to their executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, we have set our hand and seal this 1st day of May, 1946

WAR ASSETS CORPORATION [SEAL]
(Seller's signature)
BY: Geo A Cruickshank
Geo.A. Cruickshank, Treasurer

F.A.C.

ACKNOWLEDGMENT

STATE OF
COUNTY OF } ss:

(INDIVIDUAL OR PARTNER)

On this ..... day of ....., 19....., before me personally appeared the above-named seller, to me known to be the person described in and who executed the foregoing bill of sale, and acknowledged that he executed the same as his free act and deed.

(CORPORATION)

On this 1st day of May, 1946, before me appeared Mr. Geo. A. Cruickshank, to me personally known, who, being by me duly sworn, says that he is the Treasurer of the War Assets Corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of the Board of Directors and said Geo. A. Cruickshank acknowledged the foregoing bill of sale to be the free act and deed of said corporation.

Given under my hand and official seal the day and year above written.

L B Smith
~~Notary Public.~~
Justice of the Peace

MY COMMISSION IS FOR LIFE

My commission expires ....., 19.....
[SEAL]

D B L

U. S. GOVERNMENT PRINTING OFFICE 16--10683-2

M

ACTUAL WEIGHT AND BALANCE

MODEL: DC-3C

T.C.A. #CF-TDX

REPORT: #RW-C-153

Canadair
Limited

5905

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RW-0-153

TITLE ACTUAL WEIGHT AND BALANCE

MODEL DC-3

PREPARED W. Banas

CHECKED

APPROVED J. Oliver
K. J. Hebert

DATE 28 June 46

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 1
REPORT RW-0-153
MODEL DC-3

SUBJECT- WEIGHT AND BALANCE

INTRODUCTION

Airplane model C-47 A converted to a DC-3 -SIC3G for commercial use under contract for Trans-Canada Air Lines bearing registration number CF-TDX was weighed at Canadair Limited Montreal, Canada on June 27th, 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system.

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

T.C.A.N. EQUIPMENT "E" LIST (Fixed)

	Item No.	Items	W/C	Qty.	Weight	Arm	Moment
COCKPIT & FWD CARGO	1	Hand fire ext. Kidde #2TA	*	1	7.1	107	760
	2	Flashlight	-	1	1.2	74	89
	3	Jump seat and belt	*	1			
	4	Log books (D.O.T.)	-	2	2.5	71	178
	5	Tool Kit	-	1	2.0	86	172
	6	Pilots safety belts	*	2	2.0	98	196
	7	Pilots seat and back cushions	*	2			
	8	Oxygen cylinders (63.7 cu. ft.)	*	2	70.0	390	28300
	9	Engine fire cyl. (9.5 lbs.)	*	2			
MAIN CABIN	1	Carpets - complete	-	1	55.0	358	19,690
	2	Curtains - with tie-back strap	*	28		325	
	3	Coat hangers	*	24	4.0	480	1,920
	4	Coat strap	*	1	0.2	480	96
	5	Hand fire ext. Kidde #2TA	*	2	14.2	493	7,001
	6	Passenger seats	*	21			
	7	Passenger safety belts	*	21	21.0	332	6,972
	8	Stewardess seat (folding)	*	1			
	9	Stewardess safety felt	*	1			
	10	Cabin thermometer	*	1	0.3	492	148
	11	Casserole carriers	-	2	27.6	540	14,904
	12	Food box carriers	-	3	20.1	512	10,291
	13	Life belt holders	*	25			
	14	Paper cup dispenser	*	1			
	15	Ash receptacles	*	14			
TOILET	1	Coat hook	*	1			
	2	Linen towel dispenser	*	1		502	
	3	Mirror (9" x 12")	*	1			
	4	Waste towel container	*	1			
	5	Toilet paper dispenser	*	1		581	
	6	Soap dispenser	*	1		545	
	7	Kleenex dispenser	*	1		524	
	8	Sanitary napkin dispenser	*	1		540	
	9	Deodorant bottle (Airwick)	*	1			
	10	Waste container	*	1	6.9	497	3,429

SUBJECT- ACTUAL WEIGHT AND BALANCE

I.G.A.N. EQUIPMENT "B" LIST (Fixed) cont'd

Item No.		Items	* IN A/C	Qty.	Weight	Arm	Moment
MISCEL.	1	Storage batteries (89 AMP.-12V)	*	2		124	
	2	Janitrol heater	*	1	105.0	172	18,060
	3	Flares (Landing) Type A-8	-	2	36.0	604	21,744

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C ★	Qt.	Weight	Arm	Moment
COMMISSARY	1	Water jug - (1 gal.) incl. water	-	1	18.0	497	8,946
	2	Fibre food boxes, less food	★	24	36.0	520	18,720
	3	Vacuum bottles, less fluid	★	5	20.3	520	10,556
	4	Knives	-	30			
	5	Dessert forks	-	30	30.0	530	15,900
	6	Tea spoons	-	60			
	7	Paper drinking cups	-	25	0.2	530	106
	8	Lucite cup handles	-	30	2.1	530	1,113
	9	Fibre food box inserts	-	30	3.1	520	1,612
	10	Plastic cups	-	24			
	11	Plastic plates	-	24	5.7	530	3,021
	12	Hot and cold cups	-	60	1.8	530	954
	13	Casseroles and covers-round	-	24	24.0	540	12,960
	14	Service trays-large	-	6	6.0	540	3,240
	15	Cafatrays - small	-	2	0.6	540	324
	16	Can opener		1	0.2	535	107
STEWARDESS SUPPLIES	1	Pillows, at seats C/W covers & slips	-	21	21.4	332	7,105
	2	Sickness containers (at seats)	-	21	2.5	332	830
	3	Whisk	-	1	0.5	530	265
	4	Toy broom (1) & dusters (2)	-	-	0.7	530	371
	5	Dust pan	-	1	0.4	530	212
	6	Fly swatter & atomizer	-	-	1.2	540	648
	7	Blankets in rear comp't	-	24	72.0	553	39,816
	8	Stewardess satchel	-	1	7.9	521	4,116
	9	Headrest covers, on seats	-	21	2.1	332	697
	10	First aid kit	-	1	4.1	522	2,140
	11	Shopping bags	-	3	0.6	545	327
	12	Oxygen masks (above seats)	-	21	15.8	332	5,246
	13	Spare sickness containers	-	9	1.1	554	609
	14	Spare headrest covers	-	9	0.9	554	499
	15	Spare oxygen masks	-	9	6.8	554	3,767
	16	Spare pillows, complete	-	3	3.1	554	1,717

PREPARED W. Banas
CHECKED
APPROVED J.L. Orlando

CANADAIR LIMITED MONTREAL - CANADA

PAGE 5
REPORT RW-0-153
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

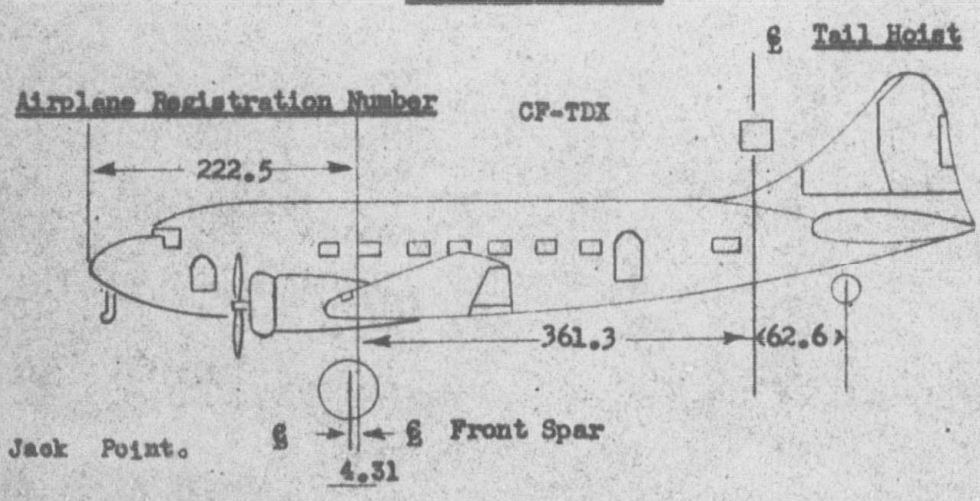
I.C.A.N. EQUIPMENT "F" LIST (Removable) cont'd

	Item No.	Items	IN A/C	Qty.	Weight	Arm	Moment
LAVATORY	1	Sanitary napkins	-	12	1.0	540	540
	2	Linen hand towels (12" x 16")	-	12	1.0	502	502
	3	Toilet tissue	-	1	0.3	581	174
	4	Kleenex (box)	-	1	0.6	524	314
	5	Powdered soap	-	-	0.2	545	109
COLD WEATHER EQUIP.	1	Anti-Icer fluid-Std. Qty. (2½ I. gals)	-	-	19.9	341	6,786
	2	De-Icer - Propellers	*	6	6.0	117	702
	3	De-Icer - Wing-Inner	*	2	12.4	200	2,480
	4	De-Icer - Wing-Outer	*	2	38.1	252	9,601
	5	De-Icer - Stabilizer	*	2	12.0	650	7,800
	6	De-Icer - Fin	*	1	4.3	660	2,838
	7	Cabin & toilet frost shields	-	15	0.9	325	293
MISCEL.	1	Crew baggage	-	3	60.0	147	8,820
	2	Magazine binders	-	10	18.1	178	3,222
	3	Life belts (under seats)	-	21	54.6	332	18,127
	4	Crew life belts	-	3	7.8	147	1,147
	5	Wash water (2½ Imp. gals.)	-	-	25.0	492	12,300
	6	Baggage straps (rear comp't)	*	4	4.0	560	2,240
	7	Baggage straps (fw'd comp't)	*	6	6.0	140	840
		Stewardess	-	1	120.0	521	62,520
		I.C.A.N. EQUIPMENT "F" (ISSUE 1):					
		Total Weight and Moment			681.3	421.7	287,279

* Max. Capacity 9.6 Imp. gals or 76.2 lbs.

SUBJECT— **Actual Weight and Balance.**

Weight Empty Data



Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	8,009	- 15	0	7,994
Right Wheel	8,120	- 15	0	8,105
Tail Hoist	1,779	- 37	0	1,742
Total	17,908	- 67	0	17,841

Less _____ Gals. Oil Sta. 184.5 _____
Less Corrections
_____ *

I.C.A.N. Empty Weight 17,922 lbs.

Remarks:

* For details of the corrections made to obtain the weight empty, see the following pages.

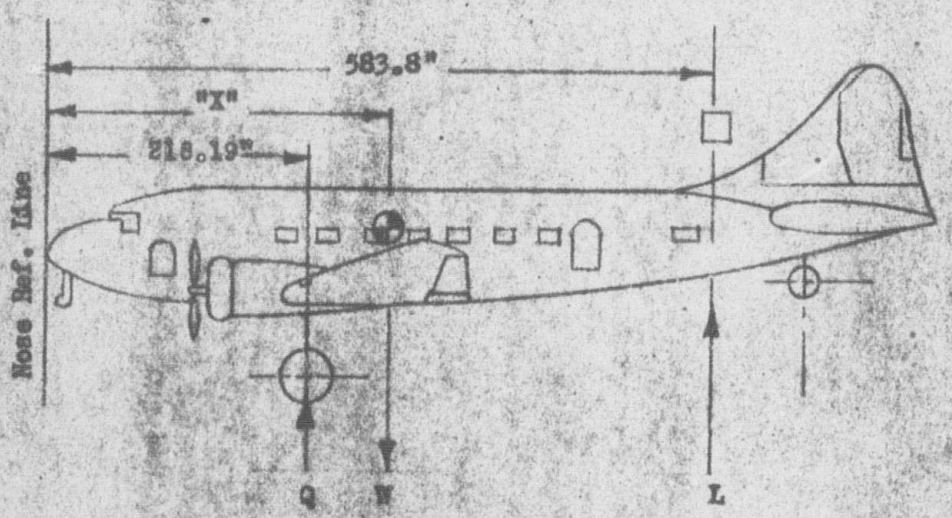
PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 7
REPORT RW-O-153
MODEL DC-3

5904

SUBJECT-- TAIL - UP WEIGHING



Main Wheel, left, net 7,994

Main Wheel, right, net..... 8,105

Total Main Wheel Q = 16,099

Tail Hoist Load Reaction L = 1,742

Aircraft, as weighed W = 17,841

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$(Q \times 218.19) + (L \times 583.8) = (W \times X) = 0$

$$\frac{(Q \times 218.19) + (L \times 583.8)}{W} = X$$

$$\frac{(16,099 \times 218.19) + (1,742 \times 583.8)}{17,841}$$

$$\frac{4,529,620}{17,841} = 253.9"$$

C.G. Location (X) aft of nose ref.: = 253.9 inches.

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY

	Qty	Weight	Arm	Moment
Aircraft as weighed.		17,841	253.9	4,529,620
Plus Trapped fuel and oil.		56	164.0	9,184
Sub - Total		17,897	253.6	4,538,804
Corrections for fixed and removable equipment.				
Total from above		17,897	253.6	4,538,804
Fixed equipment to be added				
Flashlight	1	1.2	74	89
Log books (D.O.T.)	2	2.5	71	178
Tool kit	1	2.0	86	172
Web gate (Fw'd cargo comp't)	2	54.0	120	6.480
Casserole carriers	2	27.6	540	14,904
Food box carriers	3	20.1	512	10,291
Flares	2	36.0	604	21,744
Carpets - complete		55.0	358	19,690
Removable equipment to be deducted				
Fibre food boxes, less food	24	36.0	520	18,720
De-Icer - Propellers	6	6.0	117	720
De-Icer - Wing - Inner	2	12.4	200	2,480
De-Icer - Wing - Outer	2	38.1	252	9,601
De-Icer - Stabilizer	2	12.0	650	7,800
De-Icer - Fin	1	4.3	660	2,838
Baggage Straps (Rear Compt.)	4	4.0	560	2,240
Baggage Straps (Front Compt.)	6	6.0	140	840
I.C.A.N. WEIGHT EMPTY		17,977	254.0	4,567,113

$$\text{C.G. in \% M.A.C.} = \frac{254.0 - 224.4}{138.1} \times 100$$

$$= 21.4 \text{ \% M.A.C.}$$

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 9
REPORT RW-0-153
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
I.C.A.N. Weight Empty	17,977	254.0	4,567,113
Removable equipment "F"	+681	421.7	+287,279
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,150	254.5	4,874,620

Operational Weight empty Arm = $\frac{4,874,620}{19,150}$

= 254.5 inches

C.G. in % M.A.C. = $\frac{(254.5 - 224.4)}{138.1} \times 100$

= 21.8%

- - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346#

Basic operational Weight empty (winter oper) = 19,150#

Disposable Load = 6,196#

* Disposable for fuel, passengers, stewardess and cargo.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 10
REPORT RW-0-153
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

SUBJECT— Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) **Location of Datum Line:**

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) **Location of Horizontal Reference Line:**

Fuselage nose tip (198.5 inches forward of datum line).

(c) **Location of Jig Point.**

Rear row screws at center of front spar (223")

(d) **Location of Leading Edge M.A.C.**

224.4 inches aft of horizontal reference line.

(e) **Length of M.A.C.**

138.1 inches.

(f) **Location of Leveling lugs:**

L.H. Outside (390" - 410" approximitely).

(g) **Horizontal Arm of Rear Baggage Compt.**

961" aft of horizontal reference line.

(h) **Trapped Fuel & Oil.**

56 lbs. (164.0" aft of horizontal reference line).
(1) Trapped oil = 34.5#
(2) Trapped fuel = 21.5#

C.G. Range:

Forward limit:	11% M.A.C.	(239.6" aft of nose)
Aft limit:	28% M.A.C.	(263.1" aft of nose)

Maximum Weights:

Max. Take-off	25,200 lbs. (with dump valves.)
Max. Take-off	24,400 lbs. (without dump valves)
Max. Landing	24,400 Lbs.

Reference:

Aircraft Specification "A-618-2" Douglas Model DC-3 Series, dated 28 Dec. 1944.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

Reference:

Douglas DC-3 Dwg. No.: 5071540

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Production Aeroplane having Canadian Type Approval)

5008-94-11

Registration CF-TDX

Aeroplane Type: Low Wing Monoplane [xxxxxxxx / xxxxxxxx] Model: DC-3C-SIC3G

Manufacturer: Douglas Aircraft Co. Inc. Serial No.: 12141

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY:

Normal

(a - Public transport passenger
(b - " " mails
(xxxxxxxxxxxxxxxxxxxxxxxxxxxx
(xxxxxxxxxxx
(xxxxxxxxxxxxxx

xxxxxxxxx
xxxxxxxxx

(xxxxxxxxxxxxxxxxxxx
(xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

PARTICULARS OF ENGINE(S):-

	Left Side		Right Side	
Type	Pratt & Whitney			
Model	R1830-92 (SIC3G)			
Serial No.	19292		79832	
Take-off Power	1200 H.P.		1200 H.P.	
Take-off R.P.M.	2700 R.P.M.		2700 R.P.M.	
Take-off Manifold Pressure	48" Hg.		48" Hg.	
Take-off Octane Rating of Fuel	91 (CFR)	minimum	91 (CFR)	minimum
Maximum Power (Continuous Operation	1050 H.P.		1050 H.P.	
Maximum Power R.P.M.	2550 R.P.M.		2550 R.P.M.	
Maximum Power Manifold Pressure	41.5" Hg.	(Sea level)	41.5" Hg.	(Sea level)
Maximum Power Octane Rating of Fuel	91 (C.F.R.)	minimum	91 (C.F.R.)	minimum

PARTICULARS OF AIRSCREWS:

	-LEFT-		-RIGHT-	
Maker	HAMILTON STANDARD PROPELLERS			
Type	HYDROMATIC QUICK-FEATHERING WITH CONSTANT SPEED CONTROL			
Blade Drawing No.	6571A-0		6571A-0	
Blade Serial Nos.	1.	513942	1.	514324
	2.	513943	2.	514325
	3.	513944	3.	514326
Hub Drawing No.	33D50-233		33D50-233	
Hub Serial No.	158429		158521	
Blade Settings	18.5° - 89.5°		18.5° - 89.5°	
Diameter	11' 7"		11' 7"	

PARTICULARS OF ALIGHTING GEAR

WHEELS: Make Bendix Model B-1(Tail) B-3(Main) Tire Goodyear Goodyear Goodyear

FLOATS: Installation Assembly Drawing No. N.A.

SKIIS: Installation Assembly Drawing No. N.A.

Tail Ski N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

	FUEL Position	Capacity Imp. Gals.		OIL Position	Capacity Imp. Gals.
(1)	Centreplane Main L.	168	(1)	Eng. Nac. L.	24
(2)	" " R.	168	(2)	" " R.	24
(3)	" Aux. L.	166.5	(3)		
(4)	" " R.	166.5	(4)		
(5)			(5)		
(6)			(6)		

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT:

(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	REMARKS	
Airspeed Indicator	Pioneer	1426-1Z-A1	AF-42-92249	AF-42-93880
Altimeter	Kollsman	371K-01	3777	3749
Compass	Pioneer	1821-2-A	H24389	
Engine Speed Indicator	Gen. Elect.	8DJ13AGD	2532954	2532955
Oil Pressure Gauge	U.S. Gauge	AW1 7/8-14-CZ2		
[redacted] Cylinder Temp.	Weston	827T9Y2		
([redacted] Oil Temp.	Weston	727T52Y2		
Safety Belt(s)				
Fire Extinguisher(s) Hand	Kidde	2TA	K7935BE	
Engine	Kidde		K63358L	K63463L

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT:

(Make extra sheets as required, using following pro forma and classification).

DESCRIPTION	MAKER	MODEL	REMARKS	
AIRCRAFT INSTRUMENTS:				
Flying and Direct Gyro	Sperry	649742	15085	
Navigation, E.G. Turn & Bank	Pioneer	1722-1AR-B1	329710	
Bank and Turn " " " elect.	Pioneer	15300-2A-A2	218	
Indicator, etc, Gyro Horizon	Sperry	656768	11333	
Gyro Horizonelec.	Pioneer	12401-1B-A1	204	
Aircraft Operating				
e.g., Rate of Climb	Bioneer	1430-1AA-A1	32191	32152
Cabin Temperature				
Outside " Outside Air.	Weston	602T90	34652	
Flap Indicators.				
etc., De-Icer Press	U.S. Gauge	AW1 7/8-16-AC2		
Hyd. Press	" "	AW1 7/8-17-CN2	7673	7864
POWER PLANT INSTRU- Suction Press	Kollsman	97-02	13155	13147
MENTS Man Press	Pioneer	1919-10-A1	12670	12679
ELECTRICAL EQUIPMENT Fuel Press	U.S. Gauge	AW1 7/8-15-BT2		
other than signalling Carb Air Temp.	Weston	727T68Y2		
Anti-Icer Fluid	Liquidometer	EA-102-39-L2-24		
SIGNALLING EQUIPMENT:				
Fuel Quantity	Liquidometer	EA-134-8-L2-24		
SAFETY AND EMERGENCY				
EQUIPMENT Azmith Radio Ind.	Pioneer	MN58A	K1-49	
Ammeter	Gen. Elect.	8DW53AAC5		
AMENITIES Voltameter	Gen. Elect.	8DW53BAC1		
(Fluxgate) Remote Compass	Pioneer	12011-1-A	159	
" Master Ind.	Pioneer	12010-2C-A1	12	
" Repeater Ind.	Pioneer	10061-1AF-B1	530055	
Oxygen Low Press	Heidbrink	38-06-020-AC	2005	
Oxygen Flowmeter	Heidbrink	22210A		

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.	DESCRIPTION
1.	6000 hour overhaul and conversion from C47A to DC3C-SIC3G as per Canadair Ltd. specifications (RD-1-106, RD-1-111) and Engineering Orders: with the addition of TCA requirements as listed in specification RD-1-108.
2.	Compliance with all applicableinspection and special notes in C.A.A. airworthiness directive AD-355.
3.	Units and components serialized to comply with T.C.A. specification 19 issue 2.
4.	Mandatory Douglas Service Bulletins for C-47 aircraft, numbers 50, 53, 54 and 75 were not applicable, numbers 44, 56 and 79 were accomplished by Canadair Ltd.
5.	The following Douglas Service Bulletins for DC-3 aircraft, were accomplished:-
D6S.B. 98	Floor beam rework Sta. #294½.
D.S.B. 175	Reinforcement of frames Sta. #623 .
D.S.B. 207	Control surface static balance.
D.S.B. 211	Inspection of spar cap bolts.
D.S.B. 216 S	Reinforcement of wing flap operating tube support beam attach angle.
D.S.B. 217 S	Inspection of elevator torque tubes.
D.S.B. 218	Replacement of rivets with bolts - rudder lower hinge brkt. support.
D.S.B. 220 Sec. 111 only	Spar cap bolt locking device.
D.S.B. 222	Rudder pedal torque tube support brkt. rework.
D.S.B. 228	Repair to rib at Sta. #42.
D.S.B. 231	Control column canvas boots replaced with rubber.
D.S.B. 234	Elevator tab control horn changed from Al. Al. 24ST to 4130 stl.
D.S.B. 238	Inspection of engine mount to firewall fittings.
D.S.B. 241	Fuel drain hole added to dump chute extension.

RECORD OF WEIGHT AND C. of G. POSITION:
(See Information Circulars C-3/37 and C-1/38)

		Landplane		Seaplane		Skiplane	
Maximum permissible Gross weight	Take-off:	25,346	Lbs.	-	Lbs.	-	Lbs.
	: Landing :	24,546	Lbs.	-	Lbs.	-	Lbs.
I.C.A.N Weight Empty:		17,977	Lbs.	-	Lbs.	-	Lbs.
Disposable Load :		6,196	Lbs.	-	Lbs.	-	Lbs.

Centre of Gravity of Aeroplane at above tare weight is 254.0 inches behind/

XXXXXXXXXXXX Nose reference Line or 21.4 % M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs
Refer to Wt. & Balance Report #RW-0-153 List " E "			

List of moveable equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Refer to Wt. & Balance Report #RW-0-153 List " F "			

Ref.: Aircraft Specification A-669-4

RECORD OF WEIGHT AND C. of G. POSITION:
(See Information Circulars 1-3/37 and 1-1/38)

		Landplane		Seaplane		Skiplane	
Maximum permissible Take-off:		25,346	Lbs.	-	Lbs.	-	Lbs.
Gross weight	: Landing :	24,546	Lbs.	-	Lbs.	-	Lbs.
Basic operational Wt. Empty		19,150	Lbs.	-	Lbs.	-	Lbs.
Disposable Load	:		Lbs.	-	Lbs.	-	Lbs.

Centre of Gravity of Aeroplane at above tare weight is . . . . . inches behind/

in front of: . . . . . .

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs

List of moveable equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origin; that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed.....date June 28/46
Chief Inspector

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight).

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed. R.G. Hatcher....Air Engineer.....Chief Inspector

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed.....Date JUNE 29/46
Test Pilot

CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category.....
Subdivision.....is recommended.

Signed.....
Resident Inspector, A. I. D., June 30 "46.
Department of Transport

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date).....

Signed.....1/7/46
District Inspector, Civil Aviation

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co., Inc.

Type DC-3-S13CG-92 Maker's No. 12141

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95.000	95.000
Length o/a in feet	64.458	64.458
Height o/a in feet	17.000	17.000
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	See weight report	17,300 lb
Total weight authorized (fully loaded) in lbs 25200 for T.O. 24400 for landing	Air speed 257 miles per hour indicated	

EQUIPMENT—(Give number and type).

1. Instruments ~~See List 1 attached~~ See Release Cert.
2. Gauges See List 2 attached
3. Lights See List 3 attached
4. Signals See List 4 attached
5. Fire Extinguishers Engines - CO_2 two 12.6# Cockpit CO_2 one 2# Cabin CO_2 one 2#
6. Parachutes None
7. Tools Pilots
8. Other Equipment Safety belts, maps, emergency flares, first aid, life preservers verey pistol, oxygen masks, flashlight.

Note - These gross weights may be increased by 146 pounds when de-icing equipment installed.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92-S13CG	Pratt & Whitney R-1830-92-S13CG		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	Right	Right		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on June 30/46

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved mods.

Registration recommended with the following special conditions

Registration recommended

Date 1/7/46 Signature J L Blondeau

Registration approved and Registration Mark C.F. TDX allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... for Trans-Canada Air Lines

Date of Application.....December 6, 1945.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill St., Montreal	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. SYMINGTON	Chairman & President	Montreal	Canadian
HON. WILFRED GAGNON	Director	"	"
J. A. NORTHEY	"	Toronto	"
R. C. VAUGHAN	"	Montreal	"
HON. C. P. EDWARDS	"	Ottawa	"
GEO. HERRING	"	"	"
J. A. WILSON	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station.....Winnipeg

Date of ~~manufacture or~~ reconstruction.....February, 1946

Crew required.....Two

Accommodation for what number of passengers.....Twenty-one passengers and stewardess

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, *is $5.00, which certificate* is re-issued on change of ownership without further fee.

LIST 1 - INSTRUMENTS

Qty.	Unit	Make	Type
2	Airspeed	Pioneer	1426-1AD2
2	Altimeter	Kollsman	371K-05
2	Rate of Climb Ind.	Pioneer	1634-1 M
1	Magnetic Compass	Pioneer	1821-1
1	Gyro Horizon	Sperry	656768
1	Gyro Horizon	Pioneer	12401-1C
1	Directional Gyro	Sperry	649742
1	Bank & Turn	Pioneer	1722-1AR
1	Bank & Turn	Pioneer	15300-2A
2	Clock	Pioneer	3315
2	Oil Press. Warning	Pioneer	3122-1-A
2	Vacuum Warning	Pioneer	3124
1	Flux Gate Compass	Pioneer	
2	Fuel Press. Warning	Pioneer	3132-3A

LIST 2 - GAUGES

Qty.	Unit	Make	Type
1	Outside Air Temp.	Weston	728T35
2	Carb. Air Temp.	Weston	727
2	Oil Temp.	Weston	727T52
2	Cylinder Temp.	Weston	827T9
1	Fuel Qty. Gauge	Liquidometer	EA-134-8-24
2	Pitot Static Head	Kollsman	372C-02
2	Manifold Pressure	Pioneer	1919-1B-A1
2	Oil Pressure	U.S.Gauge	AW-1 7/8-14CZ
2	Fuel Pressure	U.S.Gauge	AW-1 7/8-15BT2
2	Hydraulic Pressure	U.S.Gauge	AW-1 7/8-17CN
2	Suction Gauge	Kollsman	97-02
1	De-icer Gauge	U.S.Gauge	AW-1 7/8-16AC
2	Voltammeter	G.E.C.	DW-53 #257X85
2	Tachometer Ind.	G.E.C.	DJ-13-AGD
1	Anti-ice Qty. Ind.	Liquidometer	EA102-39-24
2	Pitot Heat Ammeter	G.E.C.	DW-53

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture.

5. Passing Light - red bulb in L.H. landing light fixture.

LIST 4 - RADIO EQUIPMENT

1. Bendix RTA-1B Communication radio-telephone set.
2. Bendix MN-31 Dual Automatic Direction Finder.
3. Bendix MN-53 Marker receiver.
4. AN/ARC-1 VHF Communication Equipment.
5. RC-103 Localizer Equipment.
6. AN/ARN-5 Glide Path Equipment.

Form ACA 317
(Rev. 3-1-41)

2

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC. (Manufacturer), certify that the aircraft DOUGLAS (Make), C-47A (Model), 12141 (Serial number), has been manufactured, under Production Certificate No. None,* in conformity with the data forming the basis for Type Certificate No. 669 and any revision or modification thereof approved by the Administration as of 12-31-43 (Date), with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-3 dated December 19, 1944

DATE December 19, 1945

Schuyler Kleinhans
(Signature)
Schuyler Kleinhans
Assistant Chief Engineer
(Title)

* Delete this phrase if not applicable.

16—21035 U. S. GOVERNMENT PRINTING OFFICE

3

5008-T4-24

910 Confederation Building,
Montreal 2, Que., June 29, 1946.

Trans-Canada Air Lines,
Montreal, Quebec

Gentlemen:

Re: Douglas CF-TDX

This letter will constitute your authority not valid after July 28, 1946, to operate subject aircraft on your regular services.

The maximum take-off weight of 25,346 lbs. and landing weight of 24,546 lbs. must not be exceeded at any time.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR
Mr. George Lace advised on July 3, 1946, that following request by Mr. Frank Rousseau of T.C.A., Mr. Graham authorized Mr. Lace to add to our letters of authority for these aircraft, the following notation:

"Heater to be made positively inoperative pending carbon monoxide test and operating personnel to be so advised".

This took place on June 30, 1946.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

4 2 8-45

910 Confederation Building,
Montreal 2, Que., July 18, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3 CF-TDX	5008-T4-24

TRANSPORT-RECORDS
22 A.M.
File 5008-94-24

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

4716

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a Commercial aircraft in the name of Trans-Canada Air Lines.

(b) Fees $10.00 (Department Receipt No. 60123) Forwarded under Cash Book Folio No. 41.

(c) Copy of our letter of authority for the operation of this machine dated June 29, 1946.

(d) Copy of Inspection Release Certificate.

(e) Copy of Statement of Conformity.

(f) Weight and Balance Report.

2. It is understood that proof of ownership is available at Headquarters, having been sent direct by the company.

3. The radio installation of this aircraft has been found satisfactory by our Radio Division.

4. This application now appears in order, and issue of certificates is recommended.

J.L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg

5008-T4-24

910 Confederation Building,
Montreal 2, Que., July 23, 1946.

A15031

Trans-Canada Air Lines,
P.O. Box 2973,
Winnipeg, Manitoba

TRANSPORT-RECORDS
JUL 24 A.M.
File 5008-T4-24

Attention: Mr. A.M. Sutherland

Dear Sir:

Re: Douglas DC-3 CF-TDX

The temporary authority granted on June 29, 1946, for the operation of the subject aircraft is hereby extended not valid after August 28, 1946, subject to this machine being in airworthy condition.

This aircraft is subject to a carbon monoxide test following installation of the Janitrol Heater, and it is requested that this might be borne in mind, please.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg

Rec'd Ltr.

A28267 5008-T4-24

6

910 Confederation Building,
Montreal 2, Que., October 21, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

TRANSPORT-RECORDS
OCT 23 A.M.
File 5008-T4-24

Attention: Mr. A. H. Sutherland

Dear Sir:

Re: Douglas CF-TDX

The temporary authority granted on June 29, 1946, for the operation of the subject aircraft is hereby extended not valid after December 26, 1946, subject to this aircraft being in airworthy condition.

The conditions outlined in our letter of June 29, regarding the weights of this machine must be complied with at all times.

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations.

AR Proved

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

8 2 8-45

TORONTO, August 28th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	DOUGLAS DC-3 CF-TDX (TCA 71)	5010-3-38

A.A.R.
L.A.E.

TRANSPORT-RECORDS
AUG 29 A.M.
File 5008-14-24

A20052

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Please find enclosed original of the test of a heater installation in Douglas DC-3 CF-TDX (TCA71)

2. This test was carried out satisfactorily and at no time did the carbon-monoxide barometer ever show evidence of carbon-monoxide in any part of the aircraft.

3. I recommend that this aircraft equipment be approved.

noted and sd/ C.A.B.

(for D.G.Joy)
District Inspector, Air Regulations,
Toronto.

CAB/HT.

COPY SENT
5012 #1

1 Copy
29/8/46

7

Routing	
Dir. of Eng. WG	1
Supvr. of EngUL	1
D.O.T. YZ	1
Service Eng YZ	1

TRANS-CANADA AIR LINES
FIELD SERVICE BULLETIN

SUBJECT: Janitrol Package Carbon-Monoxide TEST.

No. 67.001
A/C Model DC-3/P
A/C Affected CF-TDX
Prepared D.B.Barry
Approved B.W.Torell

This Form to Deal with ONE Subject Only.

1. Difficulties Encountered
2. Action Taken
3. Results
4. Recommendations

1.0 INTRODUCTION:

.01 Department of Transport requirements for aircraft heating systems call for flight trials of any new design of heating system to establish freedom from carbon-monoxide in the ventilating air.

.02 These tests were normally carried out at Canadair on converted Douglas C-47 aircraft being purchased from that Company, but due to lack of time two aircraft, Registration numbers CF-TDQ (T.C.A. No 64) and CF-TDX (T.C.A. No 71) were accepted without the required carbon-monoxide test and were then granted a restricted Certificate of Airworthiness until the tests were completed. The heating systems were to be rendered inoperative during the interim period.

2.03 SUMMARY:

.01 A heater carbon-monoxide test was accordingly carried on on A/C 71, Registration CF-TDX on August 23rd. The aircraft was fitted a Janitrol Surface Combustion Package heater, Model 67A90, Serial No 06465001 with ducting to Canadair drawings 40601-26, 40601-35 and associated drawings.

.02 No carbon-monoxide contamination was found in the crew or passenger quarters of the aircraft.

3.0 TEST EQUIPMENT:

3.1 The test equipment consisted of a type K1 Carbon-Monoxide Aircraft Signal Assembly manufactured by Mine Safety Applicances Company.

3.2 Manufacturers specifications of this instrument state that it is capable of detecting a carbon-monoxide concentration of .005 to .007% by volume.

4.1 PROCEDURE:

4.2 The instrument and installation was first tested by breathing into the air inlet and observing the warning light flash on.

4.3 The aircraft was flown to a height sufficient to require heat and the instrument was moved to the following locations in order to sample for carbon-monoxide with the heater in operation. The duration of each check was approximately one minute.

(1) Flight compartment at Captain's and First Officer's head level and at floor level.

(2) No. 2 baggage compartment approximately thirty inches above the floor.

(3) Floor level above the center aisle immediately inboard of the heater unit.

(4) Approximately twelve inches above the heater.

(5) Head level at seats No 3, 7, 15 & 19.

Routing	

TRANS-CANADA AIR LINES
FIELD SERVICE BULLETIN

SUBJECT: - - - - - - - - - - - - - - - - - -

- -

No.
A/C Model
A/C Affected
Prepared
Approved

This Form to Deal with ONE Subject Only.

1. Difficulties Encountered
2. Action Taken
3. Results
4. Recommendations

Procedure - 4.3 cont'd-

(6) Head level in Stewardesses' position.

(7) Head level in the lavatory.

4.4 Observations were taken of pressure altitude, outside air temperature, cabin air temperature, indicated speed & temperature and barometric pressure at take-off.

5.0 OBSERVATIONS:

5.01 Captain - J.T.Finucan
First Officer - K.W.Warner
Observors - Mr.C.Brethour, Dept. of Transport
- Mr.G.Smith, Surface Combustion Corporation
- Mr. B.W.Torell, T.C.A. Engineering,
- Mr. D. B. Barry, T.C.A. Engineering.

5.02 Pressure Altitude..... 2500 ft.
Outside Air temperature..... 12°C
Indicated Air Speed..... 155 m.p.h.
Cabin Air Temperature..... 85°F
Barometric Pressure at take-off..... 30.22" Hg.
Outside Air Temperature at Take-off.. 18°C

5.03. No carbon-monoxide indications were given in any of the positions as outlined in Section 4.3 or in any other position in the aircraft.

6.0 CONCLUSIONS:

6.01 No concentration of carbon-monoxide could be detected with the Janitrol heater in operation and it is concluded that the carbon monoxide concentration was less than .007% in all parts of the aircraft cabin.

ORIGINAL ON FILE 5008-T5-5

COPY

FOR FILE 5008-T4-17
T4-24
T4-16

9

8
6-44

LEJG.

CANADIANNATIONAL TELEGRAPHS

DAYLETTER COLLECT

TRANSPORT-RECORDS
AUG 28 P.M.
File 5008-T4-24

910 CONFEDERATION BUILDING
MONTREAL 2 QUEBEC AUGUST 26 1946

A19950

A M SUTHERLAND
TRANS CANADA AIR LINES
WINNIPEG MANITOBA

AR 379 THE TEMPORARY AUTHORITY PREVIOUSLY GRANTED FOR OPERATION DOUGLAS CF TARE EASY EASY CF TARE DOG QUEEN CF TARE DOG XRAY CF TARE DOG PETER ARE HEREBY EXTENDED NOT VALID AFTER SEPTEMBER TWENTY EIGHTH FORTY SIX SUBJECT THESE AIRCRAFT IN AIRWORTHY CONDITION

J L BLONDEAU
DISTRICT INSPECTOR AIR REGULATIONS

16.00 hrs.
dg

Treas 26/8

10

5008-14-24

910 Confederation Building,
Montreal 2, Que., September 20, 1946.

A23648

TRANSPORT-RECORDS
SEP 21 A.M.
File 5008-14-24

Trans- Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TUX

The temporary authority granted on June 29, 1946, for the operation of the subject aircraft is hereby extended not valid after October 27, 1946, subject to this aircraft being in airworthy condition.

The conditions outlined in our letter of June 29, regarding the weights of this machine must be complied with at all times.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

11

5008-T4-24

910 Confederation Building,
Montreal, Que., December 17, 1946.

62801

TRANSPORT - RECORDS
DEC 2[illegible] A.M. 1946
FILE 5008-T4-24

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TDX

The authority granted on June 29, 1946, for the operation of the subject aircraft is hereby extended not valid after February 25, 1947, subject to this aircraft being in airworthy condition.

The conditions outlined in our previous letter regarding the weights of this aircraft must be complied with at all times.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

12

5008-T4-24

CAR

910 Confederation Building,
Montreal 2, Que., February 18, 1947.

TRANSPORT - RECORDS
FEB 19 A.M.
5008-T4-24
71198

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TDK

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after April 24, 1947, subject to this machine being in airworthy condition.

The conditions outlined in our previous letter of authority must be complied with at all times.

Yours truly,

RLR.

J. L. Blondeau,
District Inspector, Air Regulations.

AR

L.P.

TRANS-CANADA AIR LINES
Serves the Nation.

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2445-3.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-SIC3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-SIC3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-TEA
62	CF-TDO	75	CF-TEB
63	CF-TDP	77	CF-TED
64	CF-TDQ	78	CF-TEE
66	CF-TDS	79	CF-TED
67	CF-TDT	81	CF-TEH
68	CF-TDU	82	CF-TEI
70	CF-TDW	83	CF-TEJ
71	CF-TDX	91	CF-TES
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

L.P.

ORIGINAL
ON FILE 7150-6

CAR

14

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

76734

TRANSPORT - RECORDS
MAR 24 A.M.
5008-T-4-24
File

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5361(R)
1843(A)

5008-T4-15-T5-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
ON FILE 7150-6
LEJC.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

TRANSPORT - RECORDS
0323
APR 1 P.M.
5008-T4-24
File

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11906	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED ON CARDS

16

5008-T4-24

CAR

910 Confederation Building,
Montreal 2, Que., April 15, 1947.

TRANSPORT - RECORDS
APR 18 A.M.
5008-T4-24
File

A.M. Sutherland, Esq.,
Director of Mtce. & Overhaul,
Trans Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

Dear Sir:

Re: Douglas CF-TDX 5338

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter of authority.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

DG

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

/SBK

18

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5361

NATIONALITY AND REGISTRATION MARKS CF-TDX

1. Type and description	Douglas DC3-(SIC3G)
2. Name and address of constructor	Douglas Aircraft Company, Inc. Santa Monica, California, U.S.A.
3. Constructor's serial number	12161
4. Name of owner	Trans-Canada Air Lines
5. Address of owner	360 McGill Street, Montreal, Que.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 29th day of June 19 46, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TDX and is of Canadian nationality.

Given at Ottawa this 31st day of December, 19 46

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Engines

18. Number installed: Two

19. Makes: Pratt & Whitney

20. Types: Wasp S1C3G.

21. International power of the engine or engines at

(a) Sea Level 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

(b) Rated Altitude 1050 H.P. at 2550 revolutions per minute. (International number of revolutions) (each) (7500 ft.) 39.5" Hg

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews: Number fitted Two Types Hamilton Standard No .....
Pitch Constant Speed Full Feathering Diameter 18,112 .....

25. Weight of aircraft empty (including water in the radiators):

(a) Landplane	(28.6.47)	~~10,538~~	lbs.
(b) Seaplane			lbs.
(c) Skiplane			lbs.

Weight of Fuel and Oil

26. Fuel (at 7·2 lbs. per gallon) 4,824 lbs.
(a) Number of tanks: Four
(b) Capacity of tanks: 670 Imp. gals.

27. Oil (at 9·0 lbs. per gallon) 432 lbs.
(a) Number of tanks: Two
(b) Capacity of tanks: 48 Imp. gals.

28. Weight allowed for crew: 340 lbs.

29. Weight allowed for equipment, excluding wireless apparatus: ..... lbs.

30. Weight of wireless apparatus: ..... lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full L.P. 1,492 ~~1,066~~ lbs. (28.6.47)

32. Maximum total weight authorized

Landplane	Landing 24,400 (Except in case of emergency)	Take-off 25,200	lbs.
Seaplane			lbs.
Skiplane			lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)

Landplane: Take-off - Twenty-five Thousand Two Hundred Pounds

Seaplane: .....

Skiplane: ~~xxxxx~~ ~~xxxxx~~ Landing - Twenty Four Thousand Four Hundred Pounds (Except in case of emergency)

34. Minimum crew necessary: Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum. (Leading edge of centre section of wing)

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated 29th June, 1946 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, ~~1930~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 31st day of December, 19 46

.....
Superintendent, Air Regulations.

/SEK

17

2462
7-45

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1043

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines
2. Christian name
3. Address 360 McGill Street, Montreal, P. Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Company, Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TDX

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3-(SIC3G) Constructor's No. 12141
8. Place and year of construction of aircraft Santa Monica, California, U.S.A., 1946.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) twenty-four.

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a,b,c,d. & e.
15. Maximum span (in flying position) 95'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

Maximum Take-off and Landing Weights - DC3 Aircraft

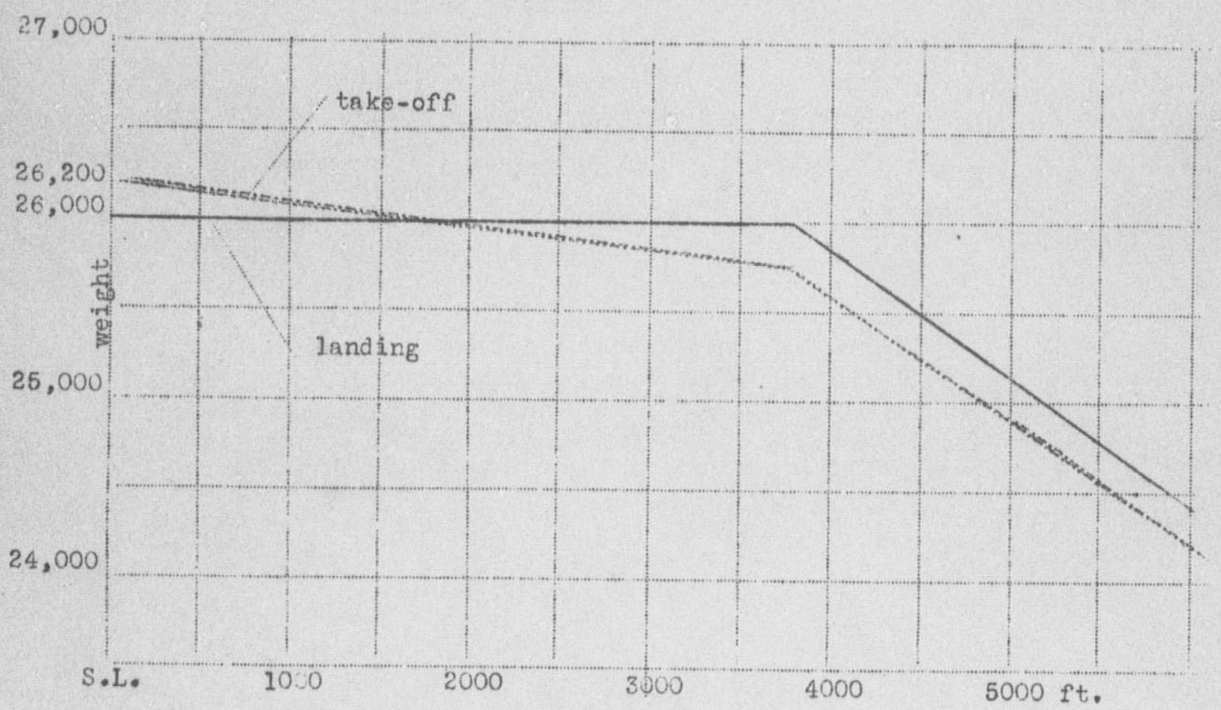
Revised Sept. 28, 1953.

(Note: The weights specified are maximum weights and lower weights may be enforced by operational performance considerations).

The maximum take-off and landing weights of DC3 type aircraft registered in Canada shall be as stated in the pertinent CAA Aircraft Specifications except that the following maximum weights shall apply when (1) the aircraft is structurally eligible for a maximum weight of 26,900 lbs. for cargo operations and (2) 1200 hp per engine is available for take-off under standard sea level conditions:

(a) Domestic Scheduled and Non-Scheduled Passenger Air Services

The maximum take-off and landing weights shall vary with altitude in accordance with the following chart. Dump valves are not required.



(b) International Scheduled Passenger Air Services Conducted on the Basis of Transport Category Operating Rules

When operations are conducted in accordance with the transport category operating limitations set forth in United States Civil Air Regulations Part 40 paras. 40.70 through 40.78 (effective October 1, 1953) the following maximum weights shall apply:

Landing 26,000 lbs. at sea level.
Take-off 26,200 lbs. at sea level.
Dump valves are not required.

Superintendent, Air Regulations.

/MIM
/ZC
/MM

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		29th June, 1947. 17/6/49 13.6.50 31/5/51.	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Landing Lights
Navigation Lights
2 Engine Revolution Counter
2 Oil Pressure Gauge
2 Oil Temperature Gauge
Emergency Flares

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT FORMS PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT. (31.5.50)

Note: This certificate is subject to Air Regulations, [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

/RBH

19

5008-T4-24

Ottawa, Ontario.
April 8th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5361 and Certificate of Airworthiness No. 1843 together with Engine and Journey and Aircraft Log Books, for your Douglas aircraft, CF- TDX. (DC3-SIC3G)

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

20

7135-6
5008-75-1
5008-76-13
-14
-15
-16
-17
-19
-20
-21
-23
-24
-25
-26
-1
-4
-5
-9
-10
-19

725/20

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

ATTENTION: Mr. J. T. Dyment

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. MONTREAL WINNIPEG

R

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.)	(1)	17.0 lbs.
Aluminum Pitcher	(1)	0.4 "
Lunch Boxes, less food	(24)	35.3 "
Thermos, 2 qt. less fluid	(5)	20.3 "
Silverware - complete sets	(24)	9.4 "
Paper Drinking Cups	(25)	0.2 "
Lucite Cup Handles	(30)	2.1 "
Lunch Box Inserts	(30)	3.1 "
Plastic Cups & Plates, sets	(24)	5.7 "
Hot & Cold Cups	(60)	1.8 "
General Utensils, allowance		2.0 "
Casseroles & Covers (Round)	(24)	13.0 "
Service Trays, large,	(6)	6.0 "
Cafatray, small,	(2)	0.6 "
Snack Kit	(1)	6.8 "
Pillows (at seats, complete with covers & slips)	(21)	21.4 "
Sickness Containers (at seats)	(21)	2.5 "
Whisk, Toy Broom and 2 Dusters		1.2 "
Dust Pan - long handle	(1)	0.4 "
Cleansing Tissue, Kleenex, 1 box		0.6 "
Stewardess Satchel	(1)	7.9 "
Linen Hand Towels (12"x 10")	(12)	0.9 "
Flyswatter	(1) & Atomizer (1)	1.2 "
Blankets (in rear service compartment)	(12)	36.0 "
Headrest covers (on seats)	(21)	2.1 "
Sanitary Napkins	(12)	1.0 "
First Aid Kit	(1)	4.1 "
Shopping Bags	(3)	0.6 "
Oxygen Masks (above seats)	(21)	15.8 "
Spare Sickness Containers	(10)	1.2 "
Spare Hand Towels (12) Headrest Covers	(10)	1.9 "
Spare Oxygen Masks	(5)	3.8 "
Spare Pillows complete	(3)	3.1 "
Crew Baggage	(3)	60.0 "
Magazines (in binders)	(10)	17.9 "
Bible	(1)	1.5 "
Life Belts - Passengers	(21)	54.6 "
Life Belts - Crew	(3)	7.8 "
Wash Water (2½ Imp.gals.)		25.0 "
Cargo Tie-down straps (cargo compt.)	10 sets	10.0 "
Anti-Icer Fluid (2½ Imp.gals.)		19.9 "
Propeller De-Icers	(6)	6.0 "
Wing, inner, De-Icers	(2)	12.4 "
Wing, outer, De-Icers	(2)	38.1 "
Stabilizer De-Icers	(2)	12.0 "
Fin De-Icers	(1)	4.3 "
Cabin & Toilet Frost Shields	(15)	0.9 "
Stewardess		120.0 "
		619.8 lbs.

Endorsement to C. of A. dated June 21, 1947:

Para. 25 - from "18538" to "18112". ✓

Para. 31 - from "1066" to "1492". ✓

Fredw Bone

for District Inspector, Air Regulations.

RLB/MC

A1.288 21

JUN 28 A...
File 5008.T4-24

A/C 71

AIRCRAFT INSPECTION REPORT

Date of Inspection ..June 21 1947...Owner ..Trans-Canada Air Lines..Reg.Markings....CF-TDX

Type ..Douglas DC-3 S1C3G.....Serial No....12141.....Purpose.....Commercial.....

C. of A...1843.....C. of R.....5361.....Date of Last Inspection .....June 30, 1946.....

Previous C. of R. & A. Expires...June 29, 1947.....Present C. of A.& C.of R. Expires.....20/6/48.....

AIRFRAME

Crew....2.....Passengers.....21.....No. of Fuel Tanks....4.....

Capacity...670 Imp. gals.....No.of Oil Tanks .....2.....Capacity.....48 Imp. gals.

Total Hrs. Since Purchase .....4843:14.....Since conversion 29/6/46 Overhaul.....3007:59.....Since Reconditioned.....--.....

WEIGHTS

		Gross	Tare	Empty	Carrying Capacity
Landplane	Passenger	Take-off 25200 Landing 24400	(1) 18735 (except in emergency)	18112	1492
	Freighter				
Seaplane	Passenger				
	Freighter				
Skiplane	Passenger				
	Freighter				

(1) Includes I.C.A.N. Item "F" Equipment (particulars overleaf)

ENGINE(S)

LEFT		RIGHT	
Make	P. & W.	Make	P. & W.
Model	Twin Wasp S1C3G	Model	Twin Wasp S1C3G
Serial No.	A81381	Serial No.	CP-361292
H.P.	1050 @ 2550 RPM	H.P.	1050 @ 2550 RPM
Total Hrs. Since New	3251:43	Total Hrs. Since New	1973:50
Since Complete Overhaul	368:34	Since Complete Overhaul	368:34

PROPELLER(S)

LEFT		RIGHT	
Make	Hamilton Standard	Make	Hamilton Standard
Model	Hydromatic Full Feathering	Model	Hydromatic Full Feathering
Diameter	11'6"	Diameter	11'6"
Pitch	18.5° - 89.5°	Pitch	18.5° - 89.5°
Blade Design	6571A-0	Blade Design	6571A-0
Mfg. No. 1	513257	Mfg. No. 1	514058
2	513258	2	514059
3	513259	3	514060
Total Hrs. 1	2392:46	Total Hrs. 1	2914:56
2	2392:46	2	2914:56
3	2392:46	3	2914:56
Hub Design	33D50-231	Hub Design	33D50-233
Mfg.No.	158232	Mfg.No.	158466
Total Hours	2392:46	Total Hours	2914:56
Hrs. Since Last Overhaul	368:34	Hrs. Since Last Overhaul	368:34
Date of Last Overhaul	9/5/47	Date of Last Overhaul	15/5/47
Date of Last Inspection	21/6/47	Date of Last Inspection	21/6/47
Date Purchased	28/5/46	Date Purchased	14/6/47

UNDERGEAR

Skis	--
Floats	--
...ls	Bendix B3
~~Pedestals~~	
Chassis	
Chassis	Standard - Retractable

1947-48 Radio Licence applied for.

OVER

DEPARTMENT OF TRANSPORT A11838 22/2

INTRA-DEPARTMENTAL CORRESPONDENCE 6-46

TORONTO (PLACE) 17th June, 1948. (DATE)

YOUR FILE	SUBJECT	OUR FILE
	CF-TDX (DOUGLAS DC-3).	5008-T4-8

TRANSPORT-RECORDS
JUN 18 A.M.
File 5008-T4-

24

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. CF-TDX (Douglas DC-3), owned by Trans-Canada Air Lines, has recently been reconditioned and inspected for airworthiness.

2. An appropriate entry has been made in the aircraft log book by Mr. E. Gee, to the effect that this aircraft was airworthy on June 17th, 1948. ✓

3. Certificate of Registration No. 5361 and Certificate of Airworthiness No. 1843 were renewed until June 17th, 1949. ✓

Wm Brethour

(for),
District Inspector, Air Regulations,
Toronto.

/AM

W

Headquarters

TRANSPORT-RECORDS
JUN 15 P.M. 1949
File 5008-T4-24

23

DEPARTMENT OF TRANSPORT
Civil Aviation Division

11241

H.Q: 5008-T4-24

TOR: 5008-T4-24

Toronto, Ontario.

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings C F - T H X .....

Aircraft Type .....Douglas DC-3.....

Owner .....Trans-Canada Air Lines.....

Place of Inspection .....Malton, Ontario.....

Date of Inspection ..June 13th, 1949.....

Satisfactory inspection report has been received from Air Engineers .....Emery Gee..... and Test Pilot .....

C. of R. No. ...5361..... and C. of A. No. ...1843.....

were renewed on ..June 13th, 1949... valid until .....

.....June 13th, 1950

Remarks .....

noted

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 9200

TOR: 5008-T4-24

Toronto, Ontario.

June 1st, 1950

TRANSPORT - RECORDS
JUN 2
5008-T4-24
File

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings ..... C F/T D X

Aircraft Type ..... DOUGLAS DC3

Owner ..... TRANS CANADA AIR LINES

Place of Inspection ..... MALTON ONTARIO

Date of Inspection ..... MAY 31st, 1950

Satisfactory inspection report has been received from Air Engineers ..... E.Gee ..... and Test Pilot .....

C. of R. No. ..... 5361 ..... and C. of A. No. ..... 1843 .....

were renewed on ..... 31.5.50 ..... valid until ..... May 31st, 1951 .....

Remarks ..... Page 3 of the Certificate of Airworthiness endorsed, as follows:

THE AIRCRAFT OPERATING MANUAL WITH AMENDMENTS, APPROVED LOADING CHART (DC3S1C3G) WEIGHT AND SPEED LIMITATIONS FORM PART OF THE CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED ON BOARD THE AIRCRAFT DURING FLIGHT.

Form No. 2444 attached.

St Grant
(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

24

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF- Serial No.

1. C. of A. No. 1843 Expires June 13-50 C. of R. No. 5361 Expires June 13-50
Aircraft Data - Manufacturer Douglas Model DC/3
Hours flown - Since New _____ Since Overhaul _____
Engine Data - Manufacturer _____ Model _____

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) _____	_____	_____
(2) _____	_____	_____
(3) _____	_____	_____
(4) _____	_____	_____

Signature of Applicant _____
Date _____

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed C Gee
"B" Engineer
Date May 31- 51

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot
Date _____

4. The following documents are attached:
Certificate of Airworthiness ☐
Certificate of Registration ☐
Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed D Bell
District Aircraft Inspector
Date May 31/50

7. C. of A. and C. of R. renewed, not valid after.

(Date)- 31.3.51
Permissible Gross Weights - Wheels
- ~~Skis~~
- ~~Floats~~

Signed W R Brechan
District Superintendent, Air Regulations
Date 31/5-/50

Other Action:-

8. H.Q. Action C.A.P.
C.A.E.

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TDX SERIAL No. 12141

1. C. of A. No. 1843 Expires 31-5-51 C. of R. No. 5361 Expires 31-5-51

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model S1C3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) Lt. eng. 655358908		
(2) Rt. eng. CP361292		
(3)		
(4)		

Signature of Applicant E. Gee

Date May 15, 1951

---

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E. Gee "B" ENGINEER Y24-52

Date May 15, 1951

---

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

---

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

---

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

DEPARTMENT OF TRANSPORT AERONAUTICS A.I. ENGINEERING CANADA

Signed H. Bate
DISTRICT AIRCRAFT INSPECTOR

Date May 15/51

---

7. C. of A. and C. of R. renewed, not valid after (Date) May 31st, 1952.

Permissible Gross Weights— Wheels (take-off) 25,200 lbs. (landing) 24,400 lbs.
Skis
Floats

Signed D. L. [illegible]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date May 15th, 1951.

Other Action:— Items 26 to 32 inclusive on the Certificate of Airworthiness have been deleted.

---

8. H.Q. Action— C.A.R.

C.A.E.

TRANSPORT - RECORDS
27
MAY 16 A.M. 1951
File 5008-T4-24

09573

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W....May.15th,..1951....

Your File 5008-T4-24 SUBJECT Renewal of Certificates of Registration and Airworthiness CF-TDX Our File 5008-T4-24

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC3 aircraft, CF-TDX.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

30

11099

TRANSPORT - RECORDS
MAY 28 A.M. 1952
File 5008-T4-24

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W....May. 27th. 1952....

Your File 5008-T4-24

SUBJECT Renewal of Certificates of Registration and Airworthiness CF- T D X

Our File 5008-T4-24

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF-T D X

2. Copy of Log Sheet attached.

(J.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
1.

29 2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF—TDX SERIAL No. 12141

1. C. of A. No. 1843 Expires May 31, 1952 C. of R. No. 5361 Expires May 31/52

AIRCRAFT DATA—Manufacturer Douglas Aircraft Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model S 1 E 3 G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61 A 60 E		
(2) 61 A 28 E		
(3)		
(4)		

Signature of Applicant E Gee

Date May 27/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Gee "B" ENGINEER

Date May 27/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed ..... TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed ..... DISTRICT AIRCRAFT INSPECTOR

Date May 27/52

7. C. of A. and C. of R. renewed, not valid after (Date) May 31, 1953

Permissible Gross Weights— Wheels - 25,200 lbs.
Skis
Floats

Signed ..... DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date May 27th 1952.

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

TCA-620
6-49

(1) **AIRCRAFT No. 321** — **TRANS-CANADA AIR LINES FLIGHT REPORT**

(2) CREW PERSONNEL		(3) FLIGHT	
		DESIGNATOR	DATE
CAPTAIN	J·A·MILLAR		
FIRST OFFICER	C WHALEY	233/26	26-5-52
STEWARDESS	K BARRY	236/26	
STEWARD			

(4) **FLIGHT TIME DATA**

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
YZ	QG	18·33	19·44	1	11
QG	YZ	20·33	21·62	1	19
			TOTAL TIME	2	30

OIL ADDED

INDICATE QUARTS			
LEFT	RIGHT	STA	BY

(5) **INSTRUMENT READINGS**

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(6) **REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT**

DEF. NO.		DEF. NO.	
		408	PORT R.P.M INDICATOR FLUCTUATES CONTINUOUSLY 20-30 R.P.M. APPEARS TO BE ONLY THE INSTRUMENT.

SIGNED J A Millar CAPTAIN

Copy of log sheet

(7) AIRCRAFT TIME DATA		(8) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION YZ	DATE 27-5-52			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	232.19			
TOTAL AIRCRAFT TIME	18 334.50			

(9) DEFECTS RECTIFIED AND OTHER WORK DONE

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	A/C ENROUTE CHECKED		
	A/C PREFLIGHT CHECKED	YZ	L. Story
408	CHANGED LEFT TACH. GENERATOR	YZ	L. Story

INSPECTION RELEASE CERTIFICATE A. I. - 12

Complete Aircraft — After Overhaul Major Repair and/or Alterations

A/C Registration - CF - TDX Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft have been completed satisfactorily: that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: May 27/52 Signed: [signature]
Air Engineer "B" YZM-5R

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED L. Story AIR ENGINEER. DATE 27-5-52 STATION YZ

14735

TRANS. - RECORDS
33
MAY 29 P.M. 1953
File 5008-T4-24

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. May 28, 1953

Your File | SUBJECT Renewal of Certificates of Registration and Airworthiness | Our File

5008-T4-24 | **Douglas DC3-(SIC3G) CF-TDX** | 5008-T4-24

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for **CF-TDX**

2. The Certificate of Airworthiness No. 1843 issued the m/n aircraft has this date been amended as follows:-
Page 2 - Item 33

Landplane ..... "25,200 Lbs." deleted.
"26,200 Lbs. inserted.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

2444
8-52

32

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF - TDX SERIAL No. 12141

1. C. of A. No. 1843 Expires May 31/53 C. of R. No. 5361 Expires
Aircraft Data—Manufacturer Douglas A/C Corp Model DC-3
Hours flown—Since New Since Overhaul
Engine Data—Manufacturer Pratt & Whitney Model S1E3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A66E		
(2) 61A64E		
(3)		
(4)		

Signature of Applicant A Gee
Date May 25/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed A Gee
"M" Licence No. YZM-52
Date May 25-/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot
Date

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5361 and C. of A. No. 1843, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed
District Aircraft Inspector
Date May 28/53

7. C. of A. and C. of R. renewed, not valid after.

Date May 31, 1954
Permissible Gross Weights—Wheels 26, 200 Lbs.
—Skis
—Floats

Signed
District Superintendent, Air Regulations
Date May 28, 1953

Other Action:—

8. H.Q. Action C.A.R.
C.A.E.

(1)

AIRCRAFT No. 371 — TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
11-51

(2) CREW PERSONNEL		(3) FLIGHT	
		DESIGNATOR	DATE
CAPTAIN	G A COOK	251-25	May 25/53
FIRST OFFICER	G WHALEY	254-25	
STEWARDESS	S J GUSTAVSON		
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	YB	08.12	09.19	1	07
YB	QJ	09.36	10.46	1	10
QJ	YU	11.00	11.40		40
YU	QJ	12.21	12.59		38
QJ	YB	13.18	14.23	1	05
YB	YZ	14.41	15.50	1	09
			TOTAL TIME	5	49

(5) OIL ADDED

INDICATE QUARTS LEFT	RIGHT	STA	BY

(6) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

Copy of Log sheet

(7) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED G A Cook per E Lee CAPTAIN

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

AC-5-132

ORIGINAL - HQ FILE NO. T-4-24

DUPLICATE - DIST. FILE NO. T4-24

TO: Director of Air Services,
Ottawa, Ont. Attn: S.A.R.

TRANSPORT - RECORDS
MAY 20 A.M.
5008-T-4-24
File

AIRCRAFT LICENSING RECORDS

06143

1. Registration mark CF- TDX 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1843 ..... Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes:
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not (T.C.A. Flight Report Attached) .....

otherwise covered .....

.....

.....

13. C of A valid from May 11th, 1954. to May 10th, 1955. ✓ Mod. 1

Temporary authority from ..... to ..... Mod. 1

Date May 14th, 1954.

F.W. Bone,
District Superintendent Air Regulations

(8) **AIRCRAFT TIME DATA**

(9) **WORK TO BE DONE NEXT CHECK STATION**

	STA.	BY

STATION Winnipeg DATE May 11/1954

TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 1039:54

TOTAL AIRCRAFT TIME 24497:45 "A. Hegger"

(10) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	DATE	SIGNATURE
	5 CHECK COMPLETED.			
	BOTH ENGINES CHANGED.	WG.	11/5/54	D Darmuy
	ZONE D1 PROGRESSIVE O'HAUL CARRIED OUT.			
	C of A AND C of R. RENEWED MAY 11/54 EXPIRES MAY 10-1955			

INSPECTION RELEASE CERTIFICATE A.I. - 12

Complete Aircraft — After Overhaul Major Repair and/or Alterations

A/C Registration - CF - TDX Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft have been completed satisfactorily: that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: May 11 - 1954 Signed: W.M. Sutherland

Air Engineer "B" WGM-43

(11) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED D Darmuy WGM. 26 AIR ENGINEER. DATE MAY 14 54 STATION WG.

(1) **AIRCRAFT No.** 371 CF-TDX

TRANS-CANADA AIR LINES FLIGHT REPORT

COPY

TCA-620

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	J. T. Finucan	DESIGNATOR	DATE
FIRST OFFICER	J.C.T. Boon	259-9	9-5-54
STEWARDESS	J. I. Hanna		
STEWARD			

(6) **INSTRUMENT READINGS**

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(4) **FLIGHT TIME DATA**

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
YZ	INR	1720	1925	2	05
INR	QT	1946	2147	2	01
QT	WG	2211	2340 CST	2	29
			TOTAL TIME	6	35

(5) **OIL ADDED**

INDICATE QUARTS			
LEFT	RIGHT	STA	BY
8		QT	

(7) **REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT**

DEF. NO.	
293	Left Pilot Heater does not function.

SIGNED "J.T. Finucan" CAPTAIN

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ. FILE NO. 5008-T4-24

DUPLICATE - DISTRICT FILE NO.

TRANSPORT RECORDS
MAY 4 A.M. 36
File 5008-T4-24

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T D X 3816 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1843 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines Citizen of .....

Christian name ....

8. Address of owner 360 McGill Street, Montreal, Que.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not otherwise covered ..... C. of A. Page 3. Maximu Take-oof and Landing Weights-DC3 aircraft Revised Sept. 28, 1953- inserted. C. of A. Page 1- Item 40 - year "1938" - deleted. Page 3 - year "1938"- deleted.

C of A valid from May 10/55 to May 10/56

Temporary authority from ..... to .....

May 2, 1955

(D.W. Saunders)
District Superintendent Air Regulations

FOR
ON AND
TS TO
S OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T4-24

DUPLICATE - DIST. FILE NO. .....

TRANSPORT - RECORDS
JUN 3 P.M.
File 5008-T4-24

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T D X 7237 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1843 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, Que.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not Endorsed re validity of C. of A. as per Instructions

otherwise covered H.Q. letter file No. 7150-6, dated May 13, 1955.

.....

.....

A valid from ..... to .....

rary authority from ..... to .....

(D.W. Saunders)
District Superintendent Air Regulations

June 2, 1955

5144

TRANSPORT - RECORDS
MAY 13 A.M.
File 5008-T-4-24

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

501-428 Portage Avenue,
Winnipeg 1, Manitoba,
May 8th, 1957.

Your File	Subject:	Our File
5008-T-4-24	Douglas DC-3, CF - T D X	5008-T-4-24

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. The Certificates of Airworthiness No. 1843 and Registration Number 5361 for the above mentioned aircraft has been (~~xxxxxxx~~ Amended) as follows:- New forms 2462 and 2462A issued to replace the old ones.

2. Attached is blue copy of the Certificate of Airworthiness and the Certificate of Registration.

/RR
Enc.

District Director, Air Services.

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE 39 ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5361

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T D X	Douglas Aircraft Company Inc- Douglas DC3 (S1C3G)	12141

(4) NAME OF OWNER TRANS - CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE June 29th, 1946.

SEAL

SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

2462
2-56

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

38

SERIAL NO. 1843

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
TDX	Douglas Aircraft Company Inc.-Douglas DC3(S1C3G)	12141

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE June 29th, 1946.

SEAL

[redacted]
SUPERINTENDENT OF AIR OPERATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

COPY 18194

41
5008-T4-24

ORIGINAL ON FILE 5008-T4-21

COPY FOR FILE 5008-T4-24

LE JG

CANADIAN NATIONAL TELEGRAPHS

1958 SEP 16 AM 8 31

CNTGA004 24/21

ST WINNIPEG MAN SEPT 15 403PMC

DIRECTOR GENERAL AIR SERVICES

ATTN CONTROLLER CIVIL AIR OPERATIONS AND REGULATIONS DOT OTTAWA

ARW187 DOUGLAS DC THREE CF-TDU AND DOUGLAS CF-TDX SOLD

TO FRONTIER AIRLINES DENVER COLORADO CANCEL REGISTRATION

MARKINGS FROM CANADIAN AIRCRAFT REGISTER

B HINDERKS REGIONAL DIRECTOR AIR SERVICES.

ARW187 DC CF-TDU CF-TDX

731AME/16

8
3-55

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐ 43

NO. 5361

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T D X	Douglas Aircraft Company Inc- Douglas DC3 (S1C3G)	12141

(4) NAME OF OWNER TRANS - CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE June 29th, 1946.

SEAL

SEE REVERSE SIDE

Controller, Civil Air Regulations.

SPECIAL COMPULSORY CONDITIONS:

"This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister."

Controller, Civil Air Regulations.

CERTIFICATES OF AIRWORTHINESS SHALL NOT REMAIN VALID FOR A PERIOD EXCEEDING TWELVE MONTHS EXCEPT AS MAY BE DIRECTED BY THE MINISTER.

NO ENTRIES OR ENDORSEMENTS MAY BE MADE ON THIS CERTIFICATE EXCEPT IN THE MANNER AND BY THE PERSONS AUTHORIZED BY THE MINISTER.

IF THIS CERTIFICATE IS LOST, THE MINISTER OF TRANSPORT SHOULD BE INFORMED AT ONCE.

ANY PERSON FINDING THIS CERTIFICATE SHOULD FORWARD IT IMMEDIATELY TO THE MINISTER OF TRANSPORT, OTTAWA, ONTARIO, CANADA

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
1-56

Winnipeg 1, Manitoba, September 18th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
5008-T-4-21		5008-T-4-21 and 5008-T-4-24

SUBJECT: DOUGLAS DC3 AIRCRAFT CF - T D U and CF - T D X

18334

TRANSPORT - RECORDS
SEP 23 A.M.
5008-T4-24
File 5008-T4-21

Director General, Air Services,
Department of Transport.
Ottawa, Ontario.

Attention Controller, Civil Air Operations & Regulations.

1. Enclosed herewith you will find the Certificate of Registration and Certificate of Airworthiness covering the above mentioned aircraft, in order that they may be cancelled and registration markings deleted from the Canadian Aircraft Register - Aircraft being exported to United States.

B. Hendrick
Regional Director, Air Services.

Encs.

COPY ON
5008-T4-24

Cancelled - Noted
24.9.58.

COPY

45
44

ORIGINAL ON FILE 5008-T4-25

COPY FOR FILE 5008-T4-24
T4-17
T4-8

LEJG.

1959 MAR 19 AM 8 57

VAA 16 CYHQ

VFT4 75 VAA

VFW5 85 VFT4

RHQ 58 VFW5

CYWG RHQ 58 182145

JJ DIGEN CYHQ ATTN COR

BT

ARW67 PLEASE ADVISE FEDERAL AVIATION AGENCY AIRMAN AND RECORDS BRANCH WASHINGTON DC THAT DOUGLAS DC THREE AIRCRAFT CF DASH TANGO DELTA YANKEE SERIAL NUMBER ONE TWO ONE NINE ONE OF DASH TANGO DELTA WHISKEY SERIAL NUMBER ONE TWO ONE THREE NINE OF DASH TANGO DELTA QUEBEC SERIAL NUMBER ONE TWO ZERO THREE NINE OF DASH TANGO ECHO HOTEL SERIAL NUMBER ONE TWO FOUR FOUR ZERO HAVE BEEN CANCELLED ON THE CIVIL AIRCRAFT REGISTER ALSO SEND CONFIRMATION TO TRANSCANADA AIRLINES FRONTIER AIRLINES AND THIS OFFICE

DIDAS WINNIPEG

FM ARW 67

8
3-55

GJ/NG

46

5008-T4-14 (SRL)
5008-T4-21
5008-T5-5
5008-T5-7
5008-T4-24

OTTAWA, Ontario.
February 24, 1959.

Mr. Robert E. Forbes,
Chief, Aircraft & Airman Records Branch,
Federal Aviation Agency,
Washington 25, D.C.,
U.S.A.

Dear Sir:

This is to confirm that the registrations of the following aircraft were cancelled on the Canadian Aircraft Register on the dates included below:

Douglas DC8(SIC30) Serial No. 12007, cancelled 14.8.58
Douglas DC8(SIC30) Serial No. 12106, cancelled 18.9.58
Douglas DC8(SIC30) Serial No. 13559, cancelled 5.8.58
Douglas DC8(SIC30) Serial No. 12442, cancelled 14.8.58
Douglas DC8(SIC30) Serial No. 12141, cancelled 18.9.58

Yours truly,

(J.R.K. Main),
Director of Civil Aviation.

cc: Frontier Airlines Inc.
Denver, Colorado.
U.S.A.

cc: Winnipeg

cc: Montreal

FILE No. 5008 - T 5 - 4

VOLUME No. 1

VOL. 1

5008 - T 5 - 4

DEPARTMENT OF TRANSPORT

FROM DEC. 1946

TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION - INSPECTION & OPERATION

FILE TITLE CF - TED - DOUGLAS DC - 3.

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

VOL. 1

5008- T 5- 4

FILE NO. 5008- T 5- 4 VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM DEC. 1946-

TO

CROSS REFERENCES

SUBJECT AIRCRAFT-INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION - INSPECTION & OPERATION

FILE TITLE CF- TED — DOUGLAS DC - 3.

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
NOV 28 1949	35251	CAR		bJ	NOV 30 1949
	—	CAE		4 cys	NOV 30 1949
NOV 21 1950	26091	CAR		bJ	
	26127	CAR		bJ	NOV 27 1950
NOV 27 1950		CAE		9 cys	NOV 27 1950
MAR 1 1951	46554	CAR		W.V.S.	MAR 1 5195
MAR 1 5 1951		CAI			MAR 20 195
MAR 20 1951	—	CAE		AH	MAR 22 1951
MAR 24 1951	APR 3 1951 W.V. Gordon 47718	CAR		W.V.S.	APR 4 1951
MAR 30 1951		CAE ①		R.	APR 3 195
NOV 29 1951	46767	CAR		bJ	NOV 30 1951
NOV 30 1951 NOV 21 1952	—	CAE		9 cys	DEC 1 1951
	41387	CAR		JHH	NOV 25 1952
NOV 25 1952		CAE		9 cys	NOV 26 1952
	51053	CAR		JHH	NOV 25 1953
NOV 20 195 NOV 25 1953	—	CAE		9 cys	NOV 25 1953
	Rey Mr Burchell	CHI			AUG 23 1954
NOV 19 1954	19169	CAR		bJ	NOV 29 1954
	7246	ARL		bJ	
JUN 6 1955	5143	ARL		bJ	JUN 6 1955
MAY 13 1957	4245	ARL		bJ	MAY 13 1957
MAY 2 1958 MAY 26 1958	— (3cys)	Record			SEP 17 1958
MAY 27 1958	—	SAF A			
	17554	AKL			SEP 17 1958

FILE NO. 5008 - T5 - 4 VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - TED DOUGLAS DC 3

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
DEC 1 1945 DEC 17 1945	30720	L.A.R.	21/12/45		DEC 1945
	31271	LAR			DEC 20 1945
DEC 20 1945	BF 21/12/45	LAR			JAN 15 1946
JAN 24 1946	35875	L.A.R.			JAN 29 1946
FEB 8 1946	38795	L.A.R.	12/3/46		FEB 25 1946
MAR 12 1946	B.F. Mail	LAR			MAR 20 1946
MAR 23 1946	43230	L.A.R.			MAR 25 1946
MAR 27 1946 APR 1 1946	67576	C.R.D.			
		C.A.E.			APR - 2 1946
	1996	L.A.R.			
APR 7 1946 MAY 24 1946	10920	L.A.R.			JUL 20 1946
JUL 20 1946 OCT 29 1946		TRANS			AUG 12 1946
	29138	C.E.A.			NOV 6 1946
		L.A.R.			NOV 5 1946
NOV 12 1946	Requested	LAR.			DEC 2 1946
DEC 30 1946	63645	LAR			DEC 31 1946
FEB 8 1947 MAY 2 1947	69541	CAR			MAY 23 1947
		Lees			MAY 28 1947
MAY 29 1947		C.R.T.			MAY 27 1947
		642			MAY 31 1947
DEC 11 47	29351	CAR			DEC 12 47
		CAE			DEC 12 47
DEC 21 48	37121	CAR			DEC 22 48

Records

Albert Jn. Moretti.

Please remove folios
1 to 44 inclusive
and place in
file CF-DX4.

Mr. Patterson

Transferred 5 Jun 08. 924-21 AR

Please return this file
Mr. Patterson.

45
1

5008-T5-4

910 Confederation Building,
Montreal, Que., December 24, 1946.

TRANSPORT - RECORDS
DEC 27 A.M. 1946
File 5008-T5-4

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

63645

Gentlemen:

Re: Douglas CF-TED

This letter will constitute your authority not valid after February 23, 1947, for the commercial operation of the subject aircraft on your regular lines.

The maximum all-up weight of this aircraft must not exceed 25,200 pounds for take off and 24,400 pounds for landing. These figures may be increased by 146 pounds when de-icers are installed. The weight empty of this aircraft has been established at 17,936 pounds.

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations.

AR

ACTUAL WEIGHT AND BALANCE

MODEL: DC-3

T.C.A. #CF-TFD

REPORT: #RW-C-221

Canadair
Limited
POST OFFICE BOX 6087
Montreal

5905

CANADAIR
LIMITED
MONTREAL. CANADA

REPORT NO. RW-0-221

TITLE ACTUAL WEIGHT AND BALANCE

MODEL DC-3

PREPARED D. Kennie

CHECKED Ed Grose

APPROVED W Banas
L. J. Hebert

DATE 18th of Dec. 1946.

PREPARED H. Armit
CHECKED Ed Grose
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 1
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I N T R O D U C T I O N

Airplane model C-47A converted to a DC-3 for commercial use under contract for Trans-Canada Air Lines bearing registration number CF-TED was weighed at Canadair Limited, Montreal, Canada on 18th of December 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system.

PREPARED D. Rennie
CHECKED Ed. Fraser
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 2
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Commissary	1	Water Thermos (incl. water - 1 Gal)	-	1	17.0	497	8,449
	2	Aluminum Pitcher	-	1	0.4	520	208
	3	Lunch Boxes, less food	-	24	35.3	520	18,356
	4	Thermos - 2 qt. less fluid	-	5	20.3	520	10,556
	5	Silverware - Complete sets	-	24	9.4	530	4,982
	6	Paper Drinking Cups	-	25	0.2	530	106
	7	Lucite Cup Handles	-	30	2.1	530	1,113
	8	Lunch Box Inserts	-	30	3.1	520	1,612
	9	Plastic Cups & Plates, sets	-	24	5.7	530	3,021
	10	Hot & Cold Cups	-	60	1.8	530	954
	11	General Utensils, Allowance	-	-	2.0	530	1,060
	12	Casseroles & Covers (Round)	-	24	24.0	540	12,960
	13	Service Trays - Large	-	6	6.0	540	3,240
	14	Cafatray - small	-	2	0.6	540	324
	15	Snack Kit	-	1	6.8	520	3,536
Stewardess Supplies	1	Pillows (at seats, complete with covers & slips)	-	21	21.4	332	7,105
	2	Sickness Containers (at seats)	-	21	2.5	332	830
	3	Whisk (1) Toy Broom (1) & Dusters (2)	-	-	1.2	530	636
	4	Dust Pan - Long Handle	-	1	0.4	530	212
	5	Cleansing Tissue - Kleenex - 1 box	-	1	0.6	524	314
	6	Stewardess Satchel	-	1	7.9	521	4,116
	7	Linen Hand Towels (12" x 10")	-	12	0.9	502	452
	8	Flyswatter (1) & Atomizer (1)	-	-	1.2	540	648
	9	Blankets (in rear service compt.)	-	12	36.0	553	19,908
	10	Headrest covers (on seats)	-	21	2.1	332	697
	11	Sanitary Napkins	-	12	1.0	540	540
	12	First Aid Kit	-	1	4.1	522	2,140
	13	Shopping Bags	-	3	0.6	545	327
	14	Oxygen Masks (above seats)	-	21	15.8	332	5,246
	15	Spare Sickness Containers	-	10	1.2	554	665
	16	Spare Towels (12) Headrest Covers(10)	-	-	1.9	554	1,053
	17	Spare Oxygen Masks	-	5	3.8	554	2,105
	18	Spare Pillows Complete	-	3	3.1	554	1,717

PREPARED D. Rennie
CHECKED Ed. Grace
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 3
REPORT RW-O-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Misc.	1	Crew Baggage	-	3	60.6	147	8,820
	2	Magazines (in binders)	-	10	17.9	177.5	3,177
	3	Bible	-	1	1.5	177.5	266
	4	Life Belts - Passengers	-	21	54.6	332	18,127
	5	Life Belts - Crew	-	3	7.8	147	1,147
	6	Wash Water (2½ Imp. Gals)	-	-	25.0	492	12,300
	7	Cargo Tie-Down Straps (Cargo Compt.) Sets	*	10	10.0	308	3,080
Cold Weather Equipment	1	Anti-Icer Fluid (Std.Qty. 2½ Imp. Gal)*	-	-	19.9	341	6,786
	2	De-Icers - Propellers	-	6	6.0	117.5	705
	3	" " - Wing, Inner	-	2	12.4	200	2,480
	4	" " - Wing, Outer	*	2	38.1	252	9,601
	5	" " - Stabilizer	-	2	12.0	650	7,800
	6	" " - Fin	-	1	4.3	660	2,838
	7	Cabin & Toilet Frost Shields	*	15	0.9	325	293
	1	Stewardess		1	120.0	521	62,520

* Max. capacity 9.6 Imp. Gal. or 76.2 lbs.

PREPARED L. Rumis
CHECKED Ed. Grose
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 4
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

L.C.A.N. EQUIPMENT "E" LIST (Fixed)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Cockpit	1	Fire Extinguisher-Cockpit & Fwd.Cargo	-	1	7.2	83.5	601
	2	Flashlight	-	1	1.2	74	89
	3	Log Book	-	1	2.5	71	178
	4	Tools	-	-	2.3	76	175
	5	Standard Oxygen Bottles	-	2	66.0	390	25,740
	6	Safety Belts - Pilots & Observer	-	3	3.0	98	294
	7	Can of Hydraulic Fluid	-	1	9.5	88	836
	8	Web Gates - Cargo Compt.	-	-	54.0	122.7	6,626
Cabin	1	Carpet - Complete	-	1	53.0	343	18,179
	2	Curtains with Tie Back Straps	-	14	7.7	325	2,503
	3	Coat Hangers	-	24	4.0	480	1,920
	4	Coat Strap	-	1	0.2	480	96
	5	Fire Extinguisher	-	1	7.2	493	3,550
	6	Safety Belts - Passenger	-	21	21.0	332	6,972
	7	Safety Belt - Stewardess	-	1	1.0	521	521
	8	Cabin Thermometer	-	1	0.3	492	148
	9	Casserole Carriers	-	2	27.6	540	14,904
	10	Food Box Carriers	-	3	20.1	512	10,291
Toilet	1	Soap - Powdered - in dispenser	-	-	0.2	500	100
	2	Toilet Container	-	1	2.0	530	1,060
	3	Toilet Tissues	-	-	0.3	538	161
	4	Waste Container	-	1	2.0	536	1,072
	5	"Air - Wick" Bottle	-	1	0.8	538	430
Misc.	1	Storage Batteries	-	2	152.0	124	18,848
	2	Janitrol Heater	-	1	105.0	172	18,060
	3	Flares (Landing) Type S-A-8	-	2	36.0	604	21,744

PREPARED L. Rennie
CHECKED Ed. Grass
APPROVED

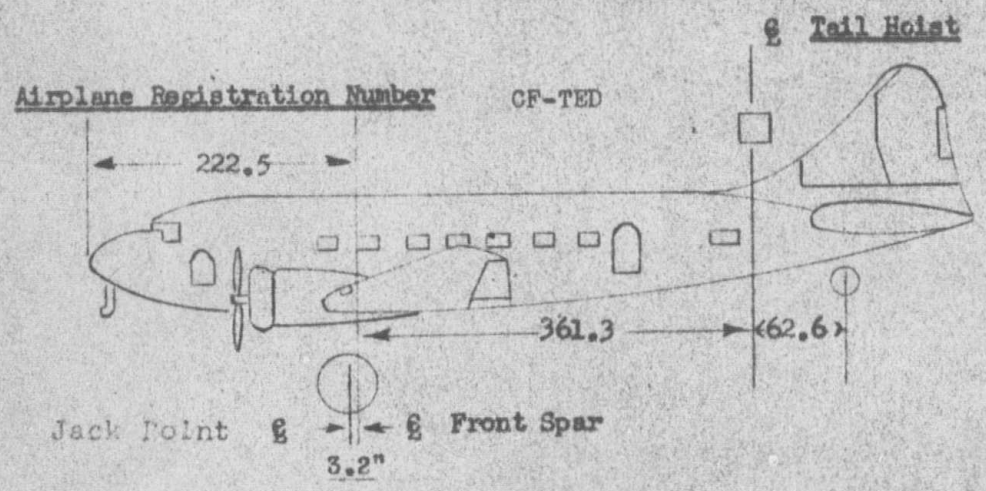
CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 5
REPORT RW-C-221
MODEL DC-3

5904

SUBJECT— **Actual Weight and Balance.**

Weight Empty Data



Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	8040	-15	-	8025
Right Wheel	8130	- 5	-	8125
Tail Hoist	1660	-10	-	1650
Total	17830	-30	-	17800

Less ____ Gals. Oil Sta. 184.5 (Corrections ____ ____ *

I.C.A.N. Empty Weight 17,936 lbs.

Remarks:

* See page "7" for corrections to obtain weight empty.

PREPARED A. Rennie
CHECKED Ed. Conrad
APPROVED

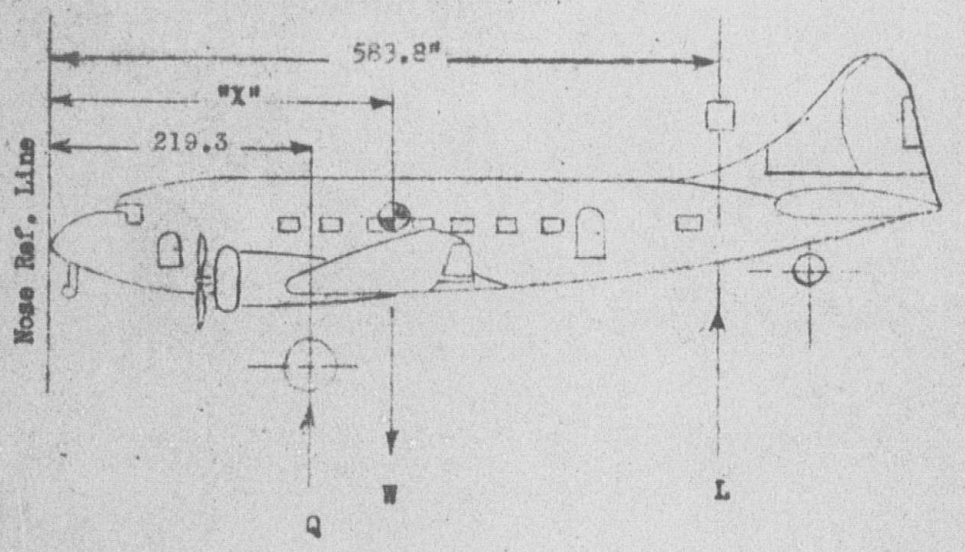
CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 6
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— **ACTUAL WEIGHT AND BALANCE**

TAIL-UP WEIGHING



Main Wheel, left, net		8,025
Main Wheel, right, net		8,125
Total Main Wheel	Q =	16,150
Tail Hoist Load Reaction	L =	1,650
Aircraft, as weighed	W =	17,800

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 219.3) + (L \times 583.8) = (W \times X) = 0$$

$$\frac{(Q \times 219.3) + (L \times 583.8)}{W} = x$$

$$\frac{(16{,}150 \times 219.3) + (1{,}650 \times 583.8)}{17{,}800}$$

$$\frac{4{,}504{,}965}{17{,}800} = 253.1"$$

C.G. Location (X) aft of nose ref.: = 253.1 inches

PREPARED L. Rennie
CHECKED Ed. Grose
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 7
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY

	WEIGHT	ARM	MOMENT
Aircraft as weighed	17,800	253.1	4,504,965
Fixed Equipment to be added			
1. Fire Ext. (cabin)	7.2	493.0	3,550
2. Fire Ext. (cockpit)	7.2	83.5	601
3. Log book	2.5	71	178
4. Tools	2.3	76	175
5. Can of Hydraulic fluid	9.5	88	836
6. Powdered soap	.2	500	100
7. Toilet tissue	.3	538	161
8. Flashlight	1.2	74	89
9. Trapped oil and fuel	51.0	175	8,925
10. Foodbox Carriers	20.1	512	10,291
11. Air-Wick bottle	.8	538	430
12. Janitrol heater	105.0	172	18,060
13. Flares	36.0	604	21,744
Removable Equipment to be Deducted			
1. Cargo tie down straps	10	308	3,080
2. De-icer Propeller	6	117.5	705
3. De-Icer wing Inner	12.4	200	2,480
4. De-Icer Wing Outer	38.1	252	9,601
5. De-Icer Stabilizer	12.0	650	7,800
6. De-Icer Fin	4.3	660	2,838
7. Cabin & Toilet Frost Shields	.9	325	293
8. Casseroles and Covers	24	540	12,960
I.C.A.N. WEIGHT EMPTY	17,936	252.6	4,530,348

$$\text{C.G. in \% M.A.C.} = \frac{252.6 - 224.4}{138.1} \times 100$$

" " " = 20.4 % M.A.C.

PREPARED D. Rennie
CHECKED Ed. Greer
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 8
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
I.C.A.N. Weight Empty	17,936	252.6	4,530,348
Removable equipment "F"	-691	410.3	- 283,328
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,059	252.4	4,809,790

Operational Weight empty Arm = $\frac{4,809,790}{19,059}$

= 252.4 inches

C.G. in % M.A.C. = $\frac{(252.4 - 224.4)}{138.1} \times 100$

= 20.3 %

- - - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346 lbs.

Basic operational Weight empty (winter oper) = 19,059 lbs.

Disposable Load = 6,287

* Disposable for fuel, passengers, stewardess and cargo.

PREPARED D. Rennie
CHECKED Ed. Forest
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 9
REPORT RW-0-221
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

5904

SUBJECT – Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum line).

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs:

L.H. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

(h) Trapped Fuel & Oil.

51 lbs. (175.0" aft of horizontal reference line).
(1) Trapped oil = 32#
(2) Trapped fuel = 19#

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)

Aft limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 25,200 lbs. (with dump valves.)
Max. Take-off 24,400 lbs. (without dump valves)
Max. Landing 24,400 Lbs.

SUBJECT- ACTUAL WEIGHT AND BALANCE

Reference:

Aircraft Specification "A-669-4" Douglas Model DC-3 Series, dated 15 Jan. 1946.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

Reference:

Douglas DC-3 Dwg. No.: 5071540

5008-T5-4

910 Confederation Building,
Montreal, Que., December 24, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

Gentlemen:

Re: Douglas CF-TED

This letter will constitute your authority not valid after February 23, 1947, for the commercial operation of the subject aircraft on your regular lines.

The maximum all-up weight of this aircraft must not exceed 25,200 pounds for take off and 24,400 pounds for landing. These figures may be increased by 146 pounds when de-icers are installed. The weight empty of this aircraft has been established at 17,936 pounds.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., Feb. 6, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas, Serial No. 12487 CF-TED	5008-T5-4

69541

TRANSPORT - RECORDS
FEB 8 A.M.
File 5008-T5-4

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans-Canada Air Lines.

(b) Proof of ownership: photostatic copy of bill of sales showing exchange between Canadair Limited and Trans-Canada Air Lines of Douglas 12930, previously CF-TED for aircraft 12487, now becoming CF-TED. Aircraft 12930 has become CF-DXU and Application for Registration of same has been made in the name of Canadair Limited.

(c) Copy of Inspection Release Certificate.

(d) Copy of Statement of Conformity.

(e) Copy of Weight and Balance Report.

(f) Copy of our letter of authority.

2. The radio in this aircraft was inspected by our Radio Division and found satisfactory.

3. It is disclosed at this time that a fee of $5.00 has not been paid by Trans-Canada Air Lines for the exchange and this matter has been taken up with the Company.

4. Apart from the above item, this application appears in order and issue of certificates is recommended.

J. L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations.

JLB:HK
Enc.6

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co.

Type DC-3C-S1C3G (converted C-47A) Maker's No. 12487 Conversion by: Canadair Ltd. Montreal, P.Q.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95' 0"	-
Length o/a in feet	64' 5"	-
Height o/a in feet	16' 11"	"

Cubic Capacity (of Airship or Balloon) N.A.

Weight equipped, but without load, fuel, or oil ~~17,300 lbs.~~ See weight report

Total weight authorized (fully loaded) in lbs 25346 Air speed 257 miles per hour Indicated

EQUIPMENT—(Give number and type).

1. Instruments: See List No. 1 attached
2. Gauges: See List No. 2 attached
3. Lights: See List No. 3 attached
4. Signals: See List No. 4 attached
5. Fire Extinguishers: 2-CO_2 (9½ lb.)-Engines & Heater Comp. & Rear Baggage 1-2 lb.CO_2-Pilot's Comp.; 1-2lb.CO_2-Cabin
6. Parachutes: None
7. Tools: Pilot's Tool Kit Only
8. Other Equipment: See List No. 5 attached

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R.H.	R.H.		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on Dec. 24/46

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved mods.

Registration recommended with the following special conditions

Registration recommended (fees to be sent later, see attached letter)

Date 24/12/46 Signature J. L. Blondeau

Registration approved and Registration Mark C.F. TED allotted.

Registration { approved or . not approved for reasons annexed.

Superintendent, Air Regulations

2413
6-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....for Trans-Canada Air Lines

Date of Application.....October 29, 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. Symington	Chairman & President	Montreal	Canadian
Hon. Wilfred Gagnon	Director	"	"
J. A. Northey	"	Toronto	"
R. C. Vaughan	"	Montreal	"
Hon. C. P. Edwards	"	Ottawa	"
Geo. Herring	"	"	"
J. A. Wilson	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....Commercial

Usual Station.....Montreal, Toronto, Winnipeg, - other Canadian & U.S. Airports

Date of ~~manufacture~~ reconstruction.....October, 1946

Crew required.....Minimum Crew: Pilot & Co-Pilot

Accommodation for what number of passengers 21 Pass., plus 2 pilots, 1 observer, 1 attendant

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

LIST NO. 1 - INSTRUMENTS

Item	No.	Make and Type
Ind. Airspeed	2	Pioneer 1426-1AD2
Pitot Static Head	2	Kollsman 372C-02
Altimeter	2	Kollsman 371K-05
Turn and Bank	1	Pioneer 1722-1AT
Turn and Bank (Elect)	1	Pioneer 15300-2A-A2
Rate of Climb	2	Pioneer 1634-1AA-A1
Gyro Horizon	1	Sperry 656768
Gyro Horizon	1	Pioneer 12401-1C-A1
Gyro Direction	1	Sperry 649742
Magnetic Compass	1	Pioneer 1821-6-A
Flux Gate Compass		
Master Indicator	1	Pioneer 12010-2E-A1
Repeater Indicator	1	Pioneer 10061-1AR-B1
Clock	2	Pioneer 3315-2D-3

LIST NO. 2 - GAUGES

Item	No.	Make and Type
Oil Temperature	2	Weston 727 T 59Y2
Outside Air Temp.	1	Weston 728 T 35Y2
Carburetor Air Temp.	2	Weston 727 T 68Y2
Cylinder Temperature	2	Weston 827 T 9
Manifold Pressure	2	Pioneer 1919-1B-A1
Fuel Pressure	2	U.S. Gauge AW-1 7/8-15-BT2
Tachometer	2	G.E. 8DJ-13-AGD
Oil Pressure	2	U.S. Gauge AW-1 7/8-14-CZ2
De-Icer Pressure	1	U.S. Gauge AW-1 7/8-16-AC2
Oxygen Pressure	1	U.S. Gauge AW-1 7/8-AD8287
Suction	2	Kollsman 97-02
Hydraulic Pressure	2	U.S. Gauge AW-1 7/8-17-CN2
Fuel Quantity	1	Liquidometer EA-134-8-24
Anti-Icer Fluid Quantity	1	Liquidometer EA-102-39-24

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. Regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture. - G.E. 4560

5. Passing Light - red bulb in L.H. landing light fixture. - G.E. 310

LIST NO. 4 - RADIO EQUIPMENT

Item	No.	Make and Type
Communication Unit (H.F.)	1	Bendix RTA-1B
Compass Receiver	1	Bendix MN-26L
Automatic Control Unit	2	Bendix MN-31C
Loop (Compass)	2	Bendix MN-36C
Compass Receiver	1	Bendix MN-26T
Indicator	1	Bendix MN-58A
Localizer Receiver	1	Airnco BC-733D
Glide Path Receiver	1	Airnco R89 B/ARN-5A
Antenna System	1	Airnco AS-27A/ARN-5
Indicator	2	Airnco 1D-48AF/ARN
Communication Unit (VHF)	1	Airnco RT-18/ARC-1
Antenna	1	Airnco AN-104 AX
Marker Receiver	1	Bendix MN-53A

LIST NO. 5 - OTHER EQUIPMENT

1	Flashlight
1	Verey Pistol
26	Oxygen Masks
1	Emergency First Aid Kit
2	Mechanically Operated Flares
24	Life Belts
24	Safety Belts

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..... **Heavier** ..... made by ... **Douglas Aircraft Co.**
Conversion by: Canadair Ltd.,

Type **DC-3C-S1C3G (converted C-47A)** ..... Maker's No. ..... **12487** ..... **Montreal, P.Q.**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95' 0"	-
Length o/a in feet	64' 5"	-
Height o/a in feet	16' 11"	-

Cubic Capacity (of Airship or Balloon) ..... **N.A.**

Weight equipped, but without load, fuel, or oil ..... ~~17,300 lbs.~~ *See weight report*

Total weight authorized (fully loaded) in lbs ..... **25346** ..... Air speed ..... **257** ..... miles per hour **Indicated**

EQUIPMENT—(Give number and type).

1. Instruments ..... **See List No. 1 attached**
2. Gauges ..... **See List No. 2 attached**
3. Lights ..... **See List No. 3 attached**
4. Signals ..... **See List No. 4 attached**
5. Fire Extinguishers ..... **2-CO_2 (9½ lbs.) -Engines & Heater Comp.& Rear Baggage 1-2lb.CO_2 -Pilots Comp.; 1-2lb.CO_2 - Cabin**
6. Parachutes ..... **None**
7. Tools ..... **Pilots' Tool Kit Only**
8. Other Equipment ..... **See List No. 5 attached**

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R.H.	R.H.		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on ..... *Dec 24/46*

Particulars accurate as corrected ..... *Yes*

Modifications from type are indicated on annexed sheet ..... *No unapproved mods.*

Registration recommended with the following special conditions .....

Registration Recommended (Fees to be sent later see attached letter

Date ..... *24/12/46* ..... Signature ..... *A. L. Blondeau*

Registration approved and Registration Mark C.F. ..... *TED* ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

2413
9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....for Trans-Canada Air Lines

Date of Application.....October 29, 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. Symington	Chairman & President	Montreal	Canadian
Hon. Wilfred Gagnon	Director	"	"
J. A. Northey	"	Toronto	"
R. C. Vaughan	"	Montreal	"
Hon. C. P. Edwards	"	Ottawa	"
Geo. Herring	"	"	"
J. A. Wilson	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....Commercial

Usual Station.....Montreal, Toronto, Winnipeg - other Canadian & U.S. Airports

Date of ~~manufacture~~ reconstruction.....October, 1946

Crew required.....Minimum Crew: Pilot & Co-Pilot

Accommodation for what number of passengers....21 Pass., plus 2 pilots, 1 observer, 1 attendant

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

LIST NO. 1 - INSTRUMENTS

Item	No.	Make and Type
Ind. Airspeed	2	Pioneer 1426-1AD2
Pitot Static Head	2	Kollsman 372C-02
Altimeter	2	Kollsman 371K-05
Turn and Bank	1	Pioneer 1722-1AT
Turn and Bank (Elect)	1	Pioneer 15300-2A-A2
Rate of Climb	2	Pioneer 1634-1AA-A1
Gyro Horizon	1	Sperry 656768
Gyro Horizon	1	Pioneer 12401-1C-A1
Gyro Direction	1	Sperry 649742
Magnetic Compass	1	Pioneer 1821-6-A
Flux Gate Compass		
Master Indicator	1	Pioneer 12010-2E-A1
Repeater Indicator	1	Pioneer 10061-1AR-B1
Clock	2	Pioneer 3315-2D-3

LIST NO. 2 - GAUGES

Item	No.	Make and Type
Oil Temperature	2	Weston 727 T 59Y2
Outside Air Temp.	1	Weston 728 T 35Y2
Carburetor Air Temp.	2	Weston 727 T 68Y2
Cylinder Temperature	2	Weston 827 T 9
Manifold Pressure	2	Pioneer 1919-1B-A1
Fuel Pressure	2	U.S. Gauge AW-1 7/8-15-BT2
Tachometer	2	G.E. 8DJ-13-AGD
Oil Pressure	2	U.S. Gauge AW-1 7/8-14-CZ2
De-Icer Pressure	1	U.S. Gauge AW-1 7/8-16-AC2
Oxygen Pressure	1	U.S. Gauge AW-1 7/8-AD8287
Suction	2	Kollsman 97-02
Hydraulic Pressure	2	U.S. Gauge AW-1 7/8-17-CN2
Fuel Quantity	1	Liquidometer EA-134-8-24
Anti-Icer Fluid Quantity	1	Liquidometer EA-102-39-24

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. Regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture. - G.E. 4560

5. Passing Light - red bulb in L.H. landing light fixture. - G.E. 310

LIST NO. 4 - RADIO EQUIPMENT

Item	No.	Make and Type
Communication Unit (H.F.)	1	Bendix RTA-1B
Compass Receiver	1	Bendix MN-26L
Automatic Control Unit	2	Bendix MN-31C
Loop (Compass)	2	Bendix MN-36C
Compass Receiver	1	Bendix MN-26T
Indicator	1	Bendix MN-58A
Localizer Receiver	1	Airnco BC-733D
Glide Path Receiver	1	Airnco R89 B/ARN-5A
Antenna System	1	Airnco AS-27A/ARN-5
Indicator	2	Airnco 1D-48AF/ARN
Communication Unit (VHF)	1	Airnco RT-18/ARC-1
Antenna	1	Airnco AN-104 AX
Marker Receiver	1	Bendix MN-53A

LIST NO. 5 - OTHER EQUIPMENT

1	Flashlight
1	Verey Pistol
26	Oxygen Masks
1	Emergency First Aid Kit
2	Mechanically Operated Flares
24	Life Belts
24	Safety Belts

Form ACA 582
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
(Rev. 3-1-44)

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: Douglas
MODEL: C-47A
MANUFACTURER'S SERIAL NO.: 12487
C. A. A. IDENTIFICATION MARK:

MANUFACTURER OF ENGINE: Pratt & Whitney
MODEL: R1830 S1C3G (-92)
SERIAL NO.: LH: 353511/369160 RH: 22706/417791

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows:

..... in the sum of $....., in favor of
(Mortgage, mechanic's lien, etc.)

..... whose address is
..... (CF-TED);

For and in consideration of the ~~sum of~~ exchange of Douglas Aircraft Serial No.12990 dollars,
Canadair Limited, the undersigned, whose
(Seller)
address is P.O. Box 6087, Montreal, Que.,
does this 9th day of October, 19 46, sell, grant, transfer, and deliver all of his above-described right, title, and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto .....
(Purchaser)
Trans-Canada Air Lines
.....
whose address is P.O. Box 2973, Winnipeg, Manitoba., and to ..... executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, I have set my hand and seal this 22 day of October, 19 46.

CANADAIR LIMITED
D Hunsenfarlane
V. - President.
(Seller's signature) [SEAL]

WITNESS:

ACKNOWLEDGMENT

STATE OF
COUNTY OF } ss:

(INDIVIDUAL OR PARTNER)

On this ..... day of ....., 19....., before me personally appeared the above-named seller, to me known to be the person described in and who executed the foregoing bill of sale, and acknowledged that he executed the same as his free act and deed.

(CORPORATION)

On this ..... day of ....., 19....., before me appeared
....., to me personally known, who, being by me duly sworn, says that he is the .....
of the .....
corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of the Board of Directors and said ..... acknowledged the foregoing bill of sale to be the free act and deed of said corporation.

Given under my hand and official seal the day and year above written.

.....
Notary Public.

My commission expires ....., 19.....
[SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—10653-2

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Production Aeroplane having Canadian type approval).

Registration C F - T E D

Aeroplane Type Low Wing Monoplane — Landplane / ~~Seaplane~~ / ~~Skiplane~~ — Model DC3C - S1C3G

Manufacturer Douglas Aircraft Co., Inc. — Serial No. 12487

Certificate Of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY:

Normal — (a - Public transport passengers / b - " " mails / ~~Aerial Work~~ / ~~Private~~ / ~~Special~~

~~Aerial Work~~ / ~~Special~~ — (~~Flying Instruction~~ / ~~Experimental Exhibition~~

PARTICULARS OF ENGINE(S):-

	Left Side	Right Side
Type	Pratt & Whitney	
Model	R 1830 - 92 (S1C3G)	
Serial No.	CP 351750	A81381
Take-off Power	1200 H.P.	1200 H.P.
Take-off R.P.M.	2700 R.P.M.	2700 R.P.M.
Take-off Manifold Pressure	48" Hg.	48" Hg.
Take-off octane rating of Fuel	91(C.F.R.)	91(C.F.R.)
Maximum Power (Continuous Operation)	1050 H.P.	1050 H.P.
Maximum Power R.P.M.	2550 R.P.M.	2550 R.P.M.
Maximum Power Manifold Pressure	41.5" Hg.	41.5" Hg.
Maximum Power Octane Of Fuel	91(C.F.R.)	91(C.F.R.)

PARTICULARS OF AIRSCREWS:-

	LEFT			RIGHT	
Maker	HAMILTON STANDARD PROPELLERS				
Type	HYDROMATIC QUICK FEATHERING WITH CONSTANT SPEED CONTROL				
Blade Drawing No.	6571A-0			6571A-0	
Blade Serial No.	516618			516609	
	516619			516610	
	516620			516611	
Hub. Drawing No.	33D50-101			33D50-101	
Hub Serial No.	159251			159248	
Blade Settings	18.5° Low	89.5° High	18.5°	Low 89.5°	High
Diameter	11' 6½"			11' 6½"	

PARTICULARS OF ALIGHTING GEAR:

WHEELS: Make Bendix Model B 1 (Tail) B 3 (Main) Tire Goodyear (Tail) Goodyear (Main)

FLOATS: Installation Assembly Drawing No. N.A.

SKILS: Installation Assembly Drawing No. N.A.

Tail Skid: N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

FUEL Position		CAPACITY Imp. Gals.	OIL Position		CAPACITY Imp. Gals.
(1)	Centre Plane Left Front (Main)	168	(1)	Left Nacelle	24
(2)	Centre Plane Right Front (Main)	168	(2)	Right Nacelle	24
(3)	Centre Plane Left Rear (Aux.)	167	(3)		
(4)	Centre Plane Right Rear (Aux.)	167	(4)		
(5)			(5)		
(6)			(6)		

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE

AEROPLANE

DRAWING AND ISSUE NO.	DESCRIPTION
1.	6000 hour overhaul and C-47A to DC-3C conversion to Douglas Aircraft Co. Inc. drawings and Canadair Ltd. engineering orders, drawings and specifications, (RD-1-106, RD-1-111) with additional requirements as specified in RD-1-108.
2.	Compliance with all applicable inspection and special notes in C.A.A. Airworthiness Directive AD-355.
3.	Mandatory Douglas Service Bulletins for C-47 Aircraft as noted in C.A.A. Spec. A-669-4 are accomplished.
4.	Units and components serialized to comply with T.C.A. Spec. 19 Issue 2.
5.	The following Douglas Service Bulletins for DC-3 aircraft were accomplished:-
D.S.B. 98 Supp. 2	Floor beam rework - station 294½.
D.S.B. 207	Control Surface Balance.
D.S.B. 211	Inspection of spar cap bolts.
D.S.B. 216 S	Re-inforcement of wing flap operating tube support beam attach angle.
D.S.B. 217 S	Inspection of elevator torque tube.
D.S.B. 218	Replacement of rivets with bolts - rudder lower hinge bracket.
D.S.B. 219	Inspection of engine section throttle rod.
D.S.B. 220 Sect. III only	Installation of spar cap bolt locking device.
D.S.B. 222	Rudder pedal torque tube support bracket - rework.
D.S.B. 228	Repair to rib station42.
D.S.B. 231	Control column canvas boot replaced with rubber.
D.S.B. 234	Elevator tab control horn modified.
D.S.B. 238	Inspection of enginemountto firewall fittings.
D.S.B. 241	Drain hole in fuel dump chute.
D.S.B. C47-101	Install additional bolt in rudder pedal attachemnt to torque tube.
6.	Parachute flare installation carriedout as per Douglas Dwg. 5315811.
7.	Rudder horn (5518065) modified to clear elevator "up" cables as per Canadair E.O. 020303-204
8.	Flying control cables tensioned for cold weather operating as per E.O. 020601-207. If operating temperatures are consistently above 0°C, cables should be rigged for normal temperatures.

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.		DESCRIPTION
9.		The following T.C.A. modifications have been carried out:-
1. D66-08A-1/1	17053	Drain hole in fuel dump chute assembly.
2. D78-07D-1	17075	Anti icer system modification (E.O.'s 040501-212 to -243, 040501-243 to -250, 040501-255,-256,-257,-258,-253).
3. D66-02B-2/2	17077	Fuel filling and using instruction plate. (E.O. 030701-205 and -211).
4. D82-03B-1/1	17078	Guard installation for flare release cables (E.O. 020605-219,-220,-221).
5. D72-04B-1/1	17079	Pressure line-vacuum oil separator (E.O. 030101-239,-244,-247,-264).
6. D31-04G-5/1	17067	Rear cargo compartment door latch - Standardization.
7. D31-04G-5/2	17068	Rear cargo compartment door latch - Warning Sign (E.O. 020003-225).
8. D31-04G-5/3	17086	Rear cargo compartment door seals (E.O.020705-208).
9. D41-02A-1/1	17081	Flight wheel brakes (D.S.B. 210).
10. U74-03D	18075	Generator blast tube (E.O. 030101-242).
11.	17085	Microphone Holder (E.O. 040406-206,-207).
12. Oxygen System		Modification to cylinder mounting tubes. (E.O. 040801-303 to-307, 040801-321,-322,-361).
13. Oxygen System		Modification to cylinder compartment doors. (E.O. 010004-215,-216).
14. Oxygen System		Modification to high pressure plumbing. (E.O.'s 040801-310 to 320, 040801-324 to 329). (040801-343 to 358,-360,-366,-367,-370,-371).
15. Oxygen System		Modification to flow meter assembly.(E.O. 040801-353 and -359).
16. Oxygen System		Adel clip anchor nuts on 40801-29-5 line. (Modifications deleted by E.O. 040801-340).
17. Oxygen System		Captain's oxygen outlet and mounting (E.O. 040801-266,-272,-354).
18. Oxygen System		Low pressure lines from regulator to cabin outlets. (E.O. 040801-333,-334,-338,-340,-341,-342).
19. Oxygen System		Passenger Outlet Assembly(E.O. 040801-336).
20. D77-05C-2/2	17094	Stainless steel lines for Janitrol Heater.
21. D71-02B-1/1	17082	Oil pressure gauge and carburettor heat gauge. (E.O. 040101-314).

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TEPS

AEROPLANE

DRAWING AND ISSUE NO.		DESCRIPTION
22. D64-03-2/1	17042	Propeller feathering switch guards. (Drawings 40304-251).
23. D71-06A-1/1	17083	Fluxgate Compass(Drawing 40404-35).
24. D74-10E-2/1	17064	Wing Navigation Lights.(E.O. 040306-223).
25. Fire Extinguisher		Rear Cabin Fire Extinguisher(E.O.040904-200).
26.	17087	Fuel Tank Selector Indicators (E.O. 030701-204).
27. D82-04A-1	17056) 17057)	Safety wire installation, fire extinguisher switch.
28.	17154A	Janitrol heater package tie down modification.
29. D75-05H-1/3		MN 36 Radio Loop Dehydrator relocation (040403-371).
30. D75-05H-1/6		MN 36 Radio Loop Clearance Hole(E.O. 040405-306,-307).
31. D75-03E-1/2		Communications Antenna feed through Hole Clearance. (E.O. 040702-269).
32. D33-04C-1	17137	Flight Compartment Ash Tray Relocation.

10. The engines installed on this aireraft, as received from T.C.A., incorporate different type carburettors (PD12H1 and PD12H4). Due to different bleed back characteristics of these models, it is recommended that one be changed so that both models will be identical both PD12H1 or PD12H4.

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT

(Essential for C. of A. for any class of operation).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS.	
Airspeed Indicator		Pioneer	1426-IAH-A1	341426	341427
Altimeter		Kollsman	371P-1-01	4626	4675
Compass (Magnetic)		Pioneer-	1818-4-A	AF-43-34444	
Engine Speed Indicator		Gen. Elec.	8DJ13AGD	2698319	2708987
Oil Pressure Guage		U.S.Gauge	AW 1 7/8-14-C22		
~~xxxxxx~~	Cyl. Temp.	Weston	727T68Y2		
~~xxxxxx~~	Oil Temp.	Weston	727T52Y2		
Safety Belt(s)					
Fire Extinguisher(s)	Hand Engine	Kiddie	82511	63589L	63600L

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENTS:

(Make extra sheets as required, using following pro forms and classification).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS.	
AIRCRAFT INSTRUMENTS:	Direct Gyro	Sperry	6469742	1202	
Flying and Navigation E.G.	Turn & Bank	Pioneer	1722-IAU-D1	330853	
Bank & Turn Indicator, etc.,	Turn & Bank (elec.)	Pioneer	15300-2A-A2	293	
	Gyro Horizon (elec)	Pioneer	12401-1C-A1	1154	
	Gyro Horizon	Sperry	656768	10904	
Aircraft Operating e.g., Cabin Temperature	Rate Of Climb	Pioneer	1654-IAF-A1	34764	34769
Outside "	Outside Air Temp.	Weston	728T35Y2		
Flap Indicators etc.,	De-icer Pres.	U.S.Gauge	AW 1 7/8-16-AC2		
POWER PLANT INSTRUMENTS	Hyd. Pres.	U.S.Gauge	AW 1 7/8-17-CN2		
ELECTRICAL EQUIPMENT other than signalling	Fuel Pres.	U.S.Gauge	AW 1 7/8-15-BT2		
	Suction	U.S.Gauge	AW 1 7/8-21-W		
SIGNALLING EQUIPMENT	Man.Pres.	Pioneer	1919-1C-A1	11621	11266
SAFETY AND EMERGENCY EQUIPMENT	Carb. Air	Weston	827T9Y2		
AMENITIES	Anti icer Quantity	Liquidometer	EA102-39-L2-24		
	Fuel Quantity	Liquidometer	EA134-8-L2-24		
	Radio Compass	Shortage			
	Radio Azimuth	Pioneer	MN 58A		
	Ammeter	Gen. Elec.	8DW53BAAC-5		
	Volt Ammeter	Gen. Elec.	8DW53BAAC-2		
Fluxgate	Master Ind.	Pioneer	12010-2B-A1	54	
	Repeater	Pioneer	10061-IAF-B1	530062	
	Oxygen Flow Meter	Heidbrink	22210-A		
	Oxygen Low Press.	Heidbrink	38-06-020-AC		

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38).

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346 lbs.	lbs.	lbs.
	Landing :	24,546 lbs.	lbs.	lbs.
I.C.A.N. Weight Empty:		~~19,996~~ 17,934 lbs.	lbs.	lbs.
Disposable load :		lbs.	lbs.	lbs.

Centre of Gravity of Aeroplane at above tare weight is . 252.6 . inches behind/

~~xxxforwardxxx~~: . Nose reference line . or . 20.4 % M.A.C. . . . . .

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	LBS.	DESCRIPTION	LBS.
Refer to Weight and Balance Report # RW-0-221			

List of moveable equipment included in I.C.A.N. weights

DESCRIPTION	LBS.	DESCRIPTION	LBS.
Refer to Weight and Balance Report # RW-0-221			

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38)

		Landplane		Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346	lbs.	lbs.	lbs.
	Landing :	24,546	lbs.	lbs.	lbs.
Basic operational weight, empty	:	19,059	lbs.	lbs.	lbs.
Disposable Load	:	6,287	lbs.	lbs.	lbs.

Centre of Gravity of Aeroplane at above tare weight is 252.4 inches behind/ xxxxxxxxxx nose reference line or 20.3 % M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft.)

List of fixed/ standard/ xxxxxxxxxx/ equipment included in empty weights

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Refer to Weight and Balance Report # RW-0-221			

List of moveable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Refer to Weight and Balance Report # RW-0-221			

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary propf issued by the authorities of the country of origine that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed ..... date DEC 21 1946
Chief Inspector.

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log Book to this effect has been made.

Signed B. Wood ... Air Engineer E. Hidkin For Chief Inspector.
DEC 22 1946

CERTIFICATE OF FACTORY TEST PILOT.

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the type Aeroplane.

Signed. H. King ... date .....
Test Pilot.

CANADAIR LIMITED.

RECOMMENDATION OF RESIDENT INSPECTOR A.I.D. DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category .....
Subdivision..... is recommended.

Signed: ... George S. Lace
Resident Inspector, A.I.D.,
Department of Transport. Dec. 24 '46

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) .....

Signed ... J. L. Blondeau 24/12/46
District Inspector, Civil Aviation.

Form ACA 317
(Rev. 3-1-41)

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC. (Manufacturer), certify that the aircraft DOUGLAS (Make), C-47A (Model), 12487 (Serial number), has been manufactured, under Production Certificate No. None,* in conformity with the data forming the basis for Type Certificate No. 669 and any revision or modification thereof approved by the Administration as of 2-7-44 (Date), with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-4 dated January 15, 1946.

DATE September 12, 1946

Schuyler Kleinhans
(Signature)
Schuyler Kleinhans
Assistant Chief Engineer
(Title)

* Delete this phrase if not applicable.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3 2 6-46

910 Confederation Building,
Montreal 2, Que., March 20, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas CF-TED	5008-T5-4

C.A.R.

76570

TRANSPORT - RECORDS
MAR 22 A.M.
FILE 5008-T5-4

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. In our letter of February 6, 1947, to Headquarters we advised that a fee of $5.00 for the registration of this aircraft had not been submitted by Trans Canada Air Lines.

2. It was realized later that the fee for Certificates of Registration and Airworthiness (namely $10.00) should have been paid in this case, as this aircraft had not been registered before.

3. A cheque for $10.00 has now been received from Trans Canada Air Lines, and will be forwarded under Department Receipt No. 84494, Cash Book Folio 3335.

4. This application now appears in order and issue of certificates is further recommended.

J.L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg

4

EAR

5008-T5-4

910 Confederation Building,
Montreal 2, Que., February 18, 1947.

71195

TRANSPORT - RECORDS
FEB 19 A.M.
File 5008-T5-4

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TED

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after April 22, 1947, subject to this machine being in airworthy condition.

The conditions outlined in our previous letter must be complied with at all times.

Yours truly,

RLR.

J. L. Blondeau,
District Inspector, Air Regulations.

AR

L.P.

TRANS-CANADA AIR LINES
Serves the Nation.

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2465-3.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-S1C3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-S1C3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-TEA
62	CF-TDO	75	CF-TEB
63	CF-TDP	77	CF-TED
64	CF-TDQ	78	CF-TEE
66	CF-TDS	79	CF-TEG
67	CF-TDT	81	CF-TEH
68	CF-TDU	82	CF-TEI
70	CF-TDW	88	CF-TEJ
71	CF-TDX	91	CF-TES
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

CAR

6

L.F.

ORIGINAL
ON FILE 7150-6

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

76734

TRANSPORT - RECORDS
MAR 24 A.M.
5-018-T5-4
File

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5386 (R)
1851 (A)

5008-15-4 64

74964

DEPARTMENT OF TRANSPORT
FLIGHT REPORT

Ref. No. .....

Aircraft Type Douglas DC3 Registration Mark CF-TED

Pilots E.W. Bendall
D.D. Murphy

Base Castleville

Date 23.4.46

Object of Flight IFR Flight check

Crew .....

Passengers .....

.....

Dep. or Arr.	Place	Time	Time in Air	Distance	Details of Flight
Dep.	Castleville	13.00			@/ vis 8 m -H-K. Light to moderate turbulence
Arr	"	13.40	.40		
			.40		

Pilot D.D. Murphy

PA

5008-74-13-15-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
ON FILE 7150-6
LEJC.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

TRANSPORT-RECORDS
APR 1 P.M.
5-018-15-4
File

0323

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDH
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEA
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TEP
91	11906	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED ON CARDS

CAR

5008-T5-4

910 Confederation Building,
Montreal 2, Que., April 10, 1947.

A.M. Sutherland, Esq.,
Director of Mtce. & Overhaul,
Trans Canada Air Lines, 3340
P.O. Box 2973,
Winnipeg, Man.

TRANSPORT-RECORDS
APR 14 A.M.
File 5008-T5-4

Dear Sir:

Re: Douglas CF-TED

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter of authority.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

DG

705/75

705/75

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2970,
Winnipeg, Man.

Attention: Mr. J. T. Bynant

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.E. MONTREAL WINNIPEG

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5386

NATIONALITY AND REGISTRATION MARKS CF-TED

1. Type and description	Douglas DC3 (S1C3G)
2. Name and address of constructor	Douglas Aircraft Company Inc. Santa Monica, Cal., U.S.A.
3. Constructor's serial number	12487
4. Name of owner	Trans-Canada Air Lines
5. Address of owner	360 McGill St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal, Toronto, Winnipeg - other Canadian & U.S. Airports
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 24th day of December, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration mark CF-TED and is of Canadian nationality.

Given at Ottawa this 1st day of April, 1947

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

ENGINES

18. Number installed: Two

19. Makes: Pratt & Whitney

20. Types: S1C3G

21. International power of the engine or engines at

(a) Sea Level 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

(b) Rated Altitude 1050 H.P. at 2550 revolutions per minute. (International number of revolutions)
at 7500 ft.

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) (b)

23. Oil: (a) (b)

24. Airscrews { Number fitted Two Types Hamilton Standard No
Pitch Constant Speed Full feathering Diameter

25. Weight of aircraft empty (including water in the radiators): (a) Landplane 10447 lbs. (4.12.47) 18140
(b) Seaplane lbs.
(c) Skiplane lbs.

WEIGHT OF FUEL AND OIL

26. Fuel 4824 lbs.
(at 7·2 lbs. per gallon)
(a) Number of tanks Four
(b) Capacity of tanks 670 Imp. gals.

27. Oil 432 lbs.
(at 9·0 lbs. per gallon)
(a) Number of tanks Two
(b) Capacity of tanks 48 Imp. gals.

28. Weight allowed for crew 340 lbs.

29. Weight allowed for equipment, excluding wireless apparatus lbs.

30. Weight of wireless apparatus lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full L.P. 1,257 lbs. (4.12.47) 1464

32. Maximum total weight authorized lbs.
Landplane (Landing) 24,400 lbs. (Take-off) 25,200 lbs.
Seaplane (Excepting in case of emergency) lbs.
Skiplane lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full) (22.11.47) Twenty-five thousand two hundred pounds
Landplane (Take off) Twenty-five thousand two hundred pounds
Seaplane
Skiplane (Landing) Twenty four thousand four hundred pounds (Excepting in case of emergency)

34. Minimum crew necessary Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) m.p.h. and (b) m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated 24th December, 1946 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 1st day of April, 19 47

H.W.

Superintendent, Air Regulations.

2462
7-45 11

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1851

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines
2. Christian name
3. Address 360 McGill St. Montreal, P.Q.
4. Nationality, Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Company Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TED

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3(S1C3G) Constructor's No. 12487
8. Place and year of construction of aircraft Santa Monica, Cal., U.S.A.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) Twenty-five

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a,b,c,d & e
15. Maximum span (in flying position) 98'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

/MIM
/ZC
/MM

10

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

DC3C (SIC3G) Weight and Speed Limitations.

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level) Dump Valves
Take-off - 26,200 lbs. at sea level) not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Dec. 24th, 1947 Dec. 3/48 30/11/49 24.11.50 20.11.51	HHD

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

8

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Landing Lights
2
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge
Emergency Flares

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

The aircraft operating Manual with amendments & approved loading chart (DC3 S1C3G), Weight & Speed Limitations form part of the Certificate of Airworthiness & must be carried on board the aircraft during flight (24.11.49)

Note: This certificate is subject to Air Regulations, [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

/RM

13

5008-T5-4

Ottawa, Ontario.
April 29th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5386 and Certificate of Airworthiness No. 1851, together with Engine and Journey and Aircraft Log Books, for your Douglas aircraft, CF-TED. DC3 (S1C3G)

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(H. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

AIRCRAFT INSPECTION REPORT

A/C 77 14

Date of Inspection December 4, 1947 Owner Trans-Canada Air Lines Registration Markings CF-TED

Type DC-3C-S1C3G-92 Serial No. 12487 Purpose Commercial

C. of R. 5386 C. of A. 1851 Date of Last Inspection 25/12/46
Previous C. of R. & A. Expires December 24, 1947. Present C. of R. & C. of A. Expires December 3, 1948.

AIRFRAME

Crew 2 Passengers 21 No. of Fuel Tanks 4

Capacity 670 Imp. gals. No. of Oil Tanks 2 Capacity 48 Imp. gals.
Total Hours Since New 4322:42 Since Conversion 23/12/46 3147:12 Since Reconditioned --

A29351

WEIGHTS

	Gross	Tare	Empty	Carrying Capacity
Landplane Passenger	25,200	(1) 18790	(2) 18140	1464
Landplane Freighter				
Seaplane Passenger	(1) includes Item "F" I.C.A.N. Equipment.			
Seaplane Freighter	(2) includes weight of de-icing equipment.			
Skiplane Passenger				
Skiplane Freighter				

TRANSPORT-RECORDS
DEC 11
File 3008-75-4

ENGINE(S)

LEFT		RIGHT	
Make	P. & W.	Make	P. & W.
Model	Twin Wasp S1C3G	Model	Twin Wasp S1C3G
Serial No.	11708	Serial No.	353590
H.P.	1050 @ 2550 R.P.M.	H.P.	1050 @ 2550 RPM
Total Hrs. Since New	2322:26	Total Hrs. Since New	3461:22
Since Complete Overhaul	545:05	Since Complete Overhaul	570:08

PROPELLER(S)

LEFT		RIGHT	
Make	Hamilton Standard	Make	Hamilton Standard
Model	Hydromatic Full Feathering	Model	Hydromatic Full Feathering
Diameter	11'6"	Diameter	11'6"
Pitch	18.5° to 89.5°	Pitch	18.5° to 89.5°
Blade Design	6571A-0	Blade Design	6571A-0
Mfg.No.1	513754	Mfg. No.1	513942
2	513755	2	513943
3	513756	3	513944
Total Hrs.1	2951:45	Total Hrs.1	3672:03
2	2951:45	2	3672:03
3	2951:45	3	3672:03
Hub Design	33D50-233	Hub Design	33D50-233
Mfg. No.	158369	Mfg. No.	158249
Total Hours	2951:45	Total Hours	3672:03
Since Last Overhaul	884:22	Since Last Overhaul	720:26
Date of Last Overhaul	11/8/47	Date of Last Overhaul	23/8/47
Date of Last Inspection	4/12/47	Date of Last Inspection	4/12/47
Date Purchased	29/7/46	Date Purchase	1/7/46

UNDERGEAR

Skis —
Floats --
Wheels Bendix B3

Radiostacks 1947-48 Radio Licence applied for.
Chassis --
Chassis Standard - Retractable.

OVER

Thos Jones
A. F. A.

noted

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.) (1)	17.0 lbs.
Aluminum Pitcher (1)	0.4 "
Lunch Boxes, less food (24)	35.3 "
Thermos, 2 qt. less fluid (5)	20.3 "
Silverware - complete sets (24)	9.4 "
Paper Drinking Cups (25)	0.2 "
Lucite Cup Handles (30)	2.1 "
Lunch Box Inserts (30)	3.1 "
Plastic Cups & Plates, sets (24)	5.7 "
Hot & Cold Cups (60)	1.8 "
General Utensils, allowance	2.0 "
Casseroles & Covers (Round) (24)	13.0 "
Service Trays, large, (6)	6.0 "
Cafatray, small, (2)	0.6 "
Snack Kit (1)	6.8 "
Pillows (at seats, complete with covers & slips) (21)	21.4 "
Sickness Containers (at seats) (21)	2.5 "
Whisk, Toy Broom and 2 Dusters	1.2 "
Dust Pan - long handle (1)	0.4 "
Cleansing Tissue, Kleenex, 1 box	0.6 "
Stewardess Satchel (1)	7.9 "
Linen Hand Towels (12"x 10") (12)	0.9 "
Flyswatter (1) & Atomizer (1)	1.2 "
Blankets (in rear service compartment) (12)	36.0 "
Headrest covers (on seats) (21)	2.1 "
Sanitary Napkins (12)	1.0 "
First Aid Kit (1)	4.1 "
Shopping Bags (3)	0.6 "
Oxygen Masks (above seats) (21)	15.8 "
Spare Sickness Containers (10)	1.2 "
Spare Hand Towels (12) Headrest Covers (10)	1.9 "
Spare Oxygen Masks (5)	3.8 "
Spare Pillows complete (3)	3.1 "
Crew Baggage (3)	60.0 "
Magazines (in binders) (10)	17.9 "
Bible (1)	1.5 "
Life Belts - Passengers (21)	54.6 "
Life Belts - Crew (3)	7.8 "
Wash Water (2½ Imp.gals.)	25.0 "
Cargo Tie-down straps (cargo compts.) 10 sets	10.0 "
Anti-Icer Fluid (2½ Imp.gals.)	19.9 "
Propeller De-Icers (6)	6.0 "
Wing, inner, De-Icers (2)	12.4 "
Wing, outer, De-Icers (2)	38.1 "
Stabilizer De-Icers (2)	12.0 "
Fin De-Icers (1)	4.3 "
Cabin & Toilet Frost Shields (15)	0.9 "
Stewardess	120.0 "
	619.8 lbs.

Amendments to C. of A. No. 1851, dated the 4th of December, 1947:-

Item 25 - "18447" deleted. "18140" inserted.
Item 31 - "1157" deleted. "1464" inserted.

F.W.Bone,
District Inspector, Air Regulations.

FWB/MC

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

15' 2 2-48

717 Dominion Public Building,
Winnipeg, Manitoba, December 17, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-4	Douglas DC-3 - CF-TED	5008-T5-4

A37121

TRANSPORT-RECORDS
DEC 21 A.M.
File 5008-T5-4

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations

1. Please be advised that Certificate of Registration No. 5386 and Certificate of Airworthiness No. 1851 for the above noted aircraft were renewed, valid until November 30th, 1949. Radio Certificate No. 83 expires on March 31st, 1949.

Fredk W Bone

for D. G. Joy,
District Controller of Air Services.

JDC/ET

16

TRANSPORT - RECORDS
NOV 28 P.M.
File 5008-T5-4

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-T5-4 **35251** TOR: ~~5008-T5-4~~

Toronto, Ontario.

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings C.F.-T.E.D.....

Aircraft Type .....Douglas DC3 (S1C3G).....

Owner .....Trans-Canada Air Lines.....

Place of Inspection ...Malton, Ontario.....

Date of Inspection ...November 24th, 1949.....

Satisfactory inspection report has been received from Air Engineers .....E. Gee..... and Test Pilot .....

C. of R. No. ...5386..... and C. of A. No. ..1851.....

were renewed on November 24th, 1949 valid until .....November 24th, 1950

Remarks Certificate of Airworthiness endorsed to read: The Aircraft Operating Manual with amendments, approved loading chart (DC3 S1C3G) Weight and Speed Limitations form part of the Certificate of Airworthiness and must be carried on board the aircraft during flight.

.....

A.R. Pinder

for (D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

17 2 9-49

509 Power Building,
Winnipeg, Manitoba. November 21, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 - CF-TED	5008-T5-4

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

26091

RECORDS
DEC 4 1950
File 5008-T5-4

Attention: Superintendent, Air Regulations

1. Please be advised that Certificate of Registration No. 5386 and Certificate of Airworthiness No. 1851 for the above noted aircraft were renewed, valid until November 20th, 1951. ✓

FWB/AB

for District Controller of Air Services.

noted BJE

NOTED
SJ

TO: Director of Air Services,
Department of Transport,
Ottawa, Ontario. Att'n: Superintendent, Air Regulations.

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS 26127

NOV 23 1950
File 5058-TS-4

Registration - CF-TED Serial No. 12487

CAR
CAE

1. C. of A. No. 1851 Expires Nov. 23/50 C. of R. No. 5386 Expires Nov. 23/50
Aircraft Data - Manufacturer Douglas Aircraft Corp. Model DC-3C - S1C3G-92
Hours flown - Since New 12278:22 Since Overhaul 1105:40
Engine Data - Manufacturer Pratt & Whitney Model R1830-92-S1C3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	24102 (left)	13336:36	376:15
(2)	P134252 (right)	6002:50	337:05
(3)			
(4)			

G. W. Sutherland
Signature of Applicant G. W. Sutherland
Date November 21st, 1950.

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

G. W. Sutherland
Signed G. W. Sutherland
"B" Engineer A 1324
Date November 21st, 1950.

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot
Date _____

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report (when applicable) [ ]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed _____
District Aircraft Inspector
Date November. 21 1950

7. C. of A. and C. of R. renewed, not valid after.
(Date)- 20th Nov. 1951 ✓
Permissible Gross Weights - Wheels 25'200. Take off. 24400 Landing
- Skis
- Floats

Department of Transport Civil Aviation Division CANADA

Signed _____
District Superintendent, Air Regulations
Date 21st Nov. 1950

Other Action:-
B7E noted
Ltd

8. H.Q. Action C.A.R.
C.A.E.

AD 50

OTTAWA, Ontario, March 6, 1951

Accident - Douglas DC-3 Aircraft, CF-TED
Accident Report

3008-T5-4 (CAR)

District Controller,
Air Services,
P.O. Box 42
MONCTON, N.B.

Attention District Superintendent Air Regulations

1. Enclosed herewith is a copy of a telegram dated March 1st, 1951 received from Trans-Canada Airlines Ltd concerning the subject accident.

2. It is requested that an accident report giving details as set out in Information Circular O/36/50 may be obtained, please.

(C. T. Travers),
Superintendent, Air Regulations.

W.O.'s Encl.

FORM 6122

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

(50)

STANDARD TIME

REC'D MAR 1 PM 4 54

MOA343/38/36=VN MONTREAL QUE 1 431P

H S REES, CHIEF AERONAUTICEL ENGINEER=

:DOT OTTAWA=

45225

FOR YOUR INFORMATION DC3 AIRCRAFT CF-TED TILTED FORWARD DURING LANDING AT STEPHENVILLE CAUSING DAMAGE TO PROPELLERS AND PILOT MAST STOP PRESENT INFORMATION INDICATES DAMAGE CONFINED TO THESE PARTS STOP CONDITION OF BRAKES WILL BE FULLY INVESTIGATED=

:J T DYMENT TRANS CANADA AIR LINES.

res 34983
5563

TIME 614p
BY

C.A.R. Spoke Dyment at this end he states no damage except props. Are sending to base for engine check although engine damage not suspected.

CALLS LEFT
ATTEMPTS
MAIL
DELIVER

CGA D.A.S.

1951 MAR 6 PM 3 56

37 5/1 VFFG/R MONCTON NB QM 48 33 061954

21

5008-T5-4

RAS OTTAWA 45714

ARM 46 REFERENCE YOUR LETTER MARCH FIRST RE TRANS CANADA AIRLINES ACCIDENT STEPHENVILLE THIS OFFICE AWAITING REPORTS FROM COMPANY STOP COMPANY ADVISE ALL DOCUMENTATION SHOULD BE IN THIS OFFICE WITHIN TWO DAYS

DCAS 350PM

..

R 37

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
11-48

Moncton, N.B., March 12, 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident Report - Douglas DC-3 - CF-TED	5002-1

TRANSPORT - RECORDS
MAR 14 P.M. 1951
File 5008-T5-4

Refer to File Number Please

46554

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Further to our ARM46 of March 6th, 1951, enclosed herewith are copies of correspondence received from Trans-Canada Air Lines, Moncton, N.B., relative to the above aircraft accident which occurred at Stephenville (Harmon Field), Newfoundland, on February 28th, 1951.

2. In view of the fact that the company still consider the cause of this accident obscure, no comments or recommendations are being made by this office until such time as the company's investigation has been finalized.

(R. W. Goodwin)
for District Controller, Air Services,
Moncton, N. B.

Encls.

20135-1

Certified true copy: J. Hedgecoe

33

TRANS-CANADA AIR LINES

Moncton, N.B.,
March 8, 1951.

File: 2330-1

Mr. H. J. Williamson,
District Controller Air Services,
Department of Transport,
P. O. Box 42,
Moncton, N. B.

Dear Mr. Williamson:

RE: Accident to DC-3P Aircraft No. 377 Harmon,
Newfoundland, Flight 27-28, February 28th.

Relative to the above, we are attaching copy of a report from Mr. G. W. Thoms, Regional Supervisor of Maintenance. This quite thoroughly covers all damage incurred.

A thorough investigation was made of this accident. The Chief Pilot, Captain W. C. C. Seddon, proceeded to Harmon immediately upon receiving word of such. It was ascertained that none of the nine passengers on board or the crew were injured and the damage to the aircraft was not considered too great.

From reconstructing the accident it was found that the flight had made landing at Harmon at 1804 AST and just as it was getting dark. All field lights were on and the Pilots were using landing lights. The wind at actual time of touch down was ENE to NE at 20 m.p.h. and since runway 07 was closed the flight was using runway 12, which has a true heading of 091°. The weather at the time of the accident was given as 3000 overcast with lower broken visibility 10 miles in light snow temperature 21° dew point 11 wind ENE at 22 altimeter 009 with the overcast estimated at 6500'. Observers at the field and the Pilots themselves admit that the amount of snow falling was practically negligible. In fact, the Pilots state that the weather was very good and that they had made a VFR approach to the field from the east. Captain N. J. Logan was in charge of the flight but in view of the weather being quite good he was letting First Officer R. F. Wright do the landing from the right seat.

this runway should not have been
used IF wind angle to runway was
or exceeded 33°. [according to TCA Manual]
Wind Was ENE to NE ie. 22½° to 45° to runway.

Certified true copy: J. Hodgson.

32

TRANS - CANADA AIR LINES

First Officer completed the pre-landing check and carried through with the landing. The Captain reports that they did not experience any trouble with cross wind landing effect and that the touch down was very smooth. Both Pilots report that immediately after touch down the aircraft commenced riding to the right and appeared to want to roll over. Immediately realizing that the First Officer was having trouble holding the aircraft, Captain Logan helped on the controls and by pulling the control column well back they managed to keep the tail down until the aircraft had almost completed its landing run. Just at the last momement, they report, and at a slow speed where the elevator lost its effect, the aircraft finally went up on its nose. According to the Pilots' testimony and that of competent witnesses, the aircraft only stayed on its nose for a few seconds and then fell back down in a normal three-point position. As the aircraft went up on its nose it turned approximately 50° to the right. The Captain states that immediately the aircraft went up on its nose he shut off all switches, gas-cocks, etc. and immediately left the cockpit to climb back to the cabin, but at this moment the aircraft fell back down. By the time he did get back into the cabin, Ramp personnel were already out on the runway and were helping to unload the passengers.

Our check of the tire marks on the runway substantiate the crew's report. The tire marks indicated that the aircraft had touched down approximately 500' from the end of runway 12 with a solid black mark on the right indicating that the right wheel had dragged from moment of impact. The left tire mark also showed evidence of some dragging but the mark was intermittent. The flight touched down approximately in the centre of the runway and commenced a very slow right turn and finally going on its nose just on the right edge of the runway exactly 1000' from point of touch down.

The crew were of the opinion that the brakes and particularly the right brake had frozen. We have not had any prior instances of brakes freezing in the air since the brake shoes are normally in the retracted position during flight. Both the Captain and the First Officer insist that the pre-landing check, the approach, and touch down were all very normal and were carried out in agreement with the Company standard.

Since it was impossible to check the brakes for some time after the aircraft had stood in a heated U.S. Army hangar, it would be impossible to say that the brakes had actually frozen. Maintenance Investigators could not find any evidence of malfunctioning except that you will note that in Mr. Thoms' report they are forwarding the brake control valve to Winnipeg for further checking.

Certified true copy: J. Wedgecove

3/

TRANS - CANADA AIR LINES

Both the Captain and the First Officer have a very good flying record with this Company and have been exonerated and placed back on line duty. However, we did give the Captain a local check flight to make certain that he felt O.K. after this incident.

From what we can gather from our investigation the right wheel was not locked solidly since there were only two slight burned marks on the right tire. Only minor worn spots were visible on the left tire. We feel that if the right wheel had been locked solidly then the tire would have burned off with a subsequent blow-out and possibly much greater damage.

It might be mentioned also that there were no previous complaints regarding the action of the brakes on this aircraft and Captain Logan reports that they had been performing normally all that day. Captain Logan had completed the take-off at Gander and the wheels were not dragging at that time. We had Captain I. K. Davis, Check Pilot, check the take-off marks at Gander and since our aircraft had been the only one to use runway 5 at Gander that day, Captain Davis was able to ascertain that both wheels had been rolling normally during the take-off run. Captain Davis also reports in this connection that there were fresh patches of snow on runway 5 at Gander with considerable large bare patches. If the wheel had been dragging, he reports, take-off would have been impossible.

As reported above, the flight crew have been exonerated since the cause of the accident is still unknown. We are hoping that further investigation will bring something to light and if such is the case we will immediately forward any further information.

(Signed: K. Edmison)

T. F. K. Edmison,
Operations Manager,
Eastern Region.

Attach.

Certified true copy: J. Hedgecoe.

T.C.A. INTER-OFFICE CORRESPONDENCE

30

Place & Date Moncton, N.B., March 7, 1951
Our File 1005
Your File
Subject Accident - Aircraft 377 - Harmon Field, Nfld.

Supervisor of Maintenance Base,
TCA - Winnipeg.

- - - - - - - - - - - - - - - - -

Aircraft 377, Flight 27-28 (Feb) nosed over on landing at Harmon Field. The tips of both props and pitot masts were damaged when they contacted the runway. When the aircraft fell back on the tail wheel, the wheel dented the bottom of the fuselage just aft of the tail wheel strut well. A 2" tear in the tail wheel strut well fairing resulted when the tail wheel oleo strut cover struck it. The tail wheel lock shear pin was sheared but according to U.S. Army personnel, this occurred while towing with the tail wheel lock on. The manner in which this pin sheared substantiated this claim.

The pilots reported that the landing was normal and that the aircraft was rolling normally when the brakes appeared to seize or drag heavily. This caused the aircraft to assume a tail high attitude which they were able to compensate for by using elevator. When the forward speed dropped off, it was not possible to keep the tail down with the elevators and the aircraft nosed over until the prop tips and the pitot masts contacted the runway. The aircraft came to a stop in this position, remained there intermittently and then fell back on the tail wheel. It is believed that one of the passengers moving to the rear of the cabin caused the aircraft to settle back on the tail wheel. The distance travelled after the props first touched the runway was approximately 10'.

U.S. Army personnel who towed the aircraft from the runway, reported that difficulty was encountered in starting the aircraft rolling. The brakes appeared to be locked. The Captain, who was riding the brakes, reports that this may have been due to the fact that he had a little difficulty in releasing the parking brake. Marks on the runway indicated continuous braking action on the right wheel and intermittent on the left wheel. It does not seem possible that the right wheel was locked throughout the skid because of the amount of rubber worn from the tire. The mark left by the right tire measured 1000' in length. The runway is concrete and it was dry at the time of the accident.

The right tire had a worn spot where approximately 5/16 of an inch of rubber was worn off. There was another minor worn spot on this tire. The two spots were approximately 90° apart. Only minor worn spots were visible on the left tire.

Both pitot masts were bent outwards and the pitot heads were bent upwards. Both masts bent at a point approximately 10" below the point of attachment to the fuselage, with no damage to the fuselage fittings. The following work was carried out on the aircraft at Harmon Field.

1. Both props were removed.

2. Reduction gear housings were checked for cracks.

Certified true copy: J. Hodgson

TLC.A. INTER-OFFICE CORRESPONDENCE

Place & Date: Moncton, N.B., March 7, 1951
Our File: 1005
Your File:
Subject: Accident - Aircraft 377 - Harmon Field, Nfld.

29

3. Both engine mounts were inspected for cracks.

4. Engines were inspected at point of attachment to mounts for cracks.

5. Both prop shafts were dialled and found within limits.

6. Serviceable props were assembled and installed on the aircraft.

7. The aircraft was placed on jacks and braking action checked and found normal.

8. The brake clearance on the right brakes was checked and foundnormal.

9. The right wheel assembly was removed and the brake assemblies removed from the axle and inspected. These were found normal.

10. The right wheel assembly was re-installed on the aircraft without changing the adjustment of the brake.

11. The aircraft was removed from the hangar and after the engine run-ups had been carried out, the aircraft was taxied and the brakes used extensively. Braking action was normal and there was no tendency for the brakes to drag or lock.

12. A serviceable set of pitot masts was installed, complete with pitot heads and associated plumbing and wiring.

13. The pitot installation was checked with a test apparatus borrowed from the U.S. Army.

14. The tail wheel lock shear pin was replaced.

15. The tail wheel strut and attachment points were checked for cracks.

16. Tail surface attachment points were checked.

17. Fuselage skin surface at the aft end of the fuselage was checked. The only damage found here was a dent in the skin above the tail wheel, and a 2" tear in the tail wheel strut well fairing where it was struck by the oleo sock. On completion of the foregoing, the aircraft was released for a ferry flight to Moncton.

The following work was carried out at Moncton:

1. The reduction gear section of both engines was changed.
   NOTE: After the props had been removed for the reduction gear change, a crack was noted in the reduction gear housing of the left engine. The crack extended from the stud hole directly in front of #14 cylinder to the radius of the P.&W. insignia boss.

Certified true copy: J. Hedgecoe

Place & Date Moncton, N.B., March 7, 1951
Our File 1005
Your File
Subject Accident - Aircraft 377 - Harmon Field, Nfld.

2. The right wheel assembly was changed.

3. All sections of both engines were checked for cracks.

4. Both engine mounts were again checked.

5. A further check of the attachment points for the tail wheel strut and the attachment points for the tail surfaces and the aft portion of the fuselage were checked for damage. No further damage was found.

6. The aircraft was released for a test flight and was found normal in all respects.

7. Since no explanation for the brake condition reported by the pilots could be found, the brake control valve was removed and forwarded to Winnipeg for checking.

The aircraft has now been returned to service with the dent in the fuselage above the tail wheel and the tear in the fairings of the tail wheel strut well deferred for rectification at the next major check.

G.W. Thoms,
Reg. Supvr. Mtce.

cc: Superintendent of Maintenance,
TCA - Dorval.

Flight Operations Superintendent,
TCA - Moncton.

GWT/sab

Certified true copy: J. Hodgson

TRANS-CANADA AIR LINES

27

Moncton, N.B.,
March 8, 1951.

File: 2330-1

Mr. H. J. Williamson,
District Controller Air Services,
Department of Transport,
P. O. Box 42,
Moncton, N. B.

Dear Mr. Williamson:

RE: Accident to DC-3P Aircraft No. 377 Harmon,
Newfoundland, Flight 27-28, February 28th.

Relative to the above, we are attaching copy of a report from Mr. G. W. Thoms, Regional Supervisor of Maintenance. This quite thoroughly covers all damage incurred.

A thorough investigation was made of this accident. The Chief Pilot, Captain W. C. C. Seddon, proceeded to Harmon immediately upon receiving word of such. It was ascertained that none of the nine passengers on board or the crew were injured and the damage to the aircraft was not considered too great.

From reconstructing the accident it was found that the flight had made landing at Harmon at 1804 AST and just as it was getting dark. All field lights were on and the Pilots were using landing lights. The wind at actual time of touch down was ENE to NE at 20 m.p.h. and since runway 07 was closed the flight was using runway 12, which has a true heading of 091°. The weather at the time of the accident was given as 3000 overcast with lower broken visibility 10 miles in light snow temperature 21° dew point 11 wind ENE at 22 altimeter 009 with the overcast estimated at 6500'. Observers at the field and the Pilots themselves admit that the amount of snow falling was practically negligible. In fact, the Pilots state that the weather was very good and that they had made a VFR approach to the field from the east. Captain N. J. Logan was in charge of the flight but in view of the weather being quite good he was letting First Officer R. F. Wright do the landing from the right seat.

Certified true copy: J Hedgecoe

36

TRANS - CANADA AIR LINES

First Officer completed the pre-landing check and carried through with the landing. The Captain reports that they did not experience any trouble with cross wind landing effect and that the touch down was very smooth. Both Pilots report that immediately after touch down the aircraft commenced riding to the right and appeared to want to roll over. Immediately realizing that the First Officer was having trouble holding the aircraft, Captain Logan helped on the controls and by pulling the control column well back they managed to keep the tail down until the aircraft had almost completed its landing run. Just at the last momement, they report, and at a slow speed where the elevator lost its effect, the aircraft finally went up on its nose. According to the Pilots' testimony and that of competent witnesses, the aircraft only stayed on its nose for a few seconds and then fell back down in a normal three-point position. As the aircraft went up on its nose it turned approximately 50° to the right. The Captain states that immediately the aircraft went up on its nose he shut off all switches, gas-cocks, etc. and immediately left the cockpit to climb back to the cabin, but at this moment the aircraft fell back down. By the time he did get back into the cabin, Ramp personnel were already out on the runway and were helping to unload the passengers.

Our check of the tire marks on the runway substantiate the crew's report. The tire marks indicated that the aircraft had touched down approximately 500' from the end of runway 12 with a solid black mark on the right indicating that the right wheel had dragged from moment of impact. The left tire mark also showed evidence of some dragging but the mark was intermittent. The flight touched down approximately in the centre of the runway and commenced a very slow right turn and finally going on its nose just on the right edge of the runway exactly 1000' from point of touch down.

The crew were of the opinion that the brakes and particularly the right brake had frozen. We have not had any prior instances of brakes freezing in the air since the brake shoes are normally in the retracted position during flight. Both the Captain and the First Officer insist that the pre-landing check, the approach, and touch down were all very normal and were carried out in agreement with the Company standard.

Since it was impossible to check the brakes for some time after the aircraft had stood in a heated U.S. Army hangar, it would be impossible to say that the brakes had actually frozen. Maintenance Investigators could not find any evidence of malfunctioning except that you will note that in Mr. Thoms' report they are forwarding the brake control valve to Winnipeg for further checking.

Certified true copy: J. Hodgson

TRANS - CANADA AIR LINES

Both the Captain and the First Officer have a very good flying record with this Company and have been exonerated and placed back on line duty. However, we did give the Captain a local check flight to make certain that he felt O.K. after this incident.

From what we can gather from our investigation the right wheel was not locked solidly since there were only two slight burned marks on the right tire. Only minor worn spots were visible on the left tire. We feel that if the right wheel had been locked solidly then the tire would have burned off with a subsequent blow-out and possibly much greater damage.

It might be mentioned also that there were no previous complaints regarding the action of the brakes on this aircraft and Captain Logan reports that they had been performing normally all that day. Captain Logan had completed the take-off at Gander and the wheels were not dragging at that time. We had Captain I. K. Davis, Check Pilot, check the take-off marks at Gander and since our aircraft had been the only one to use runway 5 at Gander that day, Captain Davis was able to ascertain that both wheels had been rolling normally during the take-off run. Captain Davis also reports in this connection that there were fresh patches of snow on runway 5 at Gander with considerable large bare patches. If the wheel had been dragging, he reports, take-off would have been impossible.

As reported above, the flight crew have been exonerated since the cause of the accident is still unknown. We are hoping that further investigation will bring something to light and if such is the case we will immediately forward any further information.

(Signed: K. Edmison)

T. F. K. Edmison,
Operations Manager,
Eastern Region.

Attach.

Certified true copy: J. Vedgeco

T.C.A. INTER-OFFICE CORRESPONDENCE

Place & Date Moncton, N.B., March 7, 1951
Our File 1005
Your File
Subject Accident - Aircraft 377 - Harmon Field, Nfld.

24

Supervisor of Maintenance Base,
TCA - Winnipeg.

- - - - - - - - - - - - - - - - -

Aircraft 377, Flight 27-28 (Feb) nosed over on landing at Harmon Field. The tips of both props and pitot masts were damaged when they contacted the runway. When the aircraft fell back on the tail wheel, the wheel dented the bottom of the fuselage just aft of the tail wheel strut well. A 2" tear in the tail wheel strut well fairing resulted when the tail wheel oleo strut cover struck it. The tail wheel lock shear pin was sheared but according to U.S. Army personnel, this occurred while towing with the tail wheel lock on. The manner in which this pin sheared substantiated this claim.

The pilots reported that the landing was normal and that the aircraft was rolling normally when the brakes appeared to seize or drag heavily. This caused the aircraft to assume a tail high attitude which they were able to compensate for by using elevator. When the forward speed dropped off, it was not possible to keep the tail down with the elevators and the aircraft nosed over until the prop tips and the pitot masts contacted the runway. The aircraft came to a stop in this position, remained there intermittently and then fell back on the tail wheel. It is believed that one of the passengers moving to the rear of the cabin caused the aircraft to settle back on the tail wheel. The distance travelled after the props first touched the runway was approximately 10'.

U.S. Army personnel who towed the aircraft from the runway, reported that difficulty was encountered in starting the aircraft rolling. The brakes appeared to be locked. The Captain, who was riding the brakes, reports that this may have been due to the fact that he had a little difficulty in releasing the parking brake. Marks on the runway indicated continuous braking action on the right wheel and intermittent on the left wheel. It does not seem possible that the right wheel was locked throughout the skid because of the amount of rubber worn from the tire. The mark left by the right tire measured 1000' in length. The runway is concrete and it was dry at the time of the accident.

The right tire had a worn spot where approximately 5/16 of an inch of rubber was worn off. There was another minor worn spot on this tire. The two spots were approximately 90° apart. Only minor worn spots were visible on the left tire.

Both pitot masts were bent outwards and the pitot heads were bent upwards. Both masts bent at a point approximately 10" below the point of attachment to the fuselage, with no damage to the fuselage fittings. The following work was carried out on the aircraft at Harmon Field.

1. Both props were removed.

2. Reduction gear housings were checked for cracks.

Certified true copy: J. Hedgecoe

TLC.A. INTER-OFFICE CORRESPONDENCE

Place & Date: Moncton, N.B., March 7, 1951
Our File: 1005
Your File:
Subject: Accident - Aircraft 377 - Harmon Field, Nfld.

23

3. Both engine mounts were inspected for cracks.

4. Engines were inspected at point of attachment to mounts for cracks.

5. Both prop shafts were dialled and found within limits.

6. Serviceable props were assembled and installed on the aircraft.

7. The aircraft was placed on jacks and braking action checked and found normal.

8. The brake clearance on the right brakes was checked and foundnormal.

9. The right wheel assembly was removed and the brake assemblies removed from the axle and inspected. These were found normal.

10. The right wheel assembly was re-installed on the aircraft without changing the adjustment of the brake.

11. The aircraft was removed from the hangar and after the engine run-ups had been carried out, the aircraft was taxied and the brakes used extensively. Braking action was normal and there was no tendency for the brakes to drag or lock.

12. A serviceable set of pitot masts was installed, complete with pitot heads and associated plumbing and wiring.

13. The pitot installation was checked with a test apparatus borrowed from the U.S. Army.

14. The tail wheel lock shear pin was replaced.

15. The tail wheel strut and attachment points were checked for cracks.

16. Tail surface attachment points were checked.

17. Fuselage skin surface at the aft end of the fuselage was checked. The only damage found here was a dent in the skin above the tail wheel, and a 2" tear in the tail wheel strut well fairing where it was struck by the oleo sock. On completion of the foregoing, the aircraft was released for a ferry flight to Moncton.

The following work was carried out at Moncton:

1. The reduction gear section of both engines was changed.
   NOTE: After the props had been removed for the reduction gear change, a crack was noted in the reduction gear housing of the left engine. The crack extended from the stud hole directly in front of #14 cylinder to the radius of the P.&W. insignia boss.

Certified true copy: J. Hodgeon

Place & Date: Moncton, N.B., March 7, 1951
Our File: 1005
Your File:
Subject: Accident - Aircraft 377 - Harmon Field, Nfld.

22

2. The right wheel assembly was changed.

3. All sections of both engines were checked for cracks.

4. Both engine mounts were again checked.

5. A further check of the attachment points for the tail wheel strut and the attachment points for the tail surfaces and the aft portion of the fuselage were checked for damage. No further damage was found.

6. The aircraft was released for a test flight and was found normal in all respects.

7. Since no explanation for the brake condition reported by the pilots could be found, the brake control valve was removed and forwarded to Winnipeg for checking.

The aircraft has now been returned to service with the dent in the fuselage above the tail wheel and the tear in the fairings of the tail wheel strut well deferred for rectification at the next major check.

G.W. Thoms,
Reg. Supvr. Mtce.

cc: Superintendent of Maintenance,
TCA - Dorval.

Flight Operations Superintendent,
TCA - Moncton.

GWT/sab

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
11-48

Moncton, N.B., March 21, 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident Report - Douglas DC-3 - CF-TED Trans-Canada Air Lines	5002-1

47718

TRANSPORT - RECORDS
MAR 22 P.M. 1951
File 5008-T5-4

Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Further to our letter of March 12th,1951, enclosed herewith is copy of further correspondence relative to the above referenced accident.

2. If your Headquarters are able to reach any conclusion from the evidence submitted, this office would appreciate being advised.

(R. W. Goodwin)
for District Controller, Air Services,
Moncton, N. B.

Encl.

Certified true copy: J. Hedgecock

37

TRANS-CANADA AIR LINES

Moncton, N.B.,
March 16, 1951.

File: 4-5
2300-1

Mr. H. J. Williamson,
District Controller Air Services,
Department of Transport,
P. O. Box 42,
Moncta, N.B.

ATTENTION: Mr. R. W. Goodwin.

Dear Sir:-

This has reference to your letter of March 12th, your file 5002-1 on the subject of damage to aircraft 377 at Harmon. The following is the final conclusion reached by Company investigation.

Report from Pilots

The Pilots report that the approach to the runway was normal with no apparent drift. The end of the runway was crossed at approximately 90 m.p.h. and touchdown was quite smooth at an estimated speed of 80 m.p.h. The aircraft was in a slightly tail-down position at the time of touchdown. After a short run, the aircraft began to decelerate suddenly; at the same time pulling to the right and the nose lowering. Both pilots pulled back on the control column and remained on the controls in an effort to keep the airplane straight and the tail down but, as the speed decreased, the aircraft swung sharply to the right and came to a stop, resting on the main wheels, propellers and pitot masts. The switches and fuel were immediately turned off and the Captain proceeded to open the front cargo door to provide an exit for the passengers but, before this was done, the tail of the aircraft dropped heavily to the ground. All passengers and crew evacuated the aircraft and, after it was determined that the damage was not extensive, the Captain and First Officer re-entered the aircraft to further check all switches and controls. During this check, the parking brakes were found to be on.

Certified true copy: J. Hodgson

2/6

Investigation

Investigation revealed that the aircraft's braking action was found to be normal after the check. The right wheel assembly was removed and the brake assemblies removed from the axle and inspected and found normal. The right wheel assembly was re-installed on the aircraft without adjusting the brake. The aircraft was then removed from the hangar and taxied, using the brakes extensively. Braking action was normal and there was no tendency for the brakes to drag or lock. After repairs were made to the propeller, etc., the aircraft was ferried to Moncton. Since no explanationfor the brake conditions, reported by the pilots, could be found, the brake control valve was removed and forwarded to Winnipeg for checking. Winnipeg reports the brake control valve operation normal.

Flying Personnel

At the time of the accident, the landing was effected by First Officer R. F. Wright from the right seat. The Chief Pilot, Eastern Region, states that First Officer Wright's flying ability is a very good average and that his ability to handle the aircraft on landing is also very good.

Summary

The cause of the accident could have been from one of the following reasons:

(1) Mechanical malfunctioning of the brakes.

(2) Landing with parking brakes engaged.

(3) Poor technique on the part of either of the pilots.

However, we fail to find conclusive evidence of any of the above situations - (a) the brakes were found to be normal after the accident, (b) there was no good reason why the parking brakes should have been placed in the "on" position in flight, and the pre-landing cockpit check would have revealed this had it been inadvertently placed in the "on" position, and (c) we have no reason to doubt the statements of the pilots.

Certified true copy: J. Hodgson

35

Accordingly, unless some further evidence is forthcoming, the cause of the accident remains undetermined. Both pilots were returned to flight duty following a normal check flight.

Yours truly,

TRANS-CANADA AIR LINES,

(Signed K. Edmison)

T. F. K. Edmison,
Operations Manager,
Eastern Region.

(7) **AIRCRAFT TIME DATA**

STATION Winnipeg DATE 20-11-51

TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 1020:13

TOTAL AIRCRAFT TIME 15160:15

(8) **WORK TO BE DONE NEXT CHECK STATION**

	STA.	BY

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	Routine No. 6 check completed		
	Progressive overhaul carried out on Zones D-1, C-1		
	Certificates of Airworthiness and Registration Renewed		

INSPECTION RELEASE CERTIFICATE A. I. - 12

Complete Aircraft — After Overhaul Major Repair and/or Alterations

A/C Registration - CF - TED Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft have been completed satisfactorily; that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: NOVEMBER 23-1951 Signed: Stu Sutherland
Air Engineer "B" W&H 43

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED _____ AIR ENGINEER. DATE _____ STATION _____

TCA-620
6-49

(1)

AIRCRAFT No. 377 TRANS-CANADA AIR LINES FLIGHT REPORT

Duplicate Copy CF-TED

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	W.G. Bates	DESIGNATOR	DATE
FIRST OFFICER	J.G. Uren	253-19	19-11-51
STEWARDESS	I.H. Bart		
STEWARD			

(5) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	INR	1728	1936	2	08
INR	QT	2003	2158	1	55
QT	WG	2223	0001	2	38
			TOTAL TIME	6	41

OIL ADDED (INDICATE QUARTS)

LEFT	RIGHT	STA	BY
✓	✓	QT	GSU

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

Certified true copy
J.G. Uren

SIGNED W.G. Bates CAPTAIN

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

46767

TRANSPORT - RECORDS
FORM No. 2444
NOV 29 P.M. 1951
File 3008-T5-4

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Attention: Superintendent, Air Regulations

Re: Application - CF- TED

Serial No. 12187

1. C. of A. No. 1851 Expires Nov. 20/51 C. of R. No. 5386 Expires Nov. 20/51
Aircraft Data - Manufacturer Douglas Aircraft Corp. Model DC-3C - S1C3G-92
Hours flown - Since New 15160:15 Since Overhaul 3987:33
Engine Data - Manufacturer Pratt and Whitney Model R1830-92-S1C3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	61A38E (Left)	0:00	11224:06
(2)	61A17E (Right)	0:00	11085:24
(3)			
(4)			

Signature of Applicant G. W. Sutherland
Date November 23, 1951

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed G. W. Sutherland
"B" Engineer WGM-13
Date November 23, 1951

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot

Date _____

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	

NOTE - Attached herewith, duplicate copy of last engine and a/c log sheet prior renewal of C of A this date.

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed _____
District Aircraft Inspector

Date NOV 24 - 1951

7. C. of A. and C. of R. renewed, not valid after.

(Date)- 22nd Nov. 1952
Permissible Gross Weights - Wheels 26200lbs -
- Skis
- Floats

Signed _____
District Superintendent, Air Regulations

Date 23/11/51

Other Action:-

Radio Lic #61 51-52

8. H.Q. Action C.A.R.

C.A.E.

TRANSPORT - RECORDS
42
NOV 21 A.M 1952
File 5008-T5-4

DEPARTMENT OF TRANSPORT 41387

TORONTO, 260 Richmond St. W. November 19, 1952

Your File 5008-T5-4 | SUBJECT Renewal of Certificates of Registration and Airworthiness | Our File 5008-T5-4

Douglas DC3 (SIC3G) CF-TED

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for **Douglas DC3 (SIC3G) CF-TED**

Maurice E. Leach

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

W

41 2444 4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TED SERIAL No.

1. C. of A. No. 1851 Expires Nov.22/52 C. of R. No. 5386 Expires Nov. 22/52

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A44E		
(2) 61A67E		
(3)		
(4)		

Signature of Applicant E Yee

Date Nov 19/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Yee "B" ENGINEER

Date Nov 19/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed ..... TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report ☒ (when applicable)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5386 and C. of A. No. ....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed L Bell DISTRICT AIRCRAFT INSPECTOR

Date Nov. 19/52

7. C. of A. and C. of R. renewed, not valid after (Date) November 22, 1953

Permissible Gross Weights— Wheels 25,200 Lbs.
Skis
Floats

Signed Maurice E. Louch DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 19, 1952

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

51053

TRANSPORT - RECORDS
NOV 20 P.M. 1953
File 5008-T5-4

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. November 19, 1953

Your File 5008-T5-4

SUBJECT Renewal of Certificates of Registration and Airworthiness
Douglas DC3 (SIC3G) CF-T E D

Our File 5008-T5-4

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC3 (SIC3G) CF-TED

A. W. Finkel
for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

2444
8-52

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF - TED SERIAL NO. 12930

1. C. of A. No. 1851 Expires Nov. 22/53 C. of R. No. 5386 Expires -----
Aircraft Data—Manufacturer Douglas A/C Corp Model DC-3
Hours flown—Since New Since Overhaul
Engine Data—Manufacturer Pratt & Whitney Model SIC 3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	61A 37E		
(2)	61A 50E		
(3)			
(4)			

Signature of Applicant [signature]
Date Nov 16/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature]
"M" Licence No. YAM-52
Date Nov 16/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot
Date

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5386 and C. of A. No. 1851, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed H. Bate
District Aircraft Inspector
Date Nov 19/53.

7. C. of A. and C. of R. renewed, not valid after.

Date November 22, 1954

Permissible Gross Weights—Wheels 26,200 Lbs.
—Skis
—Floats

Signed H. W. Finlay
for District Superintendent, Air Regulations
Date November 19, 1953

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

Noted

43

TCA-620
6-49

(1)

AIRCRAFT No. 377 TRANS-CANADA AIR LINES FLIGHT REPORT

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	RD RENWICK	DESIGNATOR	DATE
FIRST OFFICER	RF WRIGHT	253/16	Nov 16/53
STEWARDESS	ML SCOTT	252/	
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	YB	0818	0925	1	07
YB	QJ	0959	1110	1	11
QJ	YU	1132	1215		43
YU	QJ	1247	1330		43
QJ	YB	1941	1456	1	11
YB	YZ	1523	1648	1	25
			TOTAL TIME	6	20

OIL ADDED — INDICATE QUARTS

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

Copy Log sheet

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED J Matchett for R Renwick CAPTAIN

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

ORIGINAL - HQ FILE NO. 5008-T5-4

DUPLICATE - DIST. FILE NO.

TRANSPORT - RECORDS
NOV 19 A.M. 46
File 5008-T5-4

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T E D 19169 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1851 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

C. of A. Page 2 - Item 33- Landplane " 22,200 Lbs. - deleted.
" 26,200 Lbs. - inserted. ✓

Amendment not ..... Item 40- year "1938" deleted. ✓.....
Page 3 - Item D- Previous endorsement deleted.
otherwise covered .....

"The documents listed hereunder form part of this Certificate of Airworthiness and must be carried in this Aircraft during flight.....
Aeroplane Flight Manual.
Weight and Balance Report, Maximum Take-off and Landing Weights-DC3 Aircraft. Revised Sept. 28,1953."Inserted
Page 3 - year "1938" deleted. ✓

13. C of A valid from Nov. 22, 1954 to Nov. 22, 1955 ✓

Temporary authority from ..... to .....

Date November 17, 1954

(D.W. Saunders)
District Superintendent Air Regulations

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-4

DUPLICATE - DIST. FILE NO. .....

TRANSPORT - RECORDS
JUN 3 P.M. 4
File 5008-T5-4

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T E D 7246 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1851 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines Citizen of .....
   Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.
   .....
   Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐
   Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not Endorsed re validity of C. of A. as per Instructions
otherwise covered H.Q. letter file No. 7150-6, dated May 13, 1955
.....
.....

13. C of A valid from ..... to .....
    Temporary authority from ..... to .....

D Saunders
(D.W. Squnders)
District Superintendent Air Regulations

Date June 2, 1955

1/D

5143

TRANSPORT - RECORDS
MAY 13 A.M.
File 5008-T-5-4

50

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

501-428 Portage Avenue,
Winnipeg 1, Manitoba,
May 8th, 1957.

Your File	Subject:	Our File
5008-T-5-4	Douglas DC-3, CF - T E D	5008-T-5-4

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. The Certificates of Airworthiness No. 1851, and Registration Number 5386 for the above mentioned aircraft has been (~~Renewed~~ - Amended) as follows:- New forms 2462 and 2462 A issued to replace the old ones.

2. Attached is blue copy of the Certificate of Airworthiness and the Certificate of Registration.

/RR
Enc.

District Director, Air Services.

Moved
15/1

92

2462-A
2-56

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5386

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E D	Douglas Aircraft Company Inc.-Douglas DC3(S1C3G)	1 2 4 8 7

(4) NAME OF OWNER TRANS - CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS been DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE December 24th, 1946.

SEAL

SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

48 2462 2-56

SERIAL NO. 1851

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E D	Douglas Aircraft Company Inc.-Douglas DC3 (S1C3G)	12487

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE December 24th, 1946.

SEAL

SUPERINTENDENT OF AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

TRANSPORT - RECORDS
MAY 9
File 5008-T5-4

4245

MAY 7, 58

51

FULL RATE COLLECT

CAPTAIN H. J. EDWARDS,
TRANS CANADA AIRLINES,
ROCHESTER AIRPORT,
ROCHESTER, N. Y.

ARQ-699 REURTEL THIS IS TO CONFIRM THAT CANADIAN REGISTRATION MARKINGS CHARLIE FOXTROT TANGO ECHO DELTA HAVE BEEN CANCELLED IN FAVOUR DOUGLAS DC-3 AIRCRAFT SERIAL NUMBER 12487 AND AIRCRAFT HAS BEEN REMOVED FROM THE CANADIAN CIVIL AIRCRAFT REGISTER

FOR RIDAS MONTREAL

CONFIRMATION ONLY

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
1-56

Montreal Airport, May 22, 1958
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T5-4

SUBJECT: DC-3 Aircraft CF-TED

AKL

Received in ordinary mail
KA

REGISTERED 5797

TRANSPORT - RECORDS
MAY 23 P.M.
File 508-T5-4

Director General of Air Services,
Ottawa, Ontario.

Attention: Controller, Civil Air Operations
and Regulations

1. Attached please find the original copy of a letter from the Trans Canada Air Lines received at this office requesting that the above noted aircraft be removed from the Canadian Civil Aircraft Register. Certificate of Registration No. 5386 and Certificate of Airworthiness No. 1851 are returned herewith for cancellation.

for - Regional Director,
Air Services

Encl.

Mokd
Coded

54

TRANS-CANADA AIR LINES

INTERNATIONAL AVIATION BUILDING
MONTREAL
CANADA

May 16, 1958
File: 1415-1

Mr. J.P. Fournier
Dist. Supt. of Air Regulations
Civil Aviation Division
Department of Transport
Montreal Airport
P.Q.

Subject: Sale of DC-3 Aircraft CF-TED (TCA #377)

Dear Mr. Fournier:

This will confirm our telegram from Rochester, New York, dated May 7, 1958, notifying you of the sale of the above aircraft to AiResearch Company of Los Angeles, California and its delivery by Trans-Canada Air Lines to AiResearch at Rochester, New York.

Attached for cancellation, is D.O.T. C of R 12487, C of A 1851 and Radio License for this aircraft.

Yours very truly,

for

J.T. Dyment
Chief Engineer

Encl.

SPECIAL COMPULSORY CONDITIONS:

"This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister."

J. B. Hunderks

Controller, Civil Air Regulations.

CERTIFICATES OF AIRWORTHINESS SHALL NOT REMAIN VALID FOR A PERIOD EXCEEDING TWELVE MONTHS EXCEPT AS MAY BE DIRECTED BY THE MINISTER.

NO ENTRIES OR ENDORSEMENTS MAY BE MADE ON THIS CERTIFICATE EXCEPT IN THE MANNER AND BY THE PERSONS AUTHORIZED BY THE MINISTER.

IF THIS CERTIFICATE IS LOST, THE MINISTER OF TRANSPORT SHOULD BE INFORMED AT ONCE.

ANY PERSON FINDING THIS CERTIFICATE SHOULD FORWARD IT IMMEDIATELY TO THE MINISTER OF TRANSPORT, OTTAWA, ONTARIO, CANADA

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
2-56

SERIAL NO. 1851

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E D	Douglas Aircraft Company Inc.-Douglas DC3 (S1C3G)	12487

(4) CATEGORY: Commercial — LANDPLANE [x] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE December 24th, 1946.

SEAL

SEE REVERSE SIDE

for B. Hendriks
Controller, Civil Air Regulations.

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

5 2

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

NO. 5386

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E D	Douglas Aircraft Company Inc.-Douglas DC3(S1C3G)	1 2 4 8 7

(4) NAME OF OWNER TRANS - CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

SEAL

DATE OF ISSUE December 24th, 1946.

B. Hendrick

for Controller, Civil Air Regulat

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
10-56

Montreal Airport, Que. September 12, 1958
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE 5008-T5-4(ARQ)

SUBJECT

DC-3 Aircraft CF-TED

17554

TRANSPORT - RECORDS
SEP 15 A.M.
File 5008-T5-4

Director General, Air Services,
No. 3 Temporary Bldg.,
Ottawa, Ont.

Attn: Controller, Civil Air Operations and Regulations.

1. Trans-Canada Air Lines, on behalf of Air Research Aviation Service Co., the present owners of the above-noted aircraft, have requested a letter from this Department to the effect that the Certificates of Registration and Airworthiness for the subject aircraft have been cancelled. These documents were forwarded to Headquarters undercover of our letter dated May 22nd, 1958.

2. Will you, therefore, forward the requested letter to Mr. Joseph Adams, Air Research Aviation Service Company, Los Angeles 45, California. Trans-Canada Air Lines would also appreciate receiving a copy of this letter. It should be forwarded to the attention of Mr. W. Bird, Montreal Airport.

J. Bruce Donald

for Regional Director, Air Services.

57

5008-T5-4

OTTAWA, Ontario,
September 17, 1958.

Mr. Joseph Adams,
Air Research Aviation Service Co.,
Los Angeles 45, California, U.S.A.

Dear Sir:

At the request of Trans-Canada Air Lines, we wish to confirm that the Certificates of Registration and Airworthiness covering Douglas DC3 (S1C3G) aircraft, serial number 12487, have been cancelled on May 23, 1958.

Yours truly,

(J.R.K. Main),
Director of Civil Aviation

cc: Mr. W. Bird
Trans-Canada Air Lines,
Montreal Airport,
Dorval P.Q.

cc RDAS MONTREAL

FILE No. 5008 - T 5 - 5 VOLUME No. 1

VOL 1

5008 - T 5 - 5

DEPARTMENT OF TRANSPORT

FROM JUNE, 1946
TO

SUBJECT AIRCRAFT - INSPECTION & OPERATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TEE - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
SEP 26 1958 OCT 27 1958 FEB 25 1959	BF 29/9/58	SRL	29.10.58		SEP 26 1958
	BF 29/10/58	SRL		OCT	OCT 28 1958
	34225	SRL			FEB 25 1959

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

1
10-57

3-46
P. 58825
D.L.L. Co.

FILE No. 5008 - T5 - 5

VOLUME No. 1

VOL. 1
5008 - T5 - 5

DEPARTMENT OF TRANSPORT

FROM JUNE 1946
TO

SUBJECT AIRCRAFT INSPECTION AND REGISTRATION
REGISTRATION, INSPECTION AND OPERATION

SUB-SUBJECT

FILE TITLE CF - TEE - DOUGLAS DC-3.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG - 1 1946	16044	SAR	~~8.7.46~~	LSJ	AUG - 2 1946
AUG 8 1946	16741	SAR	~~6.9.46~~	LSJ	[illegible]
AUG 28 1946	19950	SAR.		LSJ	[illegible]
	B.F. Sept 16-46	SAR	~~E.G. 7.11.46~~	LSJ	[illegible]
DEC 10 MAY 23 1947	B.F. 17-12-46	SAR		LSJ	[illegible]
		CAE			MAY 26 1947
JUL 25 1947	13405	CAR.		LSJ	JUN 31 1947
		CAE			JUL 31 1947
JUL 13 48	15722	CAR		LSJ	JUL 16 48
JUL 14 1949	15069	CAR		LSJ	JUL 15 1949
		CAE		P.D.	JUL 19 1949
JUL 13 1950	13695	CAR		LSJ	JUL 19 1950
		CAE			JUL 19 19[illegible]
JUL 10 1951	20241	CAR		LSJ	JUL 11 1951
JUL 11 1951		CAE			JUL 12 1951
JUL 4 - 1952	19604	CAR		LSJ	JUL 7 1952
JUL 7 1952		CAE			JUL 8 - 1952
JUL 10 1953	24704	CAR		LSJ	JUL 10 1953
JUL 10 1953		CAE			JUL 13 1953
JUN 28 1954	9334	CAR.			JUN 29 1954
	8407	ARL		LSJ	JUN 15 [illegible]
JUN 14 1956	29205	ARL		LSJ	FEB 19 1957
FEB 19 1957	716	ARL	~~24.8.58~~	LSJ	AUG 6 1958
AUG 7 1958		BAEA			AUG - 8 1958
AUG 6 1958	BF 29/8/58	ARL	~~29.9.58~~		AUG 27 1958
AUG 27 1958					

Form ACA 502
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
(Rev. 3-1-44)

CF-TEE

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: Douglas
MODEL: C47A
MANUFACTURER'S SERIAL NO.: 13559
C. A. A. IDENTIFICATION MARK:

MANUFACTURER OF ENGINE: Pratt & Whitney
MODEL: R1830 S1C3G (-92)
SERIAL NO.: LE: CP359294 RE: CP359393

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows:

NONE
(Mortgage, mechanic's lien, etc.) in the sum of $....., in favor of

..... whose address is .....

For and in consideration of the sum of One Dollar & other valuable consideration
WAR ASSETS CORPORATION
(Seller), the undersigned, whose address is 4093 St. Catherine, St., W., Montreal, Quebec, does this 1st day of May, 19 46, sell, grant, transfer, and deliver all of his above-described right, title, and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto
(Purchaser)
TRANS-CANADA AIR LINES

whose address is P.O. Box 2973, Winnipeg, Manitoba, and to their executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, we have set our hand and seal this 1st day of May, 1946

WAR ASSETS CORPORATION [SEAL]
(Seller's signature)
BY: Geo.A. Cruickshank
Geo.A. Cruickshank, Treasurer

G.A.C.

ACKNOWLEDGMENT

STATE OF
COUNTY OF } ss:

(INDIVIDUAL OR PARTNER)

On this ..... day of ....., 19....., before me personally appeared the above-named seller, to me known to be the person described in and who executed the foregoing bill of sale, and acknowledged that he executed the same as his free act and deed.

(CORPORATION)

On this 1st day of May, 19 46, before me appeared Mr. Geo. A. Cruickshank, to me personally known, who, being by me duly sworn, says that he is the Treasurer of the War Assets Corporation corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of the Board of Directors and said Geo. A. Cruickshank acknowledged the foregoing bill of sale to be the free act and deed of said corporation.

Given under my hand and official seal the day and year above written.

D B Smith
~~Notary Public.~~
Justice of the Peace

My commission expires MY COMMISSION IS FOR LIFE, 19.....
[SEAL]

D B S

U. S. GOVERNMENT PRINTING OFFICE 10—10683-2

M

5008-T5-5

A16044

910 Confederation Building,
Montreal 2, Que., July 30, 1946.

TRANSPORT-RECORDS
AUG 1 A.M.
File 5008-T5-5

Trans-Canada Air Lines,
Montreal, Que.

Gentlemen:

Re: Douglas CF-TEE

This letter will constitute your authority not valid after August 29, 1946, to operate the subject aircraft on your regular services.

The maximum take off weight of 25346 pounds and landing weight of 24546 pounds must not be exceeded at any time.

Should you decide at a later date to instal a Janitrol heater in this machine, an inspection and carbon monoxide test of this heater will have to be carried out by an Officer of this Department, prior to operating this machine on your regular services.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

Noted

ACTUAL WEIGHT AND BALANCE

MODEL: DC-3

T.C.A. CF-TEE

REPORT: NO. WRW-0-163

Canadair
Limited

POST OFFICE BOX 6087

Montreal

5905

CANADAIR
LIMITED
MONTREAL. CANADA

REPORT NO. RW-0-163

TITLE ACTUAL WEIGHT AND BALANCE

MODEL DC-3

PREPARED W. Banas

CHECKED

APPROVED J. Alard
L. J. Hebert

DATE 22rd July 1946.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL CANADA

REPORT RW-0-163
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

INTRODUCTION

Airplane model C-47A converted to a DC-3-SIC3G for commercial use under contract for Trans-Canada Air Lines bearing registration number CF-TEE was weighed at Canadair Limited Montreal, Canada on July the 22nd, 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system.

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	In A/c	Qty	Weight	Arm	Moment
COMMISSARY	1	Water jug - Thermos (1 gal) incl. water	-	1	18.0	497	8,946
	2	Aluminum Pitcher	-	1	0.4	520	208
	3	Lunch Boxes, less food	-	24	35.5	520	18,356
	4	Thermos - 2 qt. less fluid	-	5	20.3	520	10,556
	5	Silverware, complete sets	-	24	9.4	530	4,982
	6	Paper Drinking Cups	-	25	0.2	530	106
	7	Lucite Cup Handles	-	30	2.1	530	1,113
	8	Lunch Box Inserts	-	30	3.1	520	1,612
	9	Plastic Cups & Plates, sets	-	24	5.7	530	3,021
	10	Hot & Cold Cups	-	60	1.8	530	954
	11	General Utensils, Allowance	-	—	2.0	530	1,060
	12	Casseroles & Covers (Round)	-	24	24.0	540	12,960
	13	Service Trays - large	-	6	6.0	540	3,240
	14	Cafatray - small	-	2	0.6	540	324
STEWARDESS SUPPLIES	1	Pillows at seats (complete with covers & slips)	-	21	21.4	332	7,105
	2	Sickness Containers (at seats)	-	21	2.5	332	830
	3	Whisk	-	1	0.5	530	265
	4	Toy Broom (1) & Dusters (2)	-	-	0.7	530	371
	5	Dust Pan - long handle	-	1	0.4	530	212
	6	Cleansing Tissue, Kleenex - 1 Box	-	1	0.6	524	314
	7	Stewardess Satchel	-	1	7.9	521	4,116
	8	Linen Hand Towels (12" x 10")	-	12	0.9	502	452
	9	Flyswatter & Atomizer (one of each)	-	-	1.2	540	648
	10	Blankets (in rear Service Compartment)	-	12	36.0	553	19,908
	11	Headrest Covers, on Seats	-	21	2.1	332	697
	12	Sanitary Napkins	-	12	1.0	540	540
	13	First Aid Kit	-	1	4.1	522	2,140
	14	Shopping Bags	-	3	0.6	545	327
	15	Oxygen Masks (above seats)	-	21	15.8	332	5,246
	16	Spare Sickness Containers	-	10	1.2	554	665
	17	Spare Hand Towels (12) Headrest Covers	-	-	1.9	554	1,053
	18	Spare oxygen Masks	-	5	3.8	554	2,105
	19	Spare Pillows, complete	-	3	3.1	554	1,717

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 3
REPORT RW-0-163
MODEL DC-3

590

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "E" LIST (Removable)

	Item No.	Items	II A/C	Qty.	Weight	Arm	Moment
MISCELLANEOUS	1	Crew Baggage	-	3	60.0	147	8,820
	2	Magazines in Binders	-	10	17.9	177.6	3,177
	3	Bible	-	1	1.5	177.6	266
	4	Life Belts - Passengers	-	21	54.6	332	18,127
	5	Crew Life Belts	-	3	7.8	147	1,147
	6	Wash Water (8# Imp. Gallon)	-	-	25.0	492	12,300
	7	Cargo Tie-Down Straps - Cargo Compts. sets.	-	10	10.0	308	3,080
COLD WEATHER	1	Anti-Icer Fluid - Std. Qty. 2# Imp. Gal.*	*	*	19.9	341	6,786
	2	De-Icers - Propellers	*	6	6.0	117.5	705
	3	De-Icers - Wing - Inner	*	2	12.4	200	2,480
	4	De-Icers - Wing - Outer	*	2	38.1	252	9,601
	5	De-Icers - Stabilizer	*	2	12.0	650	7,800
	6	De-Icers - Fin	*	1	4.3	660	2,838
	7	Cabin & Toilet Frost Shields	-	15	0.9	325	293
	1	Stewardess	-	1	120.0	521	62,520

* Max. capacity 9.6 Imperial Gal or 76.2 lbs.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 4
REPORT RW-0-163
MODEL DC-3

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "B" LIST (Fixed)

	Item No.	Items	IN A/C	Qty.	Weight	Arm	Moment
COCKPIT & FWD. CARGO	1	Fire Extinguishers - Cockpit & fwd.Cargo, Kidde #CTA	**	2	14.2	107	1,519
	2	Flash Light	-	1	1.2	74	89
	3	Log Book	-	1	2.5	71	178
	4	Tools	-	-	2.3	76	175
	5	Standard Oxygen Bottles	*	2	70.0	390	28,300
	6	Pilots & Observer - Safety Belts	*	3	3.0	98	294
CABIN	1	Carpet - complete	-	1	55.0	358	19,690
	2	Curtains - with tie-back straps	*	14	7.7	325	2,503
	3	Coat hangers	*	24	4.0	480	1,920
	4	Coat strap	*	1	0.2	480	96
	5	Fire Extinguisher	-	1	7.2	493	3,550
	6	Pass. Safety Belts	-	21	21.0	332	6,972
	7	Stewardess Safety Belt	*	1	1.0	521	521
	8	Cabin Thermometer	*	1	0.3	492	148
	9	Casserole Carriers	-	2	27.6	540	14,904
	10	Food Box Carriers	-	3	20.1	512	10,291
TOILET	1	Soap - powdered, in dispenser	-	-	0.2	545	109
	2	Toilet Container	*	1	2.0	530	1,060
	3	Toilet Tissue	-	-	0.3	581	174
	4	Waste Container	*	1	2.0	509	1,018
MISC.	1	Storage Batteries	*	2	158.0	124	19,692
	2	Janitrol Heater	-	1	105.0	172	18,060
	3	Flares (landing) Type S-A-8	-	2	36.0	604	21,744

Note:

** 1 only.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

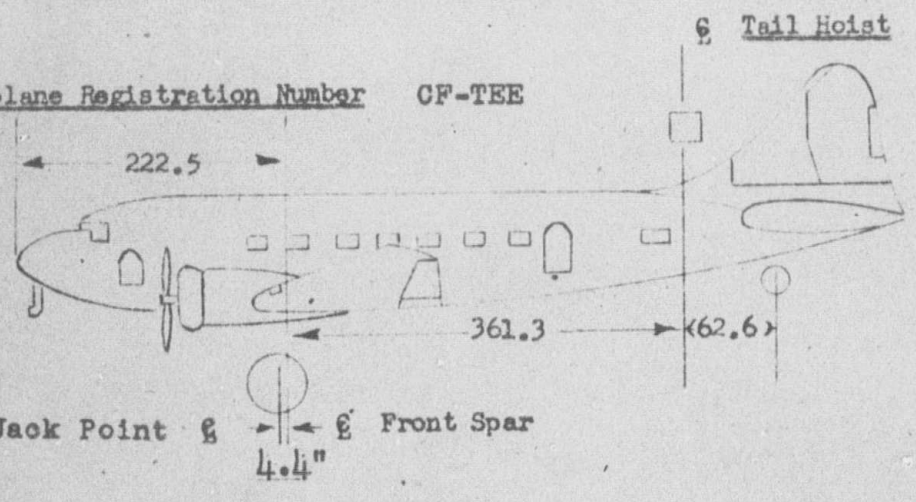
PAGE 5
REPORT RW-0-163
MODEL DC-3

5904

SUBJECT Actual Weight and Balance.

Weight Empty Data

Airplane Registration Number CF-TEE



Level Flight Position *

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	7,925	- 5	0	7,920
Right Wheel	7,870	0	0	7,870
Tail Hoist	1,475	- 5	0	1,470
Total	17,270	- 10	0	17,260

Less _____ Gals. Oil Sta. 184.5 _____
Less Corrections *

I.C.A.N. Empty Weight 17,831 lbs.

Remarks:

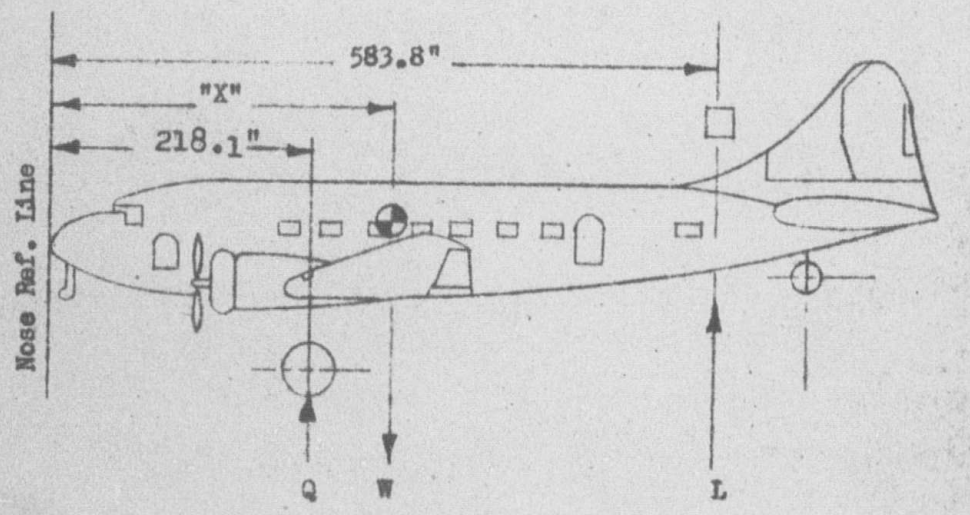
* For explanation of correction made to weight empty, refer to the pages that follow.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 6
REPORT RW-0-163
MODEL DC-3

SUBJECT— TAIL - UP WEIGHING



Main Wheel, left, net		7,920
Main Wheel, right, net.....		7,870
Total Main Wheel	Q =	15,790
Tail Hoist Load Reaction	L =	1,470
Aircraft, as weighed	W =	17,260

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 218.1) + (L \times 583.8) = (W \times X) = 0$$

$$\frac{(Q \times 218.1) + (L \times 583.8)}{W} = X$$

$$\frac{(15{,}790 \times 218.1) + (1{,}470 \times 583.8)}{17{,}260}$$

$$\frac{4{,}301{,}985}{17{,}260} = 249.2"$$

C.G. Location (X) aft of nose ref.t = 249.2 inches.

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY

	Weight	Arm	Moment
Aircraft as weighed	17,260	249.2	4,301,985
Plus Trapped fuel and oil	56	164	9,184
Sub-Total	17,316	249.0	4,311,169

Correction for fixed and removable equipment.

	Qty	Weight	Arm	Moment
Total from above		17,316	249.0	4,311,169
Fixed equipment to be added				
1. Hand fire extinguisher	1	7.1	107	760
2. Flashlight	1	1.2	74	89
3. Log books (D.O.T.)	2	2.5	71	178
4. Tool kit	1	2.0	86	172
5. Carpets, complete	-	55.0	358	19,690
6. Hand fire extinguisher	1	7.1	493	3,500
7. Casserole carriers	1	15.0	540	8,100
8. Tray carriers	2	15.0	512	7,680
9. Janitrol heater (part)	1	101.0	172	17,372
10. Landing flares	2	36.0	604	21,744
11. Seats missing:				
Row 1, complete	-	86.0	216.5	18,619
Row 2, single seat	-	28.0	255.5	7,154
Row 3, single seat	-	28.0	294.5	8,246
Row 4, complete	-	86.0	333.5	28,681
Row 5, complete	-	86.0	372.5	32,035
Row 6, double seat	-	58.0	411.5	23,867
Row 7, single seat	-	28.0	450.5	12,614
12. Instruments on pilot's panel.	3	3.4	44.0	150

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY (Cont'd)

Removable equipment to be deducted.

	Qty	Weight	Arm	Moment
1. De-Icer - Propellers	6	6.0	117	702
2. De-Icer - Wing - Inner	2	12.4	200	2,480
3. De-Icer - Wing - Outer	2	38.1	252	9,601
4. De-Icer - Stabilizer	2	12.0	650	7,800
5. De-Icer - Fin	1	4.3	660	2,838
6. Cargo tie-down straps (fw'd. & rear)	10	10.0	308	3,080
7. Anti-Icer fluid (6 Imp.gals) -		47.5	341	16,198
I.C.A.N. Weight Empty		17,831	251.2	4,479,121

C.G. in % M.A.C. = $\frac{251.2 - 224.4}{138.1} \times 100$

= 19.4% M.A.C.

Note: "Canadair" buffet used".

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 9
REPORT RW-0-163
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
I.C.A.N. Weight Empty	17,831	251.2	4,479,121
Removable equipment "F"	+681	421.7	+287,279
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,004	251.9	4,786,628

Operational Weight empty Arm = $\frac{4,786,628}{19,004}$

= 251.9 inches

C.G. in % M.A.C. = $\frac{(251.9 - 224.4)}{138.1} \times 100$

= 19.9 %

- - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346

Basic operational Weight empty (winter oper) = 19,004

Disposable Load = 6,342

* Disposable for fuel, passengers, stewardess and cargo.

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

5904

SUBJECT Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum line).

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs:

L.F. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

(h) Trapped Fuel & Oil.

56 lbs. (164.0" aft of horizontal reference line).
(1) Trapped oil = 34.5#
(2) Trapped fuel = 21.5#

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)

Aft limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 25,200 lbs. (with dump valves.)
Max. Take-off 24,400 lbs. (without dump valves)
Max. Landing 24,400 Lbs.

SUBJECT— ACTUAL WEIGHT AND BALANCE

References:

Aireraft Specification "A-618-2" Douglas Model DC-3 Series, dated 28 Dec. 1944.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

References:

Douglas DC-3 Dwg. No.: 5071540

Form ACA-8A
(rev.3-1-41)

4

STATEMENT OF CONFORMITY

United States of America

DEPARTMENT OF COMMERCE

Civil Aeronautics Administration

Washington

To the; CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by: DOUGLAS AIRCRAFT COMPANY INC. certify that the Aircraft: D O U G L A S (Make), C-47A (Model), 1 3 5 5 9 (Serial number), has been manufactured, under Production Certificate No. NONE X in conformity with data forming the basis for Type Certificate No. 6 6 9 and any revision or modification thereof approved by the Administration as of 6-10-44 (Date) with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-3 dated december 19, 1944.

CERTIFIED A TRUE COPY OF THE ORIGINAL
W. ALLAN MARTIN
Commissioner of the Superior Court
District of Montreal
W. Allan Martin
(W. Allan Martin, C.S.C.)
Montreal, May 4, 1946.

Date: December 19, 1945

Schuyler Kleinhans
(Signature)

Assistant Chief Engineer

X Delete this phrase if not applicable.

A1-1

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Production Aeroplane having Canadian Type Approval)

Registration CF-TEE

Aeroplane Type Low Wing Monoplane ~~Flying Boat~~ Landplane ~~Sea plane~~ Model DC-3C-SIC3G

Manufacturer Douglas Aircraft Co. Inc. Serial No. 13559

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY:

Normal (a - Public transport passenger
(b - " " " mails
(c - " " " ~~goods~~
(d - Private
(e - Special Work

~~Acrobatic~~
~~Glider~~ ~~Research or experimental~~

PARTICULARS OF ENGINE(S):-

	Left Side		Right Side	
Type	Pratt & Whitney			
Model	R1830-92 (SIC3G)			
Serial No.	20637		352631	
Take-off Power	1200 H.P.		1200 H.P.	
Take-off R.P.M.	2700 R.P.M.		2700 R.P.M.	
Take-off Manifold Pressure	48" Hg.		48" Hg.	
Take-off Octane Rating of Fuel	91 C.F.R.	Minimum	91 C.F.R.	Minimum
Maximum Power (Continuous Operation)	1050 H.P.		1050 H.P.	
Maximum Power R.P.M.	2550 R.P.M.		2550 R.P.M.	
Maximum Power Manifold Pressure	41.5" Hg.		41.5" Hg.	
Maximum Power Octane of Fuel	91 C.F.R.	Minimum	91 C.F.R.	Minimum

PARTICULARS OF AIRSCREWS:

	- LEFT -			- RIGHT -	
Maker	HAMILTON STANDARD PROPELLERS				
Type	HYDROMATIC QUICK - FEATHERING WITH CONSTANT SPEED CONTROL				
Blade Drawing No.	6571A-0			6571A-0	
Blade Serial Nos.	1. 513736		1.	513263	
	2. 513737		2.	513264	
	3. 513738		3.	513265	
Hub Drawing No.	33D50-233			33D50-233	
Hub Serial No.	158363			158234	
Blade Settings	18.5° - 89.5°			18.5° - 89.5°	
Diameter	11' 7"			11' 7"	

PARTICULARS OF ALIGHTING GEAR.

WHEELS: Make Bendix Model B-1 (Tail) B-3 (Main) Tire Goodyear Goodyear Goodyear

FLOATS: Installation Assembly Drawing No. N.A.

SKIIS: Installation Assembly Drawing No. N.A.

Tail Skin N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

	FUEL Position	Capacity Imp. Gals.		OIL Position	Capacity Imp. Gals.
(1)	Centreplane Main L.	168	(1)	Eng. Nac. L.	24
(2)	" " R.	168	(2)	" " R.	24
(3)	" Aux. L.	166.5	(3)		
(4)	" " R.	166.5	(4)		
(5)			(5)		
(6)			(6)		

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT
(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS	
Airspeed Indicator	Pioneer	1426-12-A1	340107	340103
Altimeter	Kollsman	371K-01	3731	3732
Compass Magnetic	Pioneer	1821-2-A	H27110	
Engine Speed Indicator	Gen .Elect.	8DJ13AGD	2530745	2530742
Oil Pressure Gauge	U.S. Gauge	AN1 8/8-14-CX2		
~~Liquid Thermometer~~ Cyl. Temp. ~~(for liquid cooled engines only)~~. Oil Temp.	Weston	827T9Y2		
	Weston	727T52Y2		
Safety Belt(s)				
Fire Extinguisher(s) Hand				
Engine	Kidde	82511	K635671.	K635604L

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT:
(Make extra sheets as required, using following pro forma and classification).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS	
AIRCRAFT INSTRUMENTS: Direct Gyro	Sperry	649742	15040	
Flying and Navigation, E.G. Turn & Bank	Pioneer	1722-1AU-B1	329824	
Bank and Turn Indicator, etc., Turn & Bank (elect.)	Pioneer	15300-2A-A2	225	
Aircraft Operating e.g., Gyro Horizon	Sperry	656768	11627	
Cabin Temperature Rate of Climb	Pioneer	1634-1AF-A1	33330	33963
Outside " Outside Air Temp.				
Flap Indicators. etc.,				
De-icer pres.	U.S. Gauge	AN1 7/8-16-AC2		
POWER PLANT INSTRUMENTS Hyd. Pres.	U.S. Gauge	AN1 7/8-17-CX2	7646	7426
ELECTRICAL EQUIPMENT other than signalling Fuel Pres.	U.S. Gauge	AN1 7/8-15-BT2		
Suction	Kollsman	97-02	14024	14026
SIGNALLING EQUIPMENT Man. Pres.	Kollsman	298H-01	8364	
SAFETY AND EMERGENCY EQUIPMENT Carb. Air	Weston	727T68Y2		
AMENITIES Anti Icer Quantity	Liquidometer	EA102-39-L2-24		
Fuel Quantity	Liquidometer	EA134-8-24		
Radio Compass				
Radio Azimuth	Pioneer	MN-58-A	K1-55	
Ammeter	Gen. Elect.	8DW53AAC5		
Volt Ammeter	Gen. Elect.	8DW53BAC1		
Remote Compass	Pioneer	12074-1-A	19	
Fluxgate Master Ind.	Pioneer	12010-2E-A1	1104	
Repeater Ind.	Pioneer	10061-1AF-B1	530126	
Oxy. Pres.				
Oxy. Flowmeter				

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE

AEROPLANE

DRAWING AND ISSUE NO.		DESCRIPTION
	1.	6000 hour overhaul and conversion from C47A to DC-3C-SIC3G as per Canadair Ltd. specifications (RD-1-106, RD-16111) and Engineering Orders with the addition of T.C.A. requirements as listed in spec. RD-1-108.
	2.	Compliance with all applicable inspection and special notes in C.A.A. airworthiness directive Ad-355.
	3.	Units and components serialized to comply with T.C.A. specification - 19 - issue 2.
	4.	Mandatory Douglas Service Bulletins for C-47 Aircraft, numbers 50, 53, 54 and 75 were not applicable, numbers 44, 56 and 79 were accomplished by Canadair Ltd.
	5.	The following Douglas Service Bulletins for DC-3 aircraft, were accomplished.
D.S.B. 98		Floor beam rework - Sta. 294½.
D.S.B. 175		Reinforcement of frames - Sta. 623.
D.S.B. 207		Control surface static balance.
D.S.B. 211		Inspection of spar cap bolts.
D.S.B. 216 S		Reinforcement of wing flap operating tube support beam attach angle.
D.S.B. 217 S		Inspection of elevator torque tubes.
D.S.B. 218		Replacement of rivets with bolts - rudder lower hinge brkt. support.
D.S.B. 220 Sect. III only		Spar cap bolt locking device.
D.S.B. 222		Rudder pedal torque tube support brkt. rework.
D.S.B. 231		Control column canvas boots replace with rubber.
D.S.B. 228		Repair to rib at Sta. 42.
D.S.B. 234		Elevator tab control horn changed from Al. Al. 248T to 4130 Stl.
D.S.B. 238		Inspection of engine mount to firewall fittings.
D.S.B. 241		Drain hole added to fuel dump chute extension pipe.

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38)

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346 Lbs.	XXXX Lbs.	XXXX Lbs.
	Landing :	24,546 Lbs.	XXXX Lbs.	XXXX Lbs.
Basic operational weight empty:		19,004 Lbs.	XXXX Lbs.	XXXX Lbs.
Disposable Load		6,342 Lbs.	XXXX Lbs.	XXXX Lbs.

Centre of Gravity of Aeroplane at above tare weight is 251.9 inches behind /

XXXXXXXXXXXX Nose Reference Line or 19.9 % M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft.)

List of fixed/ standard/ alternative equipment included in empty weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Reference: Wt. & Balance Report #RW-0-163.			

List of movable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Reference: Wt. & Balance Report #RW-0-163.			

RECORD OF WEIGHT AND C. of G. POSITION:
(See Information Circulars M-3/37 and M-1/38)

	Landplane		Seaplane		Skiplane	
Maximum permissible Take-off:	25,346	Lbs.	XXXX	Lbs.	XXXX	Lbs.
Gross weight : Landing :	24,546	Lbs.	XXXX	Lbs.	XXXX	Lbs.
I.C.A.N Weight Empty:	17,832	Lbs.	XXXX	Lbs.	XXXX	Lbs.
Disposable Load :		Lbs.		Lbs.		Lbs.

Centre of Gravity of Aeroplane at above tare weight is 251.2 . . inches behind/
in XXXXXXXXXX . Nose Reference Line , or . 19.4 % M.A.C. . . . . .
used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs

Reference: Wt. & Balance Report #RW-0-163. List "E".

List of movaable equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.

Reference: Wt. & Balance Report #RW-0-163. List"F".

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origin; that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed.....J. McDuff.....date July 26/46.....
Chief Inspector

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight).

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed. Reg. Fletcher...Air Engineer.....J. McDuff.....Chief Inspector

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed.....H. King.....Date.....July 27/46
Test Pilot

CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category.....
Subdivision.....is recommended.

Signed.....George S. Race.....
Resident Inspector, A. I. D.,
Department of Transport
July 29 '46

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date).....

Signed.....A. L. Blondeau..... 29/7/46
District Inspector, Civil Aviation

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co. Inc.

Type DC-3-S13CG-92 Maker's No. 13559

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95.000	95.000
Length o/a in feet	64.458	64.458
Height o/a in feet	17.000	17.000
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	See weight repart	17,300 lb.
Total weight authorized (fully loaded) in lbs. 25200 for T.O. 24400 for landing	Air speed 257	miles per hour indicated

EQUIPMENT—(Give number and type).

1. Instruments: ~~See List 1 attached~~ See Insp. Release
2. Gauges: ~~See List 2 attached~~ Cert.
3. Lights: See List 3 attached
4. Signals: See List 4 attached
5. Fire Extinguishers: Engines - CO_2 two 12.6 # Cockpit CO_2 one 2# Cabin CO_2 one 2#
6. Parachutes: None
7. Tools: Pilots
8. Other Equipment: Safety belts, maps, emergency flares, first aid, life preservers Verey pistol, oxygen masks, flashlight

Note: These gross weights may be increased by 146 pounds when de-icing equipment installed.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92-S13CG	Pratt & Whitney R-1830-92-S13CG		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	Right	Right		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on July 29/46

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved mod

Registration recommended with the following special conditions

Registration recommended

Date 30/7/46 Signature A. L. Blondeau

Registration approved and Registration Mark C.F. TEE allotted.

Registration { approved or not approved for reasons annexed.

Superintendent, Air Regulations

241.3
6-40

15

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... for Trans-Canada Air Lines

Date of Application..... December 6th, 1945.

OWNER, OR OWNERS OF AIRCRAFT:

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill St., Montreal.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. SYMINGTON	Chairman & President	Montreal	Canadian
HON. WILFRED GAGNON	Director	"	"
J. A. NORTHEY	"	TOronto	"
R. C. VAUGHAN	"	Montreal	"
HON. C. P. EDWARDS	"	Ottawa	"
GEO. HERRING	"	"	"
J. A. WILSON	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)..... Commercial

Usual Station..... Winnipeg

Date of manufacture or reconstruction..... February, 1946

Crew required..... Two

Accommodation for what number of passengers..... Twenty-one passengers and stewardess

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

LIST 1 - INSTRUMENTS

Qty.	Unit	Make	Type
2	Airspeed	Pioneer	1426-1AD2
2	Altimeter	Kollsman	371K-05
2	Rate of Climb Ind.	Pioneer	1634-1 M
1	Magnetic Compass	Pioneer	1821-1
1	Gyro Horizon	Sperry	656768
1	Gyro Horizon	Pioneer	12401-1C
1	Directional Gyro	Sperry	649742
1	Bank & Turn	Pioneer	1722-1AR
1	Bank & Turn	Pioneer	15300-2A
2	Clock	Pioneer	3315
2	Oil Press. Warning	Pioneer	3122-1-A
2	Vacuum Warning	Pioneer	3124
1	Flux Gate Compass	Pioneer	
2	Fuel Press. Warning	Pioneer	3132-3A

LIST 2 - GAUGES

Qty.	Unit	Make	Type
1	Outside Air Temp.	Weston	728T35
2	Carb. Air Temp.	Weston	727
2	Oil Temp.	Weston	727T52
2	Cylinder Temp.	Weston	827T9
1	Fuel Qty. Gauge	Liquidometer	EA-134-8-24
2	Pitot Static Head	Kollsman	372C-02
2	Manifold Pressure	Pioneer	1919-1B-A1
2	Oil Pressure	U.S.Gauge	AW-1 7/8-14CZ
2	Fuel Pressure	U.S.Gauge	AW-1 7/8-15BT2
2	Hydraulic Pressure	U.S.Gauge	AW-1 7/8-17CN
2	Suction Gauge	Kollsman	97-02
1	De-icer Gauge	U.S.Gauge	AW-1 7/8-16AC
2	Voltammeter	G.E.C.	DW-53 #257X85
2	Tachometer Ind.	G.E.C.	DJ-13-AGD
1	Anti-ice Qty. Ind.	Liquidometer	EA102-39-24
2	Pitot Heat Ammeter	G.E.C.	DW-53

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture.

5. Passing Light - red bulb in L.H. landing light fixture.

LIST 4 - RADIO EQUIPMENT

1. Bendix RTA-1B Communication radio-telephone set.
2. Bendix MN-31 Dual Automatic Direction Finder.
3. Bendix MN-53 Marker receiver.
4. AN/ARC-1 VHF Communication Equipment.
5. RC-103 Localizer Equipment.
6. AN/ARN-5 Glide Path Equipment.

16

2
8-45

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

910 Confederation Building, Montreal 2, Que., August 6, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-5	Douglas CF-TEE	5008-T5-5

PURCHASING AGENTS — AUG 8 1946 — DETROIT

A16741

TRANSPORT-RECORDS
AUG 7 A.M.
File 5008-T5-5

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans-Canada Air Lines.

(b) Fees $10.00 (Department Receipt No. 60123) forwarded under Cash Book Folio No. 41.

(c) Copy of Inspection Release Certificate

(d) Copy of Statement of Conformity

(e) Copy of Weight and Balance Report

2. The radio equipment in this aircraft was inspected and found satisfactory by our Radio Division.

3. The Janitrol heater has not yet been installed in this machine.

4. This application appears in order and issue of Certificates is recommended.

P. L. Rinfret
for J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR
Enc.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102-B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	
NIGHT MESSAGE	17
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			DAYLETTER COLLECT

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

A19950

TRANSPORT-RECORDS AUG 28 A.M. File 5008-TH-5-5

CONFEDERATION BUILDING
MONTREAL 2 QUEBEC AUGUST 26 1946

A M SUTHERLAND
TRANS CANADA AIR LINES
WINNIPEG MANITOBA

AR 379 THE TEMPORARY AUTHORITY PREVIOUSLY GRANTED FOR OPERATION DOUGLAS CF TARE EASY EASY CF TARE DOG QUEEN CF TARE DOG XRAY CF TARE DOG PETER ARE HEREBY EXTENDED NOT VALID AFTER SEPTEMBER TWENTY EIGHTH FORTY SIX SUBJECT THESE AIRCRAFT IN AIRWORTHY CONDITION

2 PB/DH.

J L BLONDEAU
DISTRICT INSPECTOR AIR REGULATIONS

16.00 hrs.
dg

5008-TH-17
TH-24
TH-16

18

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-44

717 Dominion Public Bldg.,
Winnipeg, Man., August 27, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 CF-TEE	5008-T5-5

TRANSPORT RECORDS
AUG 29 A.M.
File 5008-T5-5

D.A.I.
C.A.E.

Controller, Civil Aviation, Ottawa.

1. Please be advised that the above noted aircraft, which is equipped with the Janitrol Heater system was flight tested on August 22, 1946.

A20112

2. The flight test was conducted with the heater delivering maximum output. The Mine Safety Appliance Company tester gave no indication whatsoever of any concentration of carbon monoxide, either at the passenger seat outlets or around the heater and heater exhaust outlet.

3. For your information please.

T.M.Shields,
District Inspector, Air Regulations.

TMS/MC

Mtl - Gnd

2816

COPY
5012

19

TRANSPORT-RECORDS
SEP 21 A.M.
File 5008-T5-5

5008-T5-5

A23651

910 Confederation Building,
Montreal 2, Que., September 20, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TGE

The temporary authority granted on July 30, 1946, for the operation of the subject aircraft is hereby extended not valid after October 27, 1946, subject to this aircraft being in airworthy condition.

The conditions outlined in our letter of July 30, must be complied with at all times.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

20

5008-T5-5

910 Confederation Building,
Montreal 2, Que., October 21, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

TRANSPORT-RECORDS
OCT 23 A.M.
File 5008-T5-5

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TEK

A28268

The temporary authority granted on July 30, 1946, for the operation of the subject aircraft is hereby extended not valid after December 26, 1946, subject to this aircraft being in airworthy condition.

The conditions outlined in our letter of July 30, must be complied with at all times.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

5008-T5-5

910 Confederation Building,
Montreal 2, Que., December 17, 1946.

62802

TRANSPORT - RECORDS
DEC 20 A.M. 1946
File 5008-T5-0

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

Re: Douglas CF-TKE

The authority granted on July 30, 1946, for the operation of the subject aircraft is hereby extended not valid after February 25, 1947, subject to this aircraft being in airworthy condition.

The conditions outlined in our previous letter must be complied with at all times.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

1

ZAR

5008-T5-5 28

910 Confederation Building,
Montreal 2, Que., February 18, 1947.

TRANSPORT - RECORDS
FEB 19 A.M.
5008-T5-5
File

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

71197

Re: Douglas CF-TCK

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after April 24, 1947, subject to this machine being in airworthy condition.

The conditions outlined in our previous letter of authority must be complied with at all times.

Yours truly,

RLR.

J. L. Blondeau,
District Inspector, Air Regulations.

AR

10/2

Noted

L.P.

23

TRANS-CANADA AIR LINES
Serves the Nation.

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2445-3.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-SIC3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-SIC3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-TEA
62	CF-TDO	75	CF-TEB
63	CF-TDP	77	CF-TED
64	CF-TDQ	78	CF-TEE
66	CF-TDS	79	CF-TED
67	CF-TDT	81	CF-TEH
68	CF-TDU	82	CF-TEI
70	CF-TDW	83	CF-TEJ
71	CF-TDX	91	CF-TES
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

C.A.R.

24

L.P.

ORIGINAL
ON FILE 7150-6

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

TRANSPORT-RECORDS
MAR 24 A.M.
5008-75-5
FILE

76734

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5365 (R)
1847 (A)

5008-T4-18-T5-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
O FILE 7150-6
LEJC.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

TRANSPORT-RECORDS
APR 1 P.M.
File 5208-T5-5

0323

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11906	CF-TES
92	13395	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED ON CARDS

ENGINES

18. Number installed: Two

19. Makes: Pratt & Whitney

20. Types: R1830

21. International power of the engine or engines at

(a) Sea Level: 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

each (b) Rated Altitude: 1050 H.P. at 2550 revolutions per minute. (at 7,500 ft.) (International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) (b)

23. Oil: (a) (b)

24. Airscrews: Number fitted: Two Types: Hamilton Standard No.

Pitch: Constant Speed Full Feathering Diameter (22.7.47) 8'2"

25. Weight of aircraft empty (including water in the radiators):

(a) Landplane	10,272	lbs.
(b) Seaplane		lbs.
(c) Skiplane		lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	4,824	lbs.
(a) Number of tanks: Four		
(b) Capacity of tanks: 670 Imp. gals.		
27. Oil (at 9·0 lbs. per gallon)	432	lbs.
(a) Number of tanks: Two		
(b) Capacity of tanks: 48 Imp. gals.		
28. Weight allowed for crew	340	lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full L.P. (22.7.47) 1483	~~3,332~~	lbs.
32. Maximum total weight authorized		lbs.
Landplane: Landing 24,400 (Except in case of emergency) Take-off	25,200	lbs.
Seaplane		lbs.
Skiplane		lbs.

DELETED (10.7.50)

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)

Landplane: Take-off Twenty-five thousand two hundred pounds.

Seaplane

Skiplane: Landing Twenty-four thousand four hundred pounds. (Except in case of emergency)

34. Minimum crew necessary: Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum. Leading edge of center section of wing.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) m.p.h. and (b) m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated July 30, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 31st day of December, 19 46.

Superintendent, Air Regulations.

28

2462
7-45

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1847

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines.
2. Christian name
3. Address 360 McGill Street, Montreal, P.Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Co., Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TKE

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC-3C-S1C3G Constructor's No. 13559
8. Place and year of construction of aircraft Santa Monica, California, U.S.A.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) Twenty-four

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a, b, c, d & e
15. Maximum span (in flying position) 95'
16. Maximum length (in flying position) 64'4⅝"
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

27

DC3C (SIC3G) Weight and Speed Limitations.

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level)
Take-off - 26,800 lbs. at sea level) Dump Valves not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

/MIM
/ZC
/MM

26

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		July 30, 1947. 22/7/48 12/7/49 11.7.50 10.7.51	

except 1

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Landing Lights
Navigation Lights

2 Engine Revolution Counter
2 Oil Pressure Gauge
2 Oil Temperature Gauge
Emergency Flares

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

Maximum Take-off + Landing Weight
DC3 aircraft - revised 28.9.53 inserted
in Cofa (13.6.55)

Total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

WEIGHT AND BALANCE REPORT
FOR[illegible] CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT.

(11.7.49)

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

2462A
8-41

/20

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5565

NATIONALITY AND REGISTRATION MARKS CF-TEE

1. Type and description	Douglas DC-3C-S1C3G
2. Name and address of constructor	Douglas Aircraft Co. Inc., Santa Monica, California, U.S.A.
3. Constructor's serial number	13559
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill Street, Montreal, P. Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 30th, day of July, 19 46, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TEE and is of Canadian nationality.

Given at Ottawa this 31st, day of December, 19 46.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

5008-T5-5

Ottawa, Ontario.
April 5th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5365 and Certificate of Airworthiness No. 1047, together with Engine and Journey and Aircraft Log Books, for your Douglas (DC-3-G103G) aircraft, CF- TEB.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

31

CAR

5008-T5-5

910 Confederation Building,
Montreal 2, Que., April 15, 1947.

TRANSPORT - RECORDS
APR 18 A.M.
File 5008-15-5

A.M. Sutherland, Esq.,
Director of Mtce. & Overhaul,
Trans Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

Dear Sir:

Re: Douglas CF-TEE 5340

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter of authority.

Yours truly,

J. L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

DG

32

TGS/ZC

7350-6 5008-T5-1
5008-T4-13 " " -2
" " -14 -4
-15 -5 ←
-16 -6
-17 -8
-19 -9
-20- -10
-21 " " -19
-23
-24
-25
" " -26

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

ATTENTION: Mr. J. T. Dyment.

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. WINNIPEG MONTREAL

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.) (1)	17.0 lbs.
Aluminum Pitcher (1)	0.4 "
Lunch Boxes, less food (24)	35.3 "
Thermos, 2 qt. less fluid (5)	20.3 "
Silverware - complete sets (24)	9.4 "
Paper Drinking Cups (25)	0.2 "
Lucite Cup Handles (30)	2.1 "
Lunch Box Inserts (30)	3.1 "
Plastic Cups & Plates, sets (24)	5.7 "
Hot & Cold Cups (60)	1.8 "
General Utensils, allowance	2.0 "
Casseroles & Covers (Round) (24)	13.0 "
Service Trays, large, (6)	6.0 "
Cafatray, small, (2)	0.6 "
Snack Kit (1)	6.8 "
Pillows (at seats, complete with covers & slips) (21)	21.4 "
Sickness Containers (at seats) (21)	2.5 "
Whisk, Toy Broom and 2 Dusters	1.2 "
Dust Pan - long handle (1)	0.4 "
Cleansing Tissue, Kleenex, 1 box	0.6 "
Stewardess Satchel (1)	7.9 "
Linen Hand Towels (12"x 10") (12)	0.9 "
Flyswatter (1) & Atomizer (1)	1.2 "
Blankets (in rear service compartment) (12)	36.0 "
Headrest covers (on seats) (21)	2.1 "
Sanitary Napkins (12)	1.0 "
First Aid Kit (1)	4.1 "
Shopping Bags (3)	0.6 "
Oxygen Masks (above seats) (21)	15.8 "
Spare Sickness Containers (10)	1.2 "
Spare Hand Towels (12) Headrest Covers (10)	1.9 "
Spare Oxygen Masks (5)	3.8 "
Spare Pillows complete (3)	3.1 "
Crew Baggage (3)	60.0 "
Magazines (in binders) (10)	17.9 "
Bible (1)	1.5 "
Life Belts - Passengers (21)	54.6 "
Life Belts - Crew (3)	7.8 "
Wash Water (2½ Imp.gals.)	25.0 "
Cargo Tie-down straps (cargo compts.) 10 sets	10.0 "
Anti-Icer Fluid (2½ Imp.gals.)	19.9 "
Propeller De-Icers (6)	6.0 "
Wing, inner, De-Icers (2)	12.4 "
Wing, outer, De-Icers (2)	38.1 "
Stabilizer De-Icers (2)	12.0 "
Fin De-Icers (1)	4.3 "
Cabin & Toilet Frost Shields (15)	0.9 "
Stewardess	120.0 "
	619.8 lbs.

Amendments to C. of A. dated July 22, 1947: ✓

Item 25 (a) Landplane - "18272" deleted. "18121" inserted.
Item 31 " - "1332" deleted. " 1483" inserted. ✓

Fred W Bone

FWB/MC

for District Inspector, Air Regulations.

A13405

JUL 25 AM

File 5508.T5-5

AIRCRAFT INSPECTION REPORT

Date Inspection July 22, 1947 Owner Trans-Canada Air Lines Reg. Markings CF-TEE

Type Douglas DC-3 S1C3G-92 Serial No. 13559 Purpose Commercial

C. of A. 1847 C. of R. 5365 Date of Last Inspection July 30, 1946

Previous C. of R. & A. Expires July 30, 1947 Present C. of A. & C. of R. Expires 21/7/48

AIRFRAME

Crew 2 Passengers 21 No. of Fuel Tanks 4

Capacity 670 Imp. gals. No. of Oil Tanks 2 Capacity 48 Imp. gals.

Total Hrs. Since Purchase 3231:28 Since conversion July 30/46 3128:38 Since Reconditioned —

Mrs Jones to note / Noted

WEIGHTS

A13404

		Gross	Tare	Empty	Carrying Capacity
Landplane	Passenger	25200	(1) 18744	18121	1483
	Freighter	(x) 26200	18744	18121	(x) 2483
Seaplane	Passenger	(1) Includes Item "F" I.C.A.N. Equipment - particulars overleaf.			
	Freighter	Aircraft reweighed, difference more than ½ of 1%. C. of A. amended. See overleaf.			
Skiplane	Passenger				
	Freighter	(x). T.C.A. operating weights.			

ENGINE(S)

LEFT		RIGHT	
Make P. & W.	Model Twin Wasp S1C3G	Make P. & W.	Model Twin Wasp S1C3G
Serial No. P-133242	H.P. 1050 @ 2550 RPM	Serial No. 21483	H.P. 1050 @ 2550 RPM
Total Hrs. Since New 3022:23		Total Hrs. Since New 3574:38	
Since Complete Overhaul 402:31		Since Complete Overhaul 659:39	

PROPELLER(S)

LEFT		RIGHT	
Make Hamilton Standard	Model Hydromatic Full Feathering	Make Hamilton Standard	Model Hydromatic Full Feathering
Diameter 11'6"	Pitch 18.5° - 89.5°	Diameter 11'6"	Pitch 18.5° - 89.5°
Blade Design 6571A-0		Blade Design 6571A-0	
Mfg. No. 1 514720 2. 514721	3. 514722	Mfg. No. 1 513260 2. 513261	3. 513262
Total Hrs. 1 2268:58 2. 2268:58	3. 2268:58	Total Hrs. 1. 2565:05 2. 2565:05	3. 2565:05
Hub Design 33D50-101	Mfg. No. 158634	Hub Design 33D50-233	Mfg. No. 158233
Total Hours 2268:58		Total Hours 2565:05	
Hrs. Since Last Overhaul 402:31		Hrs. Since Last Overhaul 1797:23	
Date of Last Overhaul 6/6/47		Date of Last Overhaul 18/5/46	
Date of Last Inspection July 22/47		Date of Last Inspection July 22/47	
Date Purchased 22/10/46		Date Purchased 18/5/46	

UNDERGEAR

Skis —	Radio 1947-48 Radio Licence applied for.
Floats —	Chassis —
Wheels Bendix - B3	Chassis Standard - Retractable.

OVER

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

34 2 6-47

1 Montgomery Avenue, Toronto, July 12th, 1948
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-5	Renewal of Certificates of Registration and Airworthiness - aircraft CF-TEE	5008-T5-5

A15722

TRANSPORT-RECORDS
JUL 13 P.M.
File 5008-T5-5

Controller of Civil Aviation,
Department of Transport,
OTTAWA.

1. Douglas DC3C-S1C3G aircraft, C F - T E E, Serial No. 13559, owned by Trans-Canada Air Lines, has recently been reconditioned by them at Malton, Ontario.

2. Proper entries have been made in the Log Book of this aircraft that it was airworthy on July 12th, 1948.

3. These entries have been signed by Mr. E. Gee as Air Engineer.

4. Certificate of Registration No. 5365 and Certificate of Airworthiness No. 1847 have been renewed valid until July 12th, 1949.

C.A. Brethour,
A/D.I.A.R.,
Toronto.

CAB:alb

36

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-T5-5

PA
5008-T5-5
TOR:

Toronto, Ontario.

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

C F - T E E

Registration Markings ..... Douglas DC3C-S1C3G .....

Aircraft Type ..... Trans-Canada Air Lines .....

Owner ..... Malton, Ontario .....

Place of Inspection ..... July 11th, 1949 .....

Date of Inspection .....

Satisfactory inspection report has been received from Air Engineers ..... Emery Gee ..... and Test Pilot ..... 5365 ..... 1847 .....

C. of R. No. ..... July 11th, 1949 and C. of A. No. ..... were renewed on ..... July 11th, 1950 valid until .....

Remarks ..... Certificate of Airworthiness endorsed to read:- The Aircraft Operating Manual with amendments, ... approved loading chart (DC3 S1C3G) Weight and Speed ..... limitations form part of the Certificate of Air- ..... worthiness and must be carried on board the aircraft during flight.

(D.W. Saunders),
District Inspector, Air Regulations;
for (District Controller, Air Services),
Toronto.

35

July 11th, 1949.

MEMO TO: District Inspector, Air Regulations.

MEMO FROM: Aircraft Inspector.

SUBJECT: Douglas DC-3 aircraft C F - T E E

Information Circulars T/5/39 - T/5/46 and T/3/48 complied with and found satisfactory.

Inspection of Log Books carried out and found in order.

Recommended for renewal of Certificate of Airworthiness.

Operation Manual is to be carried in the aircraft.

H. Bow

OTTAWA

JUL 13 1949

37

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-T5-5 **15089** TOR: 5008-T5-5

Toronto, Ontario.

TRANSPORT - RECORDS
JUL 12 P.M.
File 5608-T5-5

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings .C.F.-.T.E.E.....

Aircraft Type .....Douglas DC3C-S1C3G.....

Owner .....Trans-Canada Air Lines.....

Place of Inspection ...Malton, Ontario.....

Date of Inspection ....July 11th, 1949.....

Satisfactory inspection report has been received from Air Engineers .....Emery Gee..... and Test Pilot .....

C. of R. No. ....5365..... and C. of A. No. 1847.....

were renewed on ...July 11th, 1949.. valid until .....

.....July 11th, 1950

Remarks Certificate of Airworthiness endorsed to read:-

.....The Aircraft Operating Manual with amendments,.....

.....approved loading chart (DC3 S1C3G) Weight and Speed

.....limitations form part of the Certificate of Air-

worthiness and must be carried on board the aircraft during flight.

noted DSI

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

38

TRANS-CANADA AIR LINES

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF- TEE Serial No. 13559

1. C. of A. No. 1847 Expires 11-7-50 C. of R. No. 5365 Expires 11-7-50
Aircraft Data - Manufacturer Douglass A/C Co. Model DC-3
Hours flown - Since New _____ Since Overhaul _____
Engine Data - Manufacturer Pratt & Whitney Model S1C3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 350102 L		
(2) CP 22719 R		
(3)		
(4)		

Signature of Applicant E. Gee
Date July 10, 1950

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E. Gee
"B" Engineer
Date July 10, 1950

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot
Date _____

4. The following documents are attached:

Certificate of Airworthiness	[x]
Certificate of Registration	[x]
Weight and Balance Report (when applicable)	[ ]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed H Batt
~~District Aircraft~~ Inspector
Date July 10/50

7. C. of A. and C. of R. renewed, not valid after.

(Date)- July 10th, 1951
Permissible Gross Weights - Wheels Landing 24,400 lbs. Take-off 25,200
- Skis
- Floats

NOTED

Signed _____
District Superintendent, Air Regulations
Date July 10th, 1950

Other Action:- Items 18 to 40 inclusive on the Certificate of Airworthiness have been deleted.

8. H.Q. Action C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

39 2 6-47

Toronto, Ontario, July 10th, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-5	Renewal of Certificates of Registration and Airworthiness - CF-TEE	5008-T5-5

TRANSPORT - RECORDS
JUL 13 1950
File 5008-T5-5

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

13695

Attention: Superintendent, Air Regulations

1. Herewith your copy of form 244, application for Renewal of Certificate of Airworthiness, for Douglas DC-3 aircraft, C F - T E E.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.

CANADA

10 2444
4-50

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEE SERIAL NO. 13559

1. C. of A. No. 1847 Expires July 10/51 C. of R. No. 5365 Expires July 10/51
AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3
Hours flown—Since New ..... Since Overhaul .....
ENGINE DATA—Manufacturer Pratt & Whitney Model SIC3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	21483 Left		
(2)	11529 Right		
(3)			
(4)			

Signature of Applicant E Gee

Date July 9/51

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Gee
"B" ENGINEER

Date July 9/51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:
Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5365 ..... and C. of A. No. 1847 ....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed .....
DISTRICT AIRCRAFT INSPECTOR

Date July 9, 51

7. C. of A. and C. of R. renewed, not valid after (Date) July 10th, 1952.
Permissible Gross Weights— Wheels Take-off 25,200 pounds Landing 24,400 pounds (Except in case of emergency).
Skis
Floats

Signed Maurice E. Leach
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date July 9th, 1951.

Other Action:—

8. H.Q. Action— C.A.R.
C.A.E.

20241

TRANSPORT - RECORDS
JUL 10 P.M., 1951
File 5008-T5-5

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W...July.9th,.1951.....

Your File 5008-T5-5 | SUBJECT Renewal of Certificates of Registration and Airworthiness CF-TEE | Our File 5008-T5-5

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC-3C-S1C3G aircraft, CF-TEE.

Maurice E. Lauch

for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

19604

TRANSPORT - RECORDS
JUL 4 A.M. 1952
File 5008-T5-5

44

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W.... July. 3rd. 1952.....

Your File 5008-T5-5 | SUBJECT Renewal of Certificates of Registration and Airworthiness | Our File 5008-T5-5

CF - T E E

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF -T E E

2. Copy of T.C.A. Flight Report attached.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
1.

27

2444
4-50

43

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEE SERIAL NO. 13559

1. C. of A. No. 1847 Expires July 10/52 C. of R. No. 5365 Expires July 10/52

AIRCRAFT DATA—Manufacturer Douglas A/C Corp Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model S1E3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A59E		
(2) 61A35E		
(3)		
(4)		

Signature of Applicant E Gee

Date July 2/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Gee
"B" ENGINEER

Date July 2/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☒

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed D Bell
DISTRICT AIRCRAFT INSPECTOR

Date July 3/52

7. C. of A. and C. of R. renewed, not valid after (Date) July 10th 1953

Permissible Gross Weights— Wheels - 25, 200 lbs.
Skis
Floats

Signed [illegible]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date July 3rd 1952.

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

(7) AIRCRAFT TIME DATA		(8) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION YZ	DATE 2/7/52			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	282.07			
TOTAL AIRCRAFT TIME	17032.24			

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1)

AIRCRAFT No. 278 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	W N SPRATT	DESIGNATOR	DATE
FIRST OFFICER	J E WIGLE	231	2/7/52
STEWARDESS	K BARRY		
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
OW	Y2	06.20	07.51	1	31

OIL ADDED — INDICATE QUARTS

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

TOTAL TIME 1 31

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	
			THROTTLE MARKED 14" at 2050 RPM at 4000'

SIGNED W N Spratt Per BY CAPTAIN

24704

47
JUL 10 P.M. 1953
File 5008-T5-5

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W.....July 9th 1953...

Your File 5008-T5-5

SUBJECT Renewal of Certificates of Registration and Airworthiness

Our File 5008-T5-5

CF TEE

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF- TEE

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

2

47

2444
8-52

46

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF – TEE SERIAL No. 13559

1. C. of A. No. 1847 Expires July 10/53 C. of R. No. 5365 Expires
Aircraft Data—Manufacturer Douglas Aircraft Corp Model DC-3
Hours flown—Since New Since Overhaul
Engine Data—Manufacturer Pratt & Whitney Model SIC3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61AS-8E		
(2) 61A7S-E		
(3)		
(4)		

Signature of Applicant [signature]

Date July 7/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature] "M" Licence No. YZM-32

Date July 7/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot

Date

4. The following documents are attached:

Certificate of Airworthiness	✓
Certificate of Registration	✓
Weight and Balance Report (when applicable)	✓

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5365 and C. of A. No. 1847, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
District Aircraft Inspector

Date July 9/53.

7. C. of A. and C. of R. renewed, not valid after.

Date July 10, 1954

Permissible Gross Weights—Wheels - 26,200 lbs.
—Skis
—Floats

Signed [signature]
District Superintendent, Air Regulations

Date July 9th 1953.

Other Action:—
Maximum all-up weight of 26,200 lbs. has been endorsed on C. of A. July 9th 1953.

8. H.Q. Action C.A.R.

C.A.E.

Noted

(1)

AIRCRAFT No. 378 — TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	W. N SPRATT	DESIGNATOR	DATE
FIRST OFFICER	H.C. LANGLOIS	271-7	7-7-53
STEWARDESS	J-M. KING		
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT		FLIGHT TIMES				OIL ADDED (INDICATE QUARTS)			
FROM	TO	OFF	ON	HOURS	MIN	LEFT	RIGHT	STA	BY
WL	OW	06.41	0722		41				
OW	YZ	07.46	0926	1	40				
			TOTAL TIME	2	21				

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

Copy to Ukuk

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED ..... CAPTAIN

(7) 45

AIRCRAFT TIME DATA

STATION YZ DATE July 7/53

TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 155.59

TOTAL AIRCRAFT TIME 20152.07

(8)

WORK TO BE DONE NEXT CHECK STATION

STA.	BY

(9)

DEFECTS RECTIFIED AND OTHER WORK DONE

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	a/c Pre flt checked	YZ	7-7-53 J. Hardy

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T5-5

DUPLICATE - DIST. FILE NO. T5-5

TO: Director of Air Services,
Ottawa, Ont. Attn: S.A.R.

TRANSPORT - RECORDS
JUN 28 A.M.
File 5008-15-1

AIRCRAFT LICENSING RECORDS

09334

1. Registration mark CF- TEE 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1847 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....
   Christian name ....

8. Address of owner .....
   .....
   Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from July 10th, 1954 to July 10th, 1955

Temporary authority from ..... to .....

Date June 25th, 1954

F.W. Bone,
District Superintendent Air Regulations

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-5

DUPLICATE - DIST. FILE NO. 49

TRANSPORT - RECORDS
JUN 14 AM
File 5008-T5-5

HQ

AIRCRAFT LICENSING RECORDS

8407

1. Registration mark CF- T E E 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1847 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines, ... Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date ..... Copy attached ☐

Wt. and balance amendment ☐ Date ..... Copy attached ☐

Amendment not otherwise covered C. of A. Page 3- "Maximum Take-off and Landing Weights-DC3 aircraft." Revised Sept. 28, 1953 - inserted. ✓ Endorsed re validity of C. of A. as per Instructions H.Q. letter file No. 7150-6, dated May 13, 1955.

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

(D.W. Saunders)
District Superintendent Air Regulations

Date June 13, 1955.

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

51

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5365

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E E	Douglas Aircraft Company Inc. -Douglas DC3(S1C3G)	1 3 5 5 9

(4) NAME OF OWNER TRANS-CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, Quebec.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE July 30th, 1946.

SEAL

SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

50 2462 2-56

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 1847

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E E	Douglas Aircraft Company Inc.-Douglas DC3(S1C3G)	13559

(4) CATEGORY: Commercial

LANDPLANE [*] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE July 30th, 1946.

SEAL

[redacted]
SUPERINTENDENT, AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

SPECIAL COMPULSORY CONDITIONS:

1. Maximum total weight authorized: Landplane : 25,200 lbs.

2. This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister.

[redacted]

Controller, Civil Air Regulations.

CERTIFICATES OF AIRWORTHINESS SHALL NOT REMAIN VALID FOR A PERIOD EXCEEDING TWELVE MONTHS EXCEPT AS MAY BE DIRECTED BY THE MINISTER.

NO ENTRIES OR ENDORSEMENTS MAY BE MADE ON THIS CERTIFICATE EXCEPT IN THE MANNER AND BY THE PERSONS AUTHORIZED BY THE MINISTER.

IF THIS CERTIFICATE IS LOST, THE MINISTER OF TRANSPORT SHOULD BE INFORMED AT ONCE.

ANY PERSON FINDING THIS CERTIFICATE SHOULD FORWARD IT IMMEDIATELY TO THE MINISTER OF TRANSPORT, OTTAWA, ONTARIO, CANADA.

29235

COPY

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
FEB 18 P.M.
File 5008-T5-5

52

ORIGINAL ON FILE..... 5008-T4-21

COPY FOR FILE..... 5008-T5-1 5008-T5-8
-T5-19 -T4-25
-T5-6 -T4-25

Winnipeg 1, Manitoba, February 14, 1957.

Our File
5008-T-4-21
-T-5-1
-T-5-19
-T-5-5
-T-5-6
-T-4-25
-T-4-25

Douglas DC-3 Aircraft
TRANS-CANADA AIRLINES

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. New forms 2462 and 2462A for the aircraft listed below have been issued to replace the old ones:-

Douglas DC-3	CF - TEU	CF - TEZ
"	" - TEA	" - TEK
"	" - TEB	" - TEP
"	" - TEC	

2. Enclosed herewith are blue copies of the Certificate of Registration and the Certificate of Airworthiness.

(Sgd)————————?
for District Director, Air Services.

Encls.

8
3-55

CANADIAN NATIONAL TELEGRAPHS

716

14252

1958 AUG 5 PM 4 22

CNT020 21/18

ST WINNIPEG MAN 5 119PMC

DIRECTOR GENERAL AIR SERVICES

DOT ATTN CONTROLLER CIVIL AIR OPTNS AND REGS

OTTAWA

ARW148 RECOMMEND CERTIFICATES OF REGISTRATION AND AIRWORTHINESS CHARLIE FOXTROT TANGO ECHO ECHO BE CANCELLED CANADIAN REGISTRY THIS DATE

CRATON REGIONAL DIRECTOR AIR SERVICES

ARW148

(310P).

Noted

Coded

TRANS - CANADA AIR LINES

13802

TRANSPORT - RECORDS
AUG 7 P.M.
File 508-T5-5

Stevenson Field
Winnipeg, Manitoba
August 5th, 1958

File: 704-12

Department of Transport
Air Services Branch
Civil Aviation Division
Room 602
Post Office Building
Ottawa, Ontario

Dear Sirs:

We are enclosing herewith the original Certificate of Airworthiness and Certificate of Registration for aircraft 378 registered under CF-TEE recently sold to Frontier Air Lines. These Certificates are for cancellation and request they be returned when completed.

Thanking you for your co-operation in this matter.

Yours truly,

J.P. Spurr
Supervisor of Reclamation.

Atts.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

5 5 2462 2-56

SERIAL NO. 1847

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E E	Douglas Aircraft Company Inc.-Douglas DC3(S1C3G)	1 3 5 5 9

(4) CATEGORY: Commercial — LANDPLANE [x] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE July 30th, 1946.

SEAL

L. R. Boston

~~SUPERINTENDENT, AIR REGULATIONS~~

Controller, Civil Air Regulations.

SEE REVERSE SIDE

54

2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5365

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E E	Douglas Aircraft Company Inc. -Douglas DC3(S1C3G)	1 3 5 5 9

(4) NAME OF OWNER TRANS-CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, Quebec.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE July 30th, 1946.

SEAL

L. R. Slaton

[redacted]
Controller, Civil Air Regulations.

SEE REVERSE SIDE

GJ/MHK

(AHL)

5008-T5-5.57

Ottawa, Ontario,
August 11th, 1958.

Trans-Canada Air Lines,
Stevenson Field,
Winnipeg, Manitoba.

Dear Sirs:- Attention J. P. Spurr.

We acknowledge receipt of your letter of August 5th, 1958, and wish to advise that the Certificates of Registration and Airworthiness for Douglas DC3C (SIC3G) aircraft, CF-TEE, were cancelled on the Aircraft Register on August 5th, 1958.

The formal certificates are being held in this office in accordance with Paragraph 807 of the Air Regulations which states:-

> "Where any licence, certificate, permit or other document issued under these regulations has been cancelled or suspended or has expired or become void, the person to whom it was issued, shall forthwith return it to the Minister. "

Yours truly,

(J. R. K. Main),
Director of Civil Aviation.

cc: Winnipeg

DEPARTMENT OF TRANSPORT

INTER-DEPARTMENTAL CORRESPONDENCE

602 Wpg. Gen. Post Off. Bldg.,
266 Graham Ave., Wpg. 1, Man., Feb. 18/59.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
8-14-14		5008-T-4-14 (AHW) 5008-T-5-5 5008-T-4-21 5008-T-5-9

SUBJECT: Registration Cancellations - Frontier Airlines

TRANSPORT - RECORDS
FEB 20 P.M.
5008-T-5-5
File 5008-T-4-14

34225

Director General, Air Services,
Department of Transport,
OTTAWA, Ont.

Attention: Controller, Civil Air Operations and Regulations.

1. This office has been advised by Frontier Airlines, Director of Flight Operations, that the Federal Aviation Agency, Washington, D.C., have never received final notification from this Department that the Canadian registry for the following aircraft have been cancelled:

CF-TDM (TCA 361) - Serial No. 12007
CF-TDU (TCA 368) - Serial No. 12106
CF-TEI (TCA 382) - Serial No. 12442
CF-TEE (TCA 378) - Serial No. 13559

He advises that they are holding the certificates of registration for these aeroplanes until they get the cancellations from the Department and have issued temporary operating permits until April 5, 1959.

2. It is requested, please, that Headquarters advise Robert E. Forbes, Chief, Aircraft & Airman Records Branch, Federal Aviation Agency, Washington 25, D.C., cancelling the Canadian registry for the above aircraft as soon as possible.

COPY ON
5008-T4-21

— T5-9,
— T5-5

for Regional Director, Air Services.

GJ/EG

5008-T4-14 (SRL)
5008-T4-21
5008-T8-5
5008-T8-9
5008-T4-24

OTTAWA, Ontario.
February 24, 1959.

Mr. Robert E. Forbes,
Chief, Aircraft & Airman Records Branch,
Federal Aviation Agency,
Washington 25, D.C.,
U.S.A.

Dear Sir:

This is to confirm that the registrations of the following aircraft were cancelled on the Canadian Aircraft Register on the dates included below:

Douglas DC8(SIC30) Serial No. 12007, cancelled 14.8.58
Douglas DC8(SIC30) Serial No. 12106, cancelled 18.9.58
Douglas DC8(SIC30) Serial No. 13550, cancelled 5.8.58
Douglas DC8(SIC30) Serial No. 12442, cancelled 14.8.58
Douglas DC8(SIC30) Serial No. 12141, cancelled 18.9.58

Yours truly,

(J.R.K. Main),
Director of Civil Aviation.

cc: Frontier Airlines Inc.
Denver, Colorado.
U.S.A.

cc: Winnipeg

cc: Montreal

VOL. 1

5008 - T 5 - 6

FILE No. 5008 - T 5 - 6 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JUNE, 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TEF - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 4 1959	31740	CAE	2a	J.P.V. - FEB 4 1959	
	996	SRL	5.4.59		MAR 24 1959
MAR 24 1959	MAR 24 1959	SAE A			APR - 6 1959
APR - 6 1959	995	SRL			APR - 6 1959
APR - 9 1959	1422	CAE			APR - 6 1959
APR 13 1959	BF 15/4/59	SRL	5-5-59		MAY - 6 1959
	4796	SRL			MAY - 4 1959
MAY - 4 1959	BF 6/5/59	SRL			MAY - 4 1959
	8462	CAE		J.P.V.	JUN 10 1959

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

3-46
C.P. 58825
O.L.L. Co.

FILE No. 5008 - T5 - 6

VOLUME No. 1

VOL. 1

5008 - T5 - 6

DEPARTMENT OF TRANSPORT

FROM JUNE 1946

TO

SUBJECT AIRCRAFT INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - TEF — DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED | UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG 1 9 1946	18529	S.A.R.		GJ	AUG 20 1946
SEP 1 1946	21784.	S.A.R.		GJ	SEP 1 1946
OCT 1 1946	24948	S.A.R.	~~14.10.46~~ EC	GJ	DEC 5 1946
DEC 10 1946	BJ 14-12-46	SAR			MAY 23 1947
MAY 23 1947		Trans			MAY 30 1947
MAY 26 1947		CRI			MAY 30 1947
AUG 12 1947	15342.	647 CAR		GJ	MAY 23 1947
		CA.E		GJ	AUG 18 1947
JUL 29 48	17713	CAR.		GJ	JUL 31
SEP 10 1948	23185	CAR		GJ	SEP 1 1948
		CAE			SEP 13 1948
JUL 10 1950	14863.	CAR		GJ	JUL 11 1950
		CAE		S.D.	11 1950
JUN 27 1951	17961	CAR		GJ	JUN 28 1951
JUN 28 1951		CAE			JUN 29 19
JUL 4 - 1952	19602	CAR		GJ	JUL 7 1952
JUL 7 1952 JUN 22 1953		CAE			JUL 8 - 1952
	20451	CAR		GJ	JUN 23 1953
JUN 23 1953 JUN 22 1954		CAE			JUN 24 1953
	8852	CAR			JUN 23 1954
JUN 6 1955	7348	ARL		GJ	JUN 6 1955
JUN 3 1956 Gotta	16412	ARR			JUN 25 1956
MAR 26 1957	32978	ARL			MAR 7 1957
JAN 20 1958 JAN 23 1959	30260	CAE (1)			JAN 23 1959
		SRC			JAN 23 1959

CF-TEF 1

Form ACA 502
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
(Rev. 3-1-44)

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: Douglas
MODEL: C47A
MANUFACTURER'S SERIAL NO.: 13560
C. A. A. IDENTIFICATION MARK:

MANUFACTURER OF ENGINE: Pratt & Whitney
MODEL: R1830 S1C3G (-92)
SERIAL NO.: LE: 21497 RE: 21761

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows:

NONE in the sum of $....., in favor of
(Mortgage, mechanic's lien, etc.)

..... whose address is .....

For and in consideration of the sum of One Dollar & other valuable consideration ~~dollars~~ WAR ASSETS CORPORATION, the undersigned, whose
(Seller)
address is 4095 St. Catherine St., W., Montreal, Quebec,
does this 1st day of May, 1946, sell, grant, transfer, and deliver all of his above-described right, title, and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto .....
(Purchaser)
TRANS-CANADA AIR LINES
whose address is P.O. Box 2973, Winnipeg, Manitoba, and to their executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, we have set our hand and seal this 1st day of May, 1946

WAR ASSETS CORPORATION [SEAL]
(Seller's signature)
BY: Geo A Cruickshank
Geo.A. Cruickshank, Treasurer

J.D.C.

ACKNOWLEDGMENT

STATE OF
COUNTY OF } ss:

(INDIVIDUAL OR PARTNER)

On this ..... day of ....., 19....., before me personally appeared the above-named seller, to me known to be the person described in and who executed the foregoing bill of sale, and acknowledged that he executed the same as his free act and deed.

(CORPORATION)

On this 1st day of May, 1946, before me appeared Mr. Geo. A. Cruickshank, to me personally known, who, being by me duly sworn, says that he is the Treasurer of the War Assets Corporation corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of the Board of Directors and said Geo. A. Cruickshank acknowledged the foregoing bill of sale to be the free act and deed of said corporation.

Given under my hand and official seal the day and year above written.

D R Elmitt
~~Notary Public.~~
Justice of the Peace

MY COMMISSION IS FOR LIFE

My commission expires ~~1951~~, 19.....
[SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—10683-2

2

2

A18529

5008-T5-6

910 Confederation Building,
Montreal 2, P.Q., August 17, 1946

TRANSPORT-RECORDS
AUG 19 A.M.

Trans-Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

Gentlemen: Re: Douglas CF-TEF File 5008-T5-6

This letter will constitute your authority not valid after September 16, 1946, for the operation of the subject aircraft on your regular services.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations

JLB/Blc

c.c. Headquarters

A21784

5008-T5-6

~~AR1/52~~

910 Confederation Building,
Montreal 2, Que., September 10, 1946.

TRANSPORT-RECORDS
SEP 11 A.M.
File 5 608 T5-6

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

Gentlemen:

Re: Douglas CF-TAT

The authority granted you on August 17, 1946, for the operation of the subject aircraft, is hereby extended not valid after October 16, 1946, subject to this machine being in airworthy condition.

noted
JJ

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations.

AR

ACTUAL WEIGHT AND BALANCE

MODEL DC-3

T.C.A. CF-TEF

REPORT NO: RW-0-166

Canadair
Limited
POST OFFICE BOX 6087
Montreal

5905

CANADAIR

LIMITED

MONTREAL, CANADA

REPORT NO. RW-0-166

TITLE ACTUAL WEIGHT AND BALANCE

MODEL DC-3

PREPARED W. Baran

CHECKED

APPROVED J. Wilson
R. J. Hebert

DATE 5th August, 1946.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 1
REPORT RW-0-166
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I N T R O D U C T I O N

Airplane model C-47 converted to a DC-3-SIC3G for commercial use under contract for Trans-Canada Air Lines bearing registration number CF-TEF, was weighed at Canadair Limited Montreal, Canada on August the 1st, 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system.

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	In A/C	Qty	Weight	Arm	Moment
COMMISSARY	1	Water jug - Thermos (1 gal) incl. water	-	1	18.0	497	8,946
	2	Aluminum Pitcher	-	1	0.4	520	208
	3	Lunch Boxes, less food	-	24	35.3	520	18,356
	4	Thermos - 2 qt. less fluid	-	5	20.3	520	10,556
	5	Silverware, complete sets	-	24	9.4	530	4,982
	6	Paper Drinking Cups	-	25	0.2	530	106
	7	Lucite Cup Handles	-	30	2.1	530	1,113
	8	Lunch Box Inserts	-	30	3.1	520	1,612
	9	Plastic Cups & Plates, sets	-	24	5.7	530	3,021
	10	Hot & Cold Cups	-	60	1.8	530	954
	11	General Utensils, Allowance	-	—	2.0	530	1,060
	12	Casseroles & Covers (Round)	-	24	24.0	540	12,960
	13	Service Trays - large	-	6	6.0	540	3,240
	14	Cafatray - small	-	2	0.6	540	324
STEWARDESS SUPPLIES	1	Pillows at seats (complete with covers & slips)	-	21	21.4	332	7,105
	2	Sickness Containers (at seats)	-	21	2.5	332	830
	3	Whisk	-	1	0.5	530	265
	4	Toy Broom (1) & Dusters (2)	-	-	0.7	530	371
	5	Dust Pan - long handle	-	1	0.4	530	212
	6	Cleansing Tissue, Kleenex - 1 Box	-	1	0.6	524	314
	7	Stewardess Satchel	-	1	7.9	521	4,116
	8	Linen Hand Towels (12" x 10")	-	12	0.9	502	452
	9	Flyswatter & Atomizer (one of each)	-	-	1.2	540	648
	10	Blankets (in rear Service Compartment)	-	12	36.0	553	19,908
	11	Headrest Covers, on Seats	-	21	2.1	332	697
	12	Sanitary Napkins	-	12	1.0	540	540
	13	First Aid Kit	-	1	4.1	522	2,140
	14	Shopping Bags	-	3	0.6	545	327
	15	Oxygen Masks (above seats)	-	21	15.8	332	5,246
	16	Spare Sickness Containers	-	10	1.2	554	665
	17	Spare Hand Towels (12) Headrest Covers	-	—	1.9	554	1,053
	18	Spare oxygen Masks	-	5	3.8	554	2,105
	19	Spare Pillows, complete	-	3	3.1	554	1,717

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qt.	Weight	Arm.	Moment
MISCELLANEOUS	1	Crew Baggage	-	3	60.0	147	8,820
	2	Magazines in Binders	-	10	17.9	177.5	3,177
	3	Bible	-	1	1.5	177.5	266
	4	Life Belts - Passengers	-	21	54.6	332	18,127
	5	Crew Life Belts	-	3	7.8	147	1,147
	6	Wash Water (2½ Imp. Gallon)	-	-	25.0	492	12,300
	7	Cargo Tie-Down Straps - Cargo Compts. sets.	*	10	10.0	308	3,080
COLD WEATHER	1	Anti-Icer Fluid - Std. Qty. 2½ Imp. Gal.*	-	-	19.9	341	6,786
	2	De-Icers - Propellers	*	6	6.0	117.5	705
	3	De-Icers - Wing - Inner	*	2	12.4	200	2,480
	4	De-Icers - Wing - Outer	*	2	38.1	252	9,601
	5	De-Icers - Stabilizer	*	2	12.0	650	7,800
	6	De-Icers - Fin	*	1	4.3	660	2,838
	7	Cabin & Toilet Frost Shields	-	15	0.9	325	293
	1	Stewardess		1	120.0	521	62,520

* Max. capacity 9.6 Imperial Gal or 76.2 lbs.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 4
REPORT RW-0-166
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "E" LIST (Fixed)

	Item No.	Items	IN A/C	Qty.	Weight	Arm	Moment
COCKPIT & FWD. CARGO	1	Fire Extinguishers - Cockpit & fwd. Cargo, Kidde #2TA	-	2	14.2	107	1,519
	2	Flash Light	-	1	1.2	74	89
	3	Log Book	-	1	2.5	71	178
	4	Tools	-	-	2.3	76	175
	5	Standard Oxygen Bottles	*	2	70.0	390	28,300
	6	Pilots & Observer - Safety Belts	*	3	3.0	98	294
CABIN	1	Carpet - complete	-	1	55.0	358	19,690
	2	Curtains - with tie-back straps	*	14	7.7	325	2,503
	3	Coat hangers	*	24	4.0	480	1,920
	4	Coat strap	*	1	0.2	480	96
	5	Fire Extinguisher	-	1	7.2	493	3,550
	6	Pass. Safety Belts	-	21	21.0	332	6,972
	7	Stewardess Safety Belt	*	1	1.0	521	521
	8	Cabin Thermometer	*	1	0.3	492	148
	9	Casserole Carriers	*	2	27.6	540	14,904
	10	Food Box Carriers	-	3	20.1	512	10,291
TOILET	1	Soap - powdered, in dispenser	-	-	0.2	545	109
	2	Toilet Container	*	1	2.0	530	1,060
	3	Toilet Tissue	-	-	0.3	581	174
	4	Waste Container	*	1	2.0	509	1,018
MISC.	1	Storage Batteries	*	2	158.0	124	19,692
	2	Janitrol Heater	-	1	105.0	172	18,060
	3	Flares (landing) Type S-A-8	-	2.	36.0	604	21,744

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL - CANADA

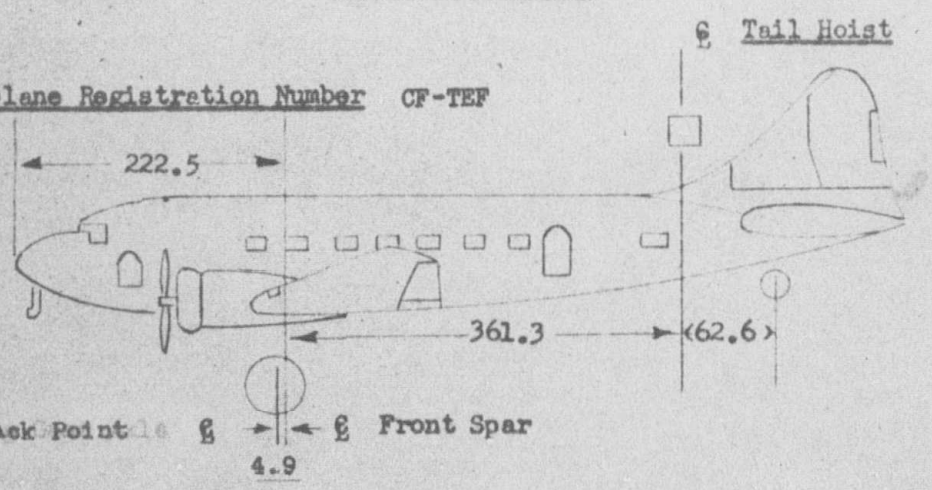
PAGE 5
REPORT RW-0-166
MODEL DC-3

5904

SUBJECT Actual Weight and Balance.

Weight Empty Data

Airplane Registration Number CF-TEF



Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	7,796	- 4	0	7,792
Right Wheel	7,945	0	0	7,945
Tail Hoist	1,482	- 7	0	1,475
Total	17,223	-11	0	17,212

Less _____ Gals. Oil Sta. 184.5

See Corrections *

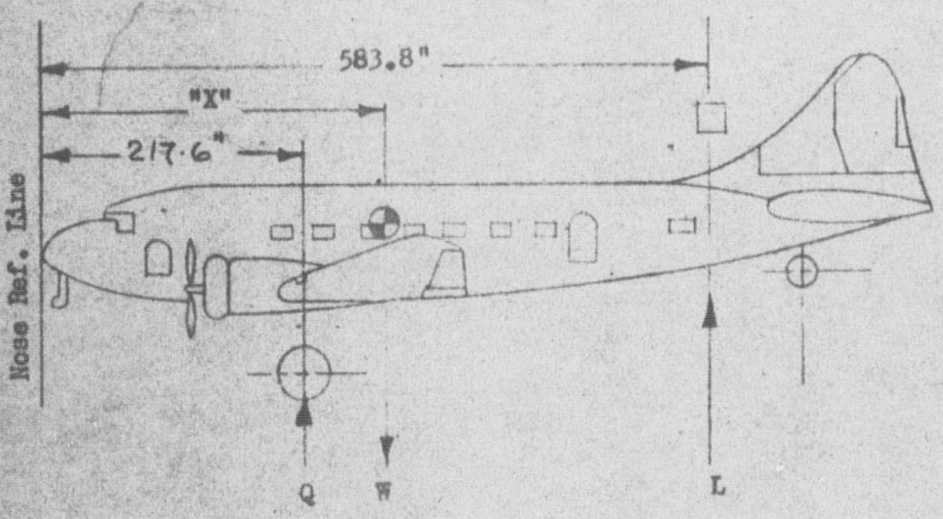
I.C.A.N. Empty Weight 17,994 lbs.

Remarks:

* For explanation of correction made to weight empty, refer to the pages that follow.

SUBJECT— ACTUAL WEIGHT AND BALANCE

TAIL-UP WEIGHING



Main Wheel, left, net		7,792
Main Wheel, right, net.....		7,945
Total Main Wheel	Q =	15,737
Tail Hoist Load Reaction	L =	1,475
Aircraft, as weighed	W =	17,212

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 217.6) + (L \times 583.8) = (W \times X) = 0$$

$$\frac{(Q \times 217.6) + (L \times 583.8)}{W} = X$$

$$\frac{(15,737 \times 217.6) + (1,475 \times 583.8)}{17,212}$$

$$\frac{4,285,476}{17,212} = 249.0"$$

C.G. Location (X) aft of nose ref.: = 249.0 inches.

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY

	Weight	Arm	Moment
Aircraft as weighed	17,212	249.0	4,285,476
Plus trapped fuel and oil	51	175.0	8,925
Sub-Total	17,263	248.8	4,294,401

Correction for fixed and removable equipment.

	Qty.	Weight	Arm	Moment
Total from above		17,263	248.8	4,294,401
Fixed equipment to be added				
1. Hand fire extinguisher (Pilot's)	1	7.1	83	589
2. Flashlight	1	1.2	74	89
3. Log Book	1	2.5	71	178
4. Tools	-	2.3	76	175
5. Carpets - complete	-	55.0	358	19,690
6. Passenger seats	21	560.0	332	185,920
7. Passenger safety belts	21	21.0	332	6,972
8. Hand fire extinguisher(Cabin)	1	7.2	493	3,550
9. Foor box carriers	3	20.1	512	10,291
10. Soap-in dispenser	-	0.2	545	109
11. Toilet Tissue	-	0.3	581	174
12. Janitrol heater (part)	1	101.0	172	17,372
13. Flares (landing)	2	36.0	604	21,744

SUBJECT- ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY (Cont'd.)

Removable equipment to be deducted.

	Qty.	Weight	Arm	Moment
1. Cargo tie-down straps	10	10.0	308	3,080
2. De-Icers - Propellers	6	6.0	117.5	705
3. " " - Wing-Inner	2	12.4	200	2,480
4. " " - Wing-Outer	2	38.1	252	9,601
5. " " - Stabilizer	2	12.0	650	7,800
6. " " - Fin	1	4.3	660	2,838
I.C.A.N. Weight Empty		17,994	252.0	4,534,750

C.G. in % M.A.C. = $\frac{252.0 - 224.4}{138.1} \times 100$

= 20% M.A.C.

Note: "Harrington Air Service buffet used."

SUBJECT- ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
L.C.A.N. Weight Empty	17,994	252.0	4,534,750
Removable equipment "P"	+681	421.7	+287,279
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,167	252.6	4,842,257

Operational Weight empty Arm $= \frac{4,842,257}{19,167}$

$= 252.6$ inches

C.G. in % M.A.C. $= \frac{(252.6 - 224.4)}{138.1} \times 100$

$= 20.4$ %

- - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346 Lbs.

Basic operational Weight empty (winter oper) = 19,167 Lbs.

Disposable Load = 6,179 lbs.

* Disposable for fuel, passengers, stewardess and cargo.

PREPARED W. Banas
CHECKED
APPROVED J. Orlando

CANADAIR
LIMITED
MONTREAL CANADA

5904

SUBJECT WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

5904

SUBJECT- Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum line).

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs:

L.H. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

(h) Trapped Fuel & Oil.

51 lbs. (175.0" aft of horizontal reference line).
(1) Trapped oil - 32#
(2) Trapped fuel - 19#

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)

Aft limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 25,200 lbs. (with dump valves.)
Max. Take-off 24,400 lbs. (without dump valves)
Max. Landing 24,400 Lbs.

SUBJECT- ACTUAL WEIGHT AND BALANCE

Reference:

Aircraft Specification "A-669-4" Douglas Model DC-3 Series, dated 15 Jan. 1946.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

Reference:

Douglas DC-3 Dwg. No.: 5071540

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co., Inc.

Type DC-3-S13CG-92 Maker's No. 13560

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95.000	95.000
Length o/a in feet	64.458	64.458
Height o/a in feet	17.000	17.000
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	See Wt & Bal Rep	~~17,300~~ lbs.
Total weight authorized (fully loaded) in lbs	25200 for T.O. 24,00 for landing	Air speed 257 miles per hour indicated

Note - These gross weights may be increased by 146 pounds when de-icing equipment installed.

EQUIPMENT—(Give number and type).

1. Instruments See List 1 attached
2. Gauges See List 2 attached
3. Lights See List 3 attached
4. Signals See List 4 attached
5. Fire Extinguishers Engines - CO_2 two 12.6# Cockpit CO_2 one 2#
6. Parachutes None Cabin CO_2 one 2#
7. Tools Pilots
8. Other Equipment Safety belts, maps, emergency flares, first aid, life preservers, Very pistol, oxygen masks, flashlight.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92-S1300	Pratt & Whitney R-1830-92-S1300		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	Right	Right		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 17/8/46.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved modifications

Registration recommended with the following special conditions

REGISTRATION RECOMMENDED

Date 17/8/46. Signature J. L. Blondeau

Registration approved and Registration Mark C.F. TEF allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

241.3
6.39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... for Trans-Canada Air Lines

Date of Application..... December 6th, 1945.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill St., Montreal	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. SYMINGTON	Chairman & President	Montreal	Canadian
HON. WILFRED GAGNON	Director	"	"
J. A. NORTHEY	"	Toronto	"
R. C. VAUGHAN	"	Montreal	"
HON. C. P. EDWARDS	"	Ottawa	"
GEO. HERRING	"	"	"
J. A. WILSON	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)..... Commercial

Usual Station..... Winnipeg

Date of manufacture or reconstruction..... February, 1946

Crew required..... Two

Accommodation for what number of passengers..... Twenty-one passengers and stewardess

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

LIST 1 - INSTRUMENTS

Qty.	Unit	Make	Type
2	Airspeed	Pioneer	1426-1AD2
2	Altimeter	Kollsman	371K-05
2	Rate of Climb Ind.	Pioneer	1634-1 M
1	Magnetic Compass	Pioneer	1821-1
1	Gyro Horizon	Sperry	656768
1	Gyro Horizon	Pioneer	12401-1C
1	Directional Gyro	Sperry	649742
1	Bank & Turn	Pioneer	1722-1AR
1	Bank & Turn	Pioneer	15300-2A
2	Clock	Pioneer	3315
2	Oil Press. Warning	Pioneer	3122-1-A
2	Vacuum Warning	Pioneer	3124
1	Flux Gate Compass	Pioneer	
2	Fuel Press. Warning	Pioneer	3132-3A

LIST 2 - GAUGES

Qty.	Unit	Make	Type
1	Outside Air Temp.	Weston	728T35
2	Carb. Air Temp.	Weston	727
2	Oil Temp.	Weston	727T52
2	Cylinder Temp.	Weston	827T9
1	Fuel Qty. Gauge	Liquidometer	EA-134-8-24
2	Pitot Static Head	Kollsman	372C-02
2	Manifold Pressure	Pioneer	1919-1B-A1
2	Oil Pressure	U.S.Gauge	AW-1 7/8-14CZ
2	Fuel Pressure	U.S.Gauge	AW-1 7/8-15BT2
2	Hydraulic Pressure	U.S.Gauge	AW-1 7/8-17CN
2	Suction Gauge	Kollsman	97-02
1	De-icer Gauge	U.S.Gauge	AW-1 7/8-16AC
2	Voltammeter	G.E.C.	DW-53 #257X85
2	Tachometer Ind.	G.E.C.	DJ-13-AGD
1	Anti-ice Qty. Ind.	Liquidometer	EA102-39-24
2	Pitot Heat Ammeter	G.E.C.	DW-53

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture.

5. Passing Light - red bulb in L.H. landing light fixture.

LIST 4 - RADIO EQUIPMENT

1. Bendix RTA-1B Communication radio-telephone set.
2. Bendix MN-31 Dual Automatic Direction Finder.
3. Bendix MN-53 Marker receiver.
4. AN/ARC-1 VHF Communication Equipment.
5. RC-103 Localizer Equipment.
6. AN/ARN-5 Glide Path Equipment.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co., Inc.

Type DC-3-S13CG-92 Maker's No. 13560

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95.000	95.000
Length o/a in feet	64.458	64.458
Height o/a in feet	17.000	17.000
Cubic Capacity (of Airship or Balloon)		

Weight equipped, but without load, fuel, or oil See Wt & Bal Report ~~17,300 lb.~~

Total weight authorized (fully loaded) in lbs 25200 for T.O. 24400 for landing Air speed 257 miles per hour indicated

Note - These gross weights may be increased by 146 pounds when de-icing equipment installed.

EQUIPMENT—(Give number and type).

1. Instruments See List 1 attached
2. Gauges See List 2 attached
3. Lights See List 3 attached
4. Signals See List 4 attached
5. Fire Extinguishers Engines - CO_2 two 12.6# Cockpit CO_2 one 2# Cabin CO_2 one 2#
6. Parachutes None
7. Tools Pilots
8. Other Equipment Safety belts, maps, emergency flares, first aid, life preservers, Very pistol, oxygen masks, flashlight.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92-S13CG	Pratt & Whitney R-1830-92-S13CG		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	Right	Right		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 17/8/46.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved modifications

Registration recommended with the following special conditions

REGISTRATION RECOMMENDED

Date 17/8/46. Signature J. L. Blondeau

Registration approved and Registration Mark C.F. T-E-F allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

241.3
6-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... for Trans-Canada Air Lines

Date of Application.....December 6th, 1945.....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill St., Montreal	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. SYMINGTON	Chairman & President	Montreal	Canadian
HON. WILFRED GAGNON	Director	"	"
J. A. NORTHEY	"	Toronto	"
R. C. VAUGHAN	"	Montreal	"
HON. C. P. EDWARDS	"	Ottawa	"
GEO. HERRING	"	"	"
J. A. WILSON	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....Commercial.....

Usual Station.....Winnipeg.....

Date of manufacture or reconstruction.....February, 1946.....

Crew required.....Two.....

Accommodation for what number of passengers.....Twenty-one passengers and stewardess.....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

LIST 1 - INSTRUMENTS

Qty.	Unit	Make	Type
2	Airspeed	Pioneer	1426-1AD2
2	Altimeter	Kollsman	371K-05
2	Rate of Climb Ind.	Pioneer	1634-1 M
1	Magnetic Compass	Pioneer	1821-1
1	Gyro Horizon	Sperry	656768
1	Gyro Horizon	Pioneer	12401-1C
1	Directional Gyro	Sperry	649742
1	Bank & Turn	Pioneer	1722-1AR
1	Bank & Turn	Pioneer	15300-2A
2	Clock	Pioneer	3315
2	Oil Press. Warning	Pioneer	3122-1-A
2	Vacuum Warning	Pioneer	3124
1	Flux Gate Compass	Pioneer	
2	Fuel Press. Warning	Pioneer	3132-3A

LIST 2 - GAUGES

Qty.	Unit	Make	Type
1	Outside Air Temp.	Weston	728T35
2	Carb. Air Temp.	Weston	727
2	Oil Temp.	Weston	727T52
2	Cylinder Temp.	Weston	827T9
1	Fuel Qty. Gauge	Liquidometer	EA-134-8-24
2	Pitot Static Head	Kollsman	372C-02
2	Manifold Pressure	Pioneer	1919-1B-A1
2	Oil Pressure	U.S.Gauge	AW-1 7/8-14CZ
2	Fuel Pressure	U.S.Gauge	AW-1 7/8-15BT2
2	Hydraulic Pressure	U.S.Gauge	AW-1 7/8-17CN
2	Suction Gauge	Kollsman	97-02
1	De-icer Gauge	U.S.Gauge	AW-1 7/8-16AC
2	Voltammeter	G.E.C.	DW-53 #257X85
2	Tachometer Ind.	G.E.C.	DJ-13-AGD
1	Anti-ice Qty. Ind.	Liquidometer	EA102-39-24
2	Pitot Heat Ammeter	G.E.C.	DW-53

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture.

5. Passing Light - red bulb in L.H. landing light fixture.

LIST 4 - RADIO EQUIPMENT

1. Bendix RTA-1B Communication radio-telephone set.
2. Bendix MN-31 Dual Automatic Direction Finder.
3. Bendix MN-53 Marker receiver.
4. AN/ARC-1 VHF Communication Equipment.
5. RC-103 Localizer Equipment.
6. AN/ARN-5 Glide Path Equipment.

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Production Aeroplane having Canadian Type Approval)

Registration C F - T E F

Aeroplane Type LOW WING MONOPLANE (Landplane / Seaplane / Skiplane) Model DC-3C-S1C3G

Manufacturer Douglas Aircraft Co., Inc. Serial No. 13560

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY:

Normal

(a - Public transport passenger
(b - " " mails
(~~xxxxxxxxxxxxxxxxxxxxxxxxxx~~
(~~xxxxxxxxx~~
(~~xxxxxxxxxxxxx~~

~~xxxxxxxx~~
~~Special~~

(~~xxxxxxxxxxxxxxxxxxxx~~
(~~xxxxxxxxxxxxxxxxxxxxxxxxxxxx~~

PARTICULARS OF ENGINE(S):-

	Left Side		Right Side	
Type Pratt & Whitney				
Model. R 1830-92(S1C3G)				
Serial No.	21497		24761	
Take-off Power	1200 H.P.		1200 H.P.	
Take-off R.P.M.	2700 R.P.M.		2700 R.P.M.	
Take-off Manifold Pressure	48" Hg.		48" Hg.	
Take-off Octane Rating of Fuel	91 C.F.R.	Min.	91 C.F.R.	Min.
Maximum Power (Continuous Operation)	1050 H.P.		1050 H.P.	
Maximum Power R.P.M. ..	2550 R.P.M.		2550 R.P.M.	
Maximum Power Manifold Pressure	41.5" Hg. (Sea Level)		41.5" Hg. (SEA LEVEL)	
Maximum Power Octane Rating of Fuel	91 C.F.R.	Min.	91 C.F.R.	Min.

C F - T E F

PARTICULARS OF AIRSCREWS:

		-LEFT-		-RIGHT-
Maker		Hamilton Standard Propellers		
Type		Hydromatic quick - feathering with constant speed control		
Blade Drawing No.		6571A-0		6571A-0
Blade Serial Nos.	1.	513787	1	513739
	2.	513788	2	513740
	3.	513789	3.	513741
Hub Drawing No.		33D50-233		33D50-233
Hub Serial No.		158380	158364	158364
BladeSettings		18.5° - 89.5°		18.5° - 89.5°
Diameter		11' 7"		11 ' 7"

PARTICULARS OF ALIGHTING GEAR

WHEELS: Make Bendix Model B-1 (Tail) B-3 (Main) Tire Goodyear Goodrich Goodrich

FLOATS: Installation Assembly Drawing No. N.A.

SKIIS: Installation Assembly Drawing No. N.A.

Tail Ski N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

	FUEL Position	Capacity Imp. Gals.		OIL Position	Capacity Imp. Gals.
(1)	Centre plane main L	168	(1)	Eng. Nac. L	24.
(2)	Centre Plane Main R	168	(2)	Eng. Nac. R	24.
(3)	Centre plane Aux L	166.5	(3)		
(4)	Centre plane Aux R	166.5	(4)		
(5)			(5)		
(6)			(6)		

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT.
(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS
Airspeed Indicator	Pioneer	1426-1Z-A1	340406 340416
Altimeter	Kollsman	371K-01	3729 3730
Compass Magnetic	Pioneer	1821-2-A	
Engine Speed Indicator	Gen. Elec.	8DJ13AGD	2530739 2530741
Oil Pressure Gauge	U.S. Gauge	AW1 7/8-14-CZ2	
[illegible] Cyl. Temp.	Weston	827T9Y2	
[illegible] Oil Temp.	Weston	727T52Y2	
Safety Belt(s)			
Fire Extinguisher(s) Hand			
Engine	Kiddie	82511	K63599 K63597

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT:
(Make extra sheets as required, using following pro forma and classification).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS
AIRCRAFT INSTRUMENTS:	Direct Gyro	Sperry	649742	15089
Flying and Navigation, E.G. Bank and Turn Indicator, etc.,	Turn & Bank	Pioneer	1722-1AU-B1	329829
	Turn & Bank (elec.)	Pioneer	15300-2A-A2	216
Aircraft Operating e.g., Cabin Temperature	Gyro Horizon	Sperry	656768	11601 33971
Outside "	Rate of Climb	Pioneer	1634-1AF-A1	33972
Flap Indicators. etc.,	Outside Air Temp.	Weston	602T90	36166
	De-icer Pres.	U.S. Gauge	AW1 7/8-16-AC2	7101
POWER PLANT INSTRUMENTS	Hyd. Pres.	U.S. Gauge	AW1 7/8-17-CN2	7385
	Fuel Pres.	U.S. Gauge	AW1 7/8-15-BT2	14028
ELECTRICAL EQUIPMENT other than signalling	Suction	Kollsman	97-02	14029 13014
SIGNALLING EQUIPMENT	Man. Pres.	Kollsman	298-H-01	7361
SAFETY AND EMERGENCY EQUIPMENT	Carb. Air	Weston	727T68Y2	
	Anti-icer Quantity	Liquidometer	EA-102-39-2-24	
AMENITIES	Fuel Quantity	Liquidometer	EA-13[illegible]-8-24	
	Radio Compass			
	Radio Azimuth	Pioneer	MN-58A	
	Ammeter	Gen. Elec.	8DW-53-AAC2	
	Volt Ammeter	Gen. Elec.	8DW53BAC1	
Fluxgate	Remote Compass			
"	Master Ind.			
"	Repeater Ind.	Pioneer	10061-1AF-B1	530191
	Oxygen Pres.			
Oxygen	Flowmeter			

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.	DESCRIPTION
1.	6000 hour overhaul and conversion from C47A to DC3C-SIC3G as per Canadair Ltd. specifications (RD-1-106, RD-1-111) and engineering Orders with the addition of T.C.A. requirements as listed in spec. RD-1-108.
2.	Compliance with all applicable inspection and special notes in C.A.A. airworthiness directive AD-355.
3.	Units and components serialized to comply with T.C.A. specification - 19 - issue 3.
4.	Mandatory Douglas Service Bulletins for C-47 Aircraft, numbers 50, 53, 54 and 75 were not applicable, numbers 44, 56 and 79 were accomplished by Canadair Ltd.
5.	The following Douglas Service Bulletins for DC-3 aircraft, were accomplished:-
D.S.B. 98	Floor beam rework - Sta. 294½.
D.S.B. 175	Reinforcement of frames - Sta. 623.
D.S.B. 207	Control surface static balance.
D.S.B. 211	Inspection of spar cap bolts.
D.S.B. 216S	Reinforcement of wing flap operating tube support beam attach angle.
D.S.B. 217S	Inspection of elevator torque tubes.
D.S.B. 218	Replacement of rivets with bolts - rudder lower hinge brkt. support.
D.S.B. 220 SECT. III only	Spar cap bolt locking device.
D.S.B. 222	Rudder pedal torque tube support brkt. rework.
D.S.B. 228	Repair to rib at Sta. 42.
D.S.B. 231	Control column canvas boots replaced with rubber.
D.S.B. 234	Elevator tab control horn changed from Al. Al. 24ST to 4130 Stl.
D.S.B. 241	Drain hole added to fuel dump chute extension pipe.

RECORD OF WEIGHT AND C. of G. POSITION:
(See Information Circulars M-3/37 and M-1/38)

	Landplane		Seaplane		Skiplane	
Maximum permissible Take-off: Gross weight : Landing :	25,346 24,546	Lbs. Lbs.	XXXX XXXX	Lbs. Lbs.	XXXX XXXX	Lbs. Lbs.
I.C.A.N Weight Empty:	17,994	Lbs.	XXXX	Lbs.	XXXX	Lbs.
Disposable Load :		Lbs.		Lbs.		Lbs.

Centre of Gravity of Aeroplane at above tare weight is 252.0 . . inches behind/

XXXXXXXXXX - Nose Reference Line - or - 20% M.A.C. . . . . .

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs

References: Wt. and Balance Report #RW-0-166.

List of moveable equipment included in I.C.A.N. weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.

References: Wt. and Balance Report #RW-0-166.

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38)

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346 Lbs.	XXXX Lbs.	XXXX Lbs.
	Landing :	24,546 Lbs.	XXXX Lbs.	XXXX Lbs.
Basic operational weight, empty;		19,167 Lbs.	XXXX Lbs.	XXXX Lbs.
Disposable Load	:	6,179 Lbs.	XXXX Lbs.	XXXX Lbs.

Centre of Gravity of Aeroplane at above tare weight is _____ inches behind / in front of _____

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft.)

List of fixed/ standard/ XXXXXXXXX equipment included in empty weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.

References: Wt. & Balance Report #RW-0-166.

List of moveable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.

References: Wt. & Balance Report #RW-0-166.

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origin; that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed....J. deVries.....date. 8th Aug. 46.
Chief Inspector
per R. Stevenson

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight).

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed..Bertel Wand..Air Engineer....J. deVries per R Stevenson...Chief Inspector

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed. A.J. Lilly.....Date.....Aug 16/46.
Test Pilot

CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category.....
Subdivision.....is recommended.

Signed.....George S. Lace.....
Resident Inspector, A. I. D.,
Department of Transport
Aug. 16th 46

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date).....

Signed.....J. L. Blondeau 17/8/46
District Inspector, Civil Aviation

Form ACA 317
(Rev.5-1-41)

UNITED STATES OF AMERICA

DEPARTMENT OF COMMERCE

CIVIL AERONAUTICS ADMINISTRATION

WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC. (Manufacturer), certify that the aircraft DOUGLAS (Make), C-47A (Model), 13560 (Serial number), has been manufactured, under Production Certificate No. None, X in conformity with the data forming the basis for Type Certificate No. 669 and any revision or modification thereof approved by the Administration as of 6-10-44 (Date), with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-3 dated December 19, 1944.

CERTIFIED A TRUE COPY OF THE ORIGINAL.
W. ALLAN MARTIN
Commissioner of the Superior Court
District of Montreal

(W.Allan Martin)
C.S.C.
Montreal, May 4, 1946.

DATE December 19, 1945

Schuyler.Kleinhans
(Signature)

Assistant.Chief.Engineer
(Title)

X Delete this phrase if not applicable.

5008-T6-5

910 Confederation Building,
Montreal 2, P.Q., August 17, 1946

Trans-Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

Gentlemen: Re: Douglas CF-TEF

This letter will constitute your authority not valid after September 16, 1946, for the operation of the subject aircraft on your regular services.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

JLB/BMc

5008-T5-6

910 Confederation Building,
Montreal 2, Que., September 10, 1946.

Trans-Canada Air Lines,
P.O. Box 2973,
Winnipeg, Manito

Gentlemen:

Re: Douglas CF-TEF

The authority granted you on August 17, 1946, for the operation of the subject aircraft, is hereby extended not valid after October 16, 1946, subject to this machine being in airworthy condition.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

AR

Canadair Ltd. August 22nd.'46.

Douglas C.47./D.C.3. CF-TEF.
Carbon Monoxide Test.

Mr. J.L.Blondeau.
D.I.A.R.
Montreal.

The above noted aircraft was test flown on August 16th. and checked for the presence of carbon monoxide, due to the operation of the Janitrol Heater.

The cabin temperature, on the ground was 74 , and this was raised, during the flight, by means of the heater, to 92 , but no indications of carbom monoxide were found, in the cabin, cockpit, or heater compartment.

The Janitrol Heater was operable both on the ground and in the air, but no automatic control unit was fitted.

Attached is the report, in duplicate, RH-0-112, on the test, issued by Canadair 's Engineering Dept.

George S. Lace.
Supervising Inspector. A.I.D.

C47-DC3 RH-0-112

Flight Tests for Carbon Monoxide Contamination with Janitrol Surface Combustion Heater Installation - Aircraft CF-TEF

Aircraft Licence	CF-TEF
Serial No. (Douglas)	12502
Job No. (Canadair)	44315
Date Tested	16 August, 1946

1.0 Introduction

This report is to be attached as an appendix to Report RH-0-103, dated June 3rd, 1946, the equipment and procedure being the same, except that the heater automatic controls were inoperative and the heater was operated in the "recirculate" position.

2.0 Results

No indication of carbon monoxide was obtained in the forward cabin in the vicinity of the heater or in the flight compartment during operation of the heater.

3.0 Conclusion

The carbon monoxide concentration due to heater operation is less than .005 to .007 of one percent by volume in living quarters.

Witness: Mr. G. Lace,
Department of Transport.

Date: August 21st, 1946.

H H Whiteman
21 Aug/46
H H Whiteman

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., Sept. 28, 1946.
PLACE DATE

9

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3 CF-TEF	5008-T5-6

TRANSPORT RECORDS
OCT 1 1946
File 5008-T5-6

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans-Canada Air Lines.

(b) Fees $10.00 (Department Receipt No. 60123) forwarded under Cash Book Folio 41.

(c) Copy of Inspection Release Certificate.

(d) Copy of Statement of Conformity.

(e) Weight and balance report.

(f) Copies of our letters of authority for the operation of this aircraft.

(g) Copy of memorandum from our A.I.D., Mr. G. Lace, regarding carbon monoxide test as well as copy of Canadair's report on this matter.

A24948

2. It is understood that proof of ownership is available at Headquarters, having been sent direct by the company.

3. The radio installation of this aircraft has been found satisfactory by our Radio Division.

4. This application appears in order, and issue of certificates is recommended.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5008-T5-6 10

910 Confederation Building,
Montreal 2, October 11, 1946.

TRANSPORT-RECORDS
OCT 12 A.M.
File 5008-T5-6

Trans-Canada Air Lines,
P. O. Box 2979,
Winnipeg, Man.

Attention: Mr. A. M. Sutherland

Dear Sir:

A26746

Re: Douglas CF-TEF

The authority granted you on August 17, 1946, for the operation of the subject aircraft is hereby extended not valid after December 15, 1946, subject to this machine being in airworthy condition.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

P.A.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

104

2
6-44

717 Dominion Public Bldg.,
Winnipeg, Man., Nov. 25, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3 - CF-TEF	5008-T5-6

TRANSPORT RECORDS
NOV 28 A.M. 1946
5008-T5-6
File

D.A.E. etc. ppw
D.A.E.

Controller, Civil Aviation, Ottawa.

1. Please be advised that the above noted aircraft, which is equipped with the Janitrol Heater system, was flight tested on November 22nd, 1946.

59059

2. The flight test was conducted with the heater delivering maximum output. The Mine Safety Appliance Company tester gave no indication whatsoever of any concentration of carbon monoxide either at the passenger seat outlets or around the heater and heater exhaust outlet.

3. For your information please.

Fred W. Bone

for T.M.Shields,
District Inspector, Air Regulations.

FWB/MH

ent by PL.
ppw

10B

5008-T5-6

910 Confederation Building,
Montreal, Que., December 10, 1946.

TRANSPORT RECORDS
DEC 11 A.M. 1946
File 5008-T5-6

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Attention: Mr. A. M. Sutherland

Dear Sir:

61320

Re: Douglas CF-TEF ✓

The authority granted you on August 17, 1946, for the operation of the subject aircraft is hereby extended not valid after February 14, 1947, subject to this machine being in airworthy condition.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

CAR

5008-T5-6 11

910 Confederation Building,
Montreal 2, Que., January 30, 1947.

68536

A. M. Sutherland, Esq.,
Director of Mtce. & Service,
Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

TRANSPORT - RECORDS
FEB 1 AM
File 5008-T5-6

Dear Sir:

Re: Douglas CF-TEP

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after April 13, 1947, subject to this machine being in airworthy condition.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR
c.c. H.Q. ✓
D.I.A.R. Winnipeg

noted as J

TRANS-CANADA AIR LINES
Serves the Nation.

12

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2445-3.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-SIC3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-SIC3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-TEA
62	CF-TDO	76	CF-TEB
63	CF-TDP	77	CF-TED
64	CF-TDQ	78	CF-TEE
66	CF-TDS	79	CF-TEF
67	CF-TDT	81	CF-TEH
68	CF-TDU	82	CF-TEI
70	CF-TDW	83	CF-TEJ
71	CF-TDX	91	CF-TES
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

L.P.

CAR

13

ORIGINAL
ON FILE 7150-6

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

TRANSPORT - RECORDS
MAR 24 A.M.
5008-T5-6
File

76734

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5366(R)
1848(A)

5008-T4-13-T5-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
ON FILE 7150-8
LEJC.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

0323

TRANSPORT - RECORDS
APR 1 P.M.
5008-T5-6
File

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11906	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

Sak 10/IV

MICROFILMED
IN CANADA

5008-T5-6 14

AR

910 Confederation Building,
Montreal 2, Que., April 5, 1947.

A.M. Sutherland, Esq.,
Director of Mtce. & Overhaul,
Trans Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

1380

TRANSPORT - RECORDS
APR 8 P.M.
5008-T5-6
File

Dear Sir:

Re: Douglas CF-TEF

The previous authority granted for operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter of authority.

Yours truly,

JB

J.L. Blondeau,
District Inspector, Air Regulations

Sask
10/12

2462A
8-41

CANADA

19

/20

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5366

NATIONALITY AND REGISTRATION MARKS CF-TXF

1. Type and description	Douglas DC3-(S1C3G)
2. Name and address of constructor	Douglas Aircraft Co. Inc., Santa Monica, California, U.S.A.
3. Constructor's serial number	13560
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 17th, day of August, 1945, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TXF and is of Canadian nationality.

Given at Ottawa this 31st, day of December, 1945.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

Engines

18. Number installed: Two

19. Makes: Pratt & Whitney

20. Types: Wasp S1C3G

21. International power of the engine or engines at

(a) Sea Level: 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

(each) (b) Rated Altitude: 1050 I.P. at 2550 revolutions per minute. (International number of revolutions)
"at 7500 ft."

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews: Number fitted: Two Types: Hamilton Standard No. .....
Pitch: Constant Speed Full Feathering Diameter .....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	18255 (8.8.47) ~~19425~~ lbs.
	(b) Seaplane	..... lbs.
	(c) Skiplane	..... lbs.

Weight of Fuel and Oil

26. Fuel (at 7·2 lbs. per gallon)	4824 lbs.
(a) Number of tanks: Four	
(b) Capacity of tanks: 670 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	432 lbs.
(a) Number of tanks: Two	
(b) Capacity of tanks: 48 Imp. gals.	
28. Weight allowed for crew	340 lbs.
29. Weight allowed for equipment, excluding wireless apparatus	..... lbs.
30. Weight of wireless apparatus	..... lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	1379 (8.8.47) L.P. ~~1169~~ lbs.
32. Maximum total weight authorized	..... lbs.
Landplane (Landing) 24400 lbs. (Except in case of emergency) (Take-off)	25200 lbs.
~~Seaplane~~	..... lbs.
Skiplane	..... lbs.

Compulsory Conditions

33. Maximum total weight authorized (write in full)
Landplane (Take-off) Twenty-five thousand two hundred pounds.
Seaplane .....
Skiplane (Landing) Twenty-four thousand four hundred pounds. (Except in case of emergency)

34. Minimum crew necessary: Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum. (Leading edge of centre section of wing)

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated August 17, 1946. in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 31st. day of December, 19 46.

.....
Superintendent, Air Regulations.

2462
7-45

18

/25

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1848

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines.
2. Christian name
3. Address 360 McGill St., Montreal, P.Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Co. Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-[illegible]

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3-(S1C3G) Constructor's No. 13560
8. Place and year of construction of aircraft Santa Monica, California, U.S.A.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) Twenty-four

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a, b, c, d & e
15. Maximum span (in flying position) 95'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

17

DC3C (SIC3G) Weight and Speed Limitations.

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level) Dump Valves
Take-off - 26,200 lbs. at sea level) not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

/MIM
/ZC
/MM

16

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		August 17, 1947. 8/8/48 28/7/49 27.7.50 4.7.51.	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

15

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass	2	Engine Revolution Counter
Altimeter	2	Oil Pressure Gauge
Airspeed Indicator	2	Oil Temperature Gauge

Navigation Lights, Landing Lights and Emergency Flares.

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit.

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

The aircraft operating manual with amendments, approved loading chart (DC3-51C35), weight + speed limitations form part of this Certificate of Airworthiness & must be carried on board the aircraft during flight (27.7.49)

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

5008-T5-6

Ottawa, Ontario.
April 5th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill St.,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5366 and Certificate of Airworthiness No. 1848, together with Engine and Journey and Aircraft Log Books, for your Douglas (DC3-G103C) aircraft, CF-TEF.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

21

WHE/ZS

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2975,
Winnipeg, Man.

ATTENTION: Mr. J. T. Dyment.

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. WINNIPEG MONTREAL

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.) (1)	17.0	lbs.
Aluminum Pitcher (1)	0.4	"
Lunch Boxes, less food (24)	35.3	"
Thermos, 2 qt. less fluid (5)	20.3	"
Silverware - complete sets (24)	9.4	"
Paper Drinking Cups (25)	0.2	"
Lucite Cup Handles (30)	2.1	"
Lunch Box Inserts (30)	3.1	"
Plastic Cups & Plates, sets (24)	5.7	"
Hot & Cold Cups (60)	1.8	"
General Utensils, allowance	2.0	"
Casseroles & Covers (Round) (24)	13.0	"
Service Trays, large, (6)	6.0	"
Cafatray, small, (2)	0.6	"
Snack Kit (1)	6.8	"
Pillows (at seats, complete with covers & slips) (21)	21.4	"
Sickness Containers (at seats) (21)	2.5	"
Whisk, Toy Broom and 2 Dusters	1.2	"
Dust Pan - long handle (1)	0.4	"
Cleansing Tissue, Kleenex, 1 box	0.6	"
Stewardess Satchel (1)	7.9	"
Linen Hand Towels (12"x 10") (12)	0.9	"
Flyswatter (1) & Atomizer (1)	1.2	"
Blankets (in rear service compartment) (12)	56.0	"
Headrest covers (on seats) (21)	2.1	"
Sanitary Napkins (12)	1.0	"
First Aid Kit (1)	4.1	"
Shopping Bags (3)	0.6	"
Oxygen Masks (above seats) (21)	15.8	"
Spare Sickness Containers (10)	1.2	"
Spare Hand Towels (12) Headrest Covers (10)	1.9	"
Spare Oxygen Masks (5)	3.8	"
Spare Pillows complete (3)	3.1	"
Crew Baggage (3)	60.0	"
Magazines (in binders) (10)	17.9	"
Bible (1)	1.5	"
Life Belts - Passengers (21)	54.6	"
Life Belts - Crew (3)	7.8	"
Wash Water (2½ Imp. gals.)	25.0	"
Cargo Tie-down straps (cargo compts.) 10 sets	10.0	"
Anti-Icer Fluid (2½ Imp. gals.)	19.9	"
Propeller De-Icers (6)	6.0	"
Wing, inner, De-Icers (2)	12.4	"
Wing, outer, De-Icers (2)	38.1	"
Stabilizer De-Icers (2)	12.0	"
Fin De-Icers (1)	4.3	"
Cabin & Toilet Frost Shields (15)	0.9	"
Stewardess	120.0	"
	619.8	lbs.

Certificate of Airworthiness No. 1848 amended August 8, 1947, as follows:

Item 25 - 18435 deleted. 18225 inserted. ✓

Item 31 - 1169 deleted. 1379 inserted. ✓

Fred W Bore

FWB/MC

for District Inspector, Air Regulations

AIRCRAFT INSPECTION REPORT

22

Date of Inspection August 8, 1947 Owner Trans-Canada Air Lines Registration Markings CF-TEF

Type Douglas DC-3 S1C3G-92 Serial No. 13560 Purpose Commercial

C. of R. 5366 C. of A. 1848 Date of Last Inspection August 17, 1946.
Previous C. of R. & A. Expires Aug. 17, 1947. Present C. of R. & C. of A. Expires August 8, 1948.

TRANSPORT RECORDS
AUG 12 4 11
5008-T5-6
File

A15342 AIRFRAME

Crew 2 Passengers 21 No. of Fuel Tanks 4 ff. plus note changes in wt. 5

Capacity 670 Imp. gals. No. of Oil Tanks 2 Capacity 48 Imp. gals.
Total Hours Since New 3783:26 Since Overhaul 2692:46 Since Reconditioned --

WEIGHTS

		Gross	Tare	Empty	Carrying Capacity
Landplane	Passenger T.C.A. Weights	26200	(2) 18,848	(1)18225	2379
	Passenger C. of A.	" 25200	(2) 18,848	(1) 18225	1379
	Freighter				
Seaplane	Passenger				
	Freighter				
Skiplane	Passenger				
	Freighter				

(1) Includes weight of de-icing equipment - 146 lbs.

(2) Includes Item "F" Equipment I.C.A.N. - particulars overleaf.

Aircraft reweighed. Difference of 210 lbs. - more than ½ of 1% of all up weight. C. of A. amended.

ENGINE(S)

LEFT	RIGHT
Make P. & W. Model S1C3G	Make P. & W. Model S1C3G
Serial No. 353227 H.P. 1050 @ 2550 RPM	Serial No. 23367 H.P. 1050 @ 2550 RPM
Total Hrs. Since New 2360:09	Total Hrs. Since New 2486:25
Since Complete Overhaul Nil	Since Complete Overhaul Nil

PROPELLER(S)

LEFT	RIGHT
Make Hamilton Standard Model Hydromatic Full Feathering	Make Hamilton Standard Model Hydromatic Full Feathering
Diameter 11'6" Pitch 18.5° - 89.5°	Diameter 11'6" Pitch 18.5° - 89.5°
Blade Design 6571A-0	Blade Design 6571A-0
Mfg.No.1 513787 2 513788 3 513789	Mfg. No.1 513763 2 513764 3 513765
Total Hrs.1 1972:41 2 do 3 do	Total Hrs.1 2586:12 2 do 3 do
Hub Design 33D50-233 Mfg. No. 158380	Hub Design 33D50-233 Mfg. No. 158372
Total Hours 1972:41 Since Last Overhaul 237:15	Total Hours 2586:12 Since Last Overhaul 982:07
Date of Last Overhaul 19/6/47	Date of Last Overhaul 23/4/47
Date of Last Inspection 7/8/47	Date of Last Inspection 7/8/47
Date Purchased 8/7/46	Date Purchase 16/8/46

UNDERGEAR

Skis --
Floats --
Wheels ~~Stand~~ Bendix B3

~~Radio~~ 1947-48 Radio Licence applied for.
Chassis
Chassis Standard Retractable.

OVER

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

22 2 6-47

1 Montgomery Avenue, Toronto, July 28th, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-6	Renewal of Certificates of Registration and Airworthiness - aircraft CF-TEF	5008-T5-6

A17713

TRANSPORT-RECORDS
JUL 29 A.M.
5008-T5-6
File

Director of Air Services,
Department of Transport,
OTTAWA.

1. Douglas DC3-(S1C3G) aircraft, C F - T E F, Serial No. 13560, owned by Trans-Canada Airlines, has recently been overhauled by them at Malton, Ontario.

2. Proper entries have been made in the Log Book of this aircraft that it was airworthy on July 28th, 1948. These entries have been signed by Mr. E. Gee as Air Engineer.

3. Certificate of Registration No. 5366 and Certificate of Airworthiness No. 1848 have been renewed valid until July 28th, 1949.

Miss Jones
Typist

STG:alb

S.T. Grant.
for (C.A. Brethour),
A/D.I.A.R.,
for (J.R. Robertson),
D.C.A.S.,
Toronto.

24

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-T5-6

23185

TOR: 5008-T5-6

Toronto, Ontario.

TRANSPORT - RECORDS
SEP 9 A.M.
File 5008-T5-6

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings C.F.-.T.E.F.....

Aircraft Type .....Douglas DC-3.....

Owner .....Trans-Canada Air Lines.....

Place of Inspection ..Malton, Ontario.....

Date of Inspection ...July 27th, 1949 ✓.....

Satisfactory inspection report has been received from Air Engineers .....Emery Gee..... and Test Pilot .....

C. of R. No. ...5366..... and C. of A. No. ..1848.....

were renewed on ....July 27th, 1949 ✓ valid until .....

.....July 27th, 1950 ✓

Remarks Certificate of Airworthiness endorsed to read:-

"The aircraft operating manual with amendments, approved loading chart (DC3 S1C3G) weight and speed limitations form part of this Certificate of Airworthiness and must be carried on board the aircraft during flight."

✓ Noted DSJ

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

B

14863

TRANSPORT - RECORDS
5608-T5-6
JUL 7 P.M.

25

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

File

Registration - CF-TEF

Serial No. 13560

1. C. of A. No. 1848 Expires July 27, 1950 C. of R. No. 5366 Expires July 27, 1950
Aircraft Data - Manufacturer Douglas Aircraft Corp. Model DC-3C - S1C3G-92
Hours flown - Since New 11653:34 Since Overhaul 974:22
Engine Data - Manufacturer Pratt & Whitney Model R1830-92-S1C3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	27816 (left)	8135:04	664:49
(2)	351624 (right)	7469:22	761:29
(3)			
(4)			

Signature of Applicant G. W. Sutherland
Date July 5th, 1950.

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed G. W. Sutherland
"B" Engineer A 1324
Date July 5th, 1950.

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Test Pilot
Date

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report (when applicable) [ ]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed
District Aircraft Inspector
Date 5 — 7 — 50

7. C. of A. and C. of R. renewed, not valid after.
(Date)- 4th July 1951
Permissible Gross Weights - Wheels 25200 lbs.
- Skis
- Floats

Signed
District Superintendent, Air Regulations
Date 5th July 1950

Other Action:-

8. H.Q. Action C.A.R.
C.A.E.

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEF SERIAL NO. 13560

1. C. of A. No. 1848 Expires July 4/51 C. of R. No. 5366 Expires July 4/51
AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3
Hours flown—Since New ..... Since Overhaul .....
ENGINE DATA—Manufacturer Pratt & Whitney Model S1C3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 6420 Left		
(2) CP22719 Right		
(3)		
(4)		

Signature of Applicant J B Gee
Date June 25-51

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed J B Gee "B" ENGINEER
Date June 25-51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed ..... TEST PILOT
Date .....

4. The following documents are attached:
Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☑

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5366 and C. of A. No. 1848, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed H Ball DISTRICT AIRCRAFT INSPECTOR A. I.
Date June 26/51

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) July 4th, 1952.
Permissible Gross Weights— Wheels Landing 24,400 lbs. Take-off 25,200 lbs.
Skis
Floats

Signed W Mann Grison DISTRICT SUPERINTENDENT, AIR REGULATIONS
Date June 26th, 1951.

Other Action:— Items 26 to 32 inclusive on the Certificate of Airworthiness have been deleted.

8. H.Q. Action— C.A.R.
C.A.E.

17961

TRANSPORT - RECORDS
JUN 27 A.M. 1951
File 5008-T5-6

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W... June 26th, 1951...

Your File 5008-T5-6 SUBJECT Renewal of Certificates of Registration and Airworthiness CF-TEF Our File 5008-T5-6

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC-3(S1C3G) aircraft, CF-TEF.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

19602

TRANSPORT - RECORDS
JUL 4 A.M. 1952
File 5008-T5-6

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. July 3, 1952

Your File 5008-T5-6

SUBJECT Renewal of Certificates of Registration and Airworthiness
Douglas DC3-(SIC3G) CF-TEF

Our File 5008-T5-6

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC3-(SIC3G) CF-TEF

2. Copy of T.C.A. Flight Report attached.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEF SERIAL NO. 13560

1. C. of A. No. 1848 Expires July 4/52 C. of R. No. 5366 Expires July 4/52

AIRCRAFT DATA—Manufacturer Douglas A/C Corp Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model S1E3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A14E		
(2) 61A39E		
(3)		
(4)		

Signature of Applicant B Gee

Date July 2/52

---

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed B Gee
"B" ENGINEER

Date July 2/52

---

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

---

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☒

---

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed D Bell
DISTRICT AIRCRAFT INSPECTOR

Date July 3/52

---

7. C. of A. and C. of R. renewed, not valid after (Date) July 4, 1953

Permissible Gross Weights— Wheels 25,200 Lbs.
Skis
Floats

Signed [illegible]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date July 3, 1952

Other Action:—

---

8. H.Q. Action— C.A.R. Noted

C.A.E.

(7) AIRCRAFT TIME DATA	(8) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION YZ DATE 2-7-52			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 762.20			
TOTAL AIRCRAFT TIME 1791.9.52			

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	A/C EN ROUTE CHECKED	YZ Y	H Smith

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1)

AIRCRAFT No. 319 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	R D RENWICK	DESIGNATOR	DATE
FIRST OFFICER	A E COLLARD	257-1	1-7-52
STEWARDESS	B BROOKER	254-2	2-7-52
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
YZ	YB	20.20	2202	1	06
YB	YZ	07.07	0816	1	09

OIL ADDED

INDICATE QUARTS			
LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

TOTAL TIME 2 15

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED R D Renwick per EG CAPTAIN

20451

TRA...T RECORDS
33
JUN 22 P.M. 1953
File 5008-T5-6

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. June 19th 1953

Your File 5008-T5-6

SUBJECT Renewal of Certificates of Registration and Airworthiness

Our File 5008-T5-6

CF T E F

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E F

2. Log Sheet Attached

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
2

W7

379

2444
8-52
32

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF – TEF SERIAL NO. 13560

1. C. of A. No. 1848 Expires July 4/53 C. of R. No. 5366 Expires
Aircraft Data—Manufacturer Douglas Aircraft Corp Model DC-3
Hours flown—Since New Since Overhaul
Engine Data—Manufacturer Pratt & Whitney Model SIC3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	61A 11E		
(2)	61A 30E		
(3)	-		
(4)			

Signature of Applicant C. Gee

Date June 18/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed C. Gee "M" Licence No. YZM-52

Date June 18/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot

Date

4. The following documents are attached:

Certificate of Airworthiness	✓
Certificate of Registration	✓
Weight and Balance Report (when applicable)	✓

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5366 and C. of A. No. 1848, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed S Bell
District Aircraft Inspector

Date June 19/53

7. C. of A. and C. of R. renewed, not valid after.

Date July 4th 1954

Permissible Gross Weights—Wheels - 26,200 lbs.
—Skis
—Floats

Noted 1st

Signed
District Superintendent, Air Regulations

Date June 19th 1953

Other Action:—
Item 33 on Cof A Landplane (Take-off) Twenty-five thousand two hundred pounds-deleted. ✓
Twenty six thousand two hundred pounds - inserted.

8. H.Q. Action C.A.R.

C.A.E.

(7) AIRCRAFT TIME DATA		(8) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION YZ	DATE 12-6-53			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	462-47			
TOTAL AIRCRAFT TIME	20474.29			

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	A/C P/F CHECKED	YZ	12-6-53 L Bellanger

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1)

AIRCRAFT No. 379 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
		DESIGNATOR	DATE
CAPTAIN	R D RENWICK	251-17	17-6-53
FIRST OFFICER	J N BRUCE		
STEWARDESS	S GUSTAVSON	254-17	
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	YB	08.08	09.24	1	16
YB	QT	09.45	10.56	1	11
QT	YU	11.12	11.55	0	43
				3	10
YU	QT	12.22	13.02		40
QT	YB	13.18	14.35	1	17
YB	YZ	14.58	16.21	1	23
				3	20
			TOTAL TIME	6	30

OIL ADDED (INDICATE QUARTS)

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED R D Renwick per kly CAPTAIN

Copy log - asked

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-6

DUPLICATE - DIST. FILE NO. T5-6

TRANSPORT - RECORDS
JUN 22 A.M.
File SW8-T5-6

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T E F — 2. Old C of R No. 08852

3. New C of R No. ..... Date .....

4. C of A No. 1848 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐; Commercial ☐ to State ☐ to Private ☐; Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines ..... Citizen of .....

Christian name ....

8. Address of owner 360 McGill St. Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not Trans-Canada Air Lines Flight Report on File.

otherwise covered .....

.....

.....

13. C of A valid from July 4, 1954 to July 4, 1955

Temporary authority from ..... to .....

Noted

(D.W. Saunders)

Date June 18, 1954 District Superintendent Air Regulations

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-6

DUPLICATE - DIST. RECORDS

TRANSPORT - RECORDS
35
JUN 3 P.M.
File 5008-T5-6

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T E F 7248 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1848 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines ..... Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not Maximum Take-off and Landing Weights- DC3 Aircraft

otherwise covered Revised Sept. 28, 1953. - inserted.

Endorsed re validity of C. of A. as per Instructions

H.Q. letter file No. 7150-6, dated May 13, 1955.

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

(D.W. Saunders)

Date June 2, 1955 District Superintendent Air Regulations

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
36

EDMONTON, Alberta. 19 June, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	AIRCRAFT DAMAGE - CF-TEF	5008-1

10412

TRANSPORT - RECORDS
JUN 21 A.M.
File S&I 8-15-6

Director of Air Services,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. We have learned that on approximately the 10th instant, the subject aircraft, operated by TCA, received severe wind damage while on the ramp at Calgary, necessitating the aircraft being grounded for approximately five days while crews flown in from outside this District made the necessary repairs.

2. We find it very strange that this company does not comply with The Air Regulations, and especially insofar as Information Circular 0/10/52 is concerned.

3. Any further information that you may desire on the subject of damage, we suggest you may obtain through the head offices of T.C.A.

for District Controller, Air Services.

Note
not on ℄ accident
by defn.
25/6 WVG

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY - PRIVATE ☐
COMMERCIAL ☒
STATE ☐

NO. 5366

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E F	Douglas Aircraft Company Inc. - Douglas DC3 (S1C3G)	13560

(4) NAME OF OWNER TRANS - CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE August 17th, 1946.

SEAL

B. Hendricks
~~SUPERINTENDENT AIR REGULATIONS~~
for Controller, Civil Air Regulations.

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

37

2462
2-56

SERIAL NO. 1846

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E F	Douglas Aircraft Company Inc. - Douglas DC3 (S1C3G)	13560

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE August 17th, 1946.

SEAL

B. Hendricks
for [redacted]

SEE REVERSE SIDE

32978

39 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Winnipeg 1, Manitoba, March 21st, 1957.
PLACE DATE

YOUR FILE 5008-T-4-13 | SUBJECT: CERTIFICATES OF REGISTRATION AND AIRWORTHINESS | OUR FILE: 5008-T-4-13, 5008-T-5-6, 5008-T-5-7, 5008-T-5-9, 5008-T-7-20, 5008-T-7-21

TRANSPORT - RECORDS
MAR P.M.
File 5008-T-5-6

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. New forms 2462 and 2462A have been issued to replace the old ones for the aircraft listed below-

Douglas DC3, CF - TDM
Douglas DC3, CF - TEF
Douglas DC3, CF - TEG
Douglas DC3, CF - TEI
Viscount 724, CF - TGT
Viscount 724, CF - TGU

2. Enclosed herewith are blue copies of the Certificate of Registration and Certificate of Airworthiness.

COPI ON
5008-T-5-6

B. Hindlet

-T-5-7
-T-5-9
-T-7-20
-T-7-21

District Director, Air Services.

Encs.

DEPARTMENT OF TRANSPORT

2
10-56

INTRA-DEPARTMENTAL CORRESPONDENCE

Winnipeg General Post Office,
Winnipeg 1, Manitoba, January 16, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-6 (AIW)

SUBJECT: Douglas DC-3 Aircraft - CF-TEF

TRANSPORT - RECORDS
JAN 19 P.M.
File 5008-T5-L

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Please find attached a copy of a letter received from Bristol Aircraft (Western) Limited, which is being forwarded for your comments and instructions. As this involves an Export Certificate of Airworthiness to possibly Thialand of which little is known of their requirements or whether they are members of I.C.A.O.

30269
2 c. of a. for export

2. May we be favoured with your instructions, please.

for Regional Director, Air Services.

Enc.

Thailand

41

BRISTOL AIRCRAFT (WESTERN) LIMITED

STEVENSON FIELD, P.O. BOX 874, WINNIPEG,
CANADA

Your Ref.
Our Ref. L-7
CF-TEF

Telegrams "BRISTAIRCO" Winnipeg

Telephone SPruce 5-8331
Telex 03-587

January 15th, 2959.

2236;

AIR SERVICES REGISTRY
File

District Director of Air Services,
Department of Transport,
6th Floor, Winnipeg General Post Office,
Winnipeg 1, Manitoba.

Dear Sir:

Attention: Mr. R. C. Smith.

Subject: Douglas DC-3 - CF-TEF

We are at present carryout out a Reconditioning and Modification program for Trans Canada Airlines on a Douglas DC-3, Registration - CF-TEF. There are a number of queries on which we would appreciate your advice.

1. What information will you require for approval of the following modifications:

O.K. If standard installation R

a) Conversion from Standard 21 Passenger to 28 Passenger version in accordance with previous T.C.A. approval, Ref. letter H. Wiese No.7150-6-5008 TH-16 dated 30th May, 1957. The only variation will be in the type of seats. T.C.A.F. used Aerotherm and our conversion calls for Pay Loader seats, Type A22H.

b) Removal of present V.H.F. installation and replacing with ART 13.

c) Installation of Radio Operator's seat in Front Cargo Compartment.

d) Installation of two (2) Loud Speakers in Pilot's compartment and four (4) Loud Speakers in Cabin compartment.

(Cont'd on Page 2).

AITA MEMBER

District Director of Air Services,
Department of Transport,
Winnipeg, Man.

When completed, the aircraft will be leaving this country, either to the U.S.A. or direct to Thialand. Would you please also advise on the following:

1. Will a renewal of Certificate of Airworthiness, Form #2444 be sufficient for export requirements?

2. Will present registration remain for ferry flight?

3. Will the ART 13A operating on 3023.5 KC's be sufficient radio coverage for test flight and ferry flight?

Your assistance in clarifying these points would be most appreciated.

Yours truly,

BRISTOL AIRCRAFT (Western) LIMITED.

E. Juzak,
Chief Inspector.

EJ/MEC.

Copy to: Mr. W. E. Robinson, Chief Engineer.

MB/BT

43

OTTAWA, Ontario. January 22nd, 1959

5008-T-5-6 (AIW) 5008-T5-6 (SRL)

DOUGLAS DC-3 AIRCRAFT - CF-TEF

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. This refers to your letter of January 16th, 1959 on the subject of the DC-3 aircraft being converted by Bristol Aircraft (Western) Limited.

2. The Chief Aeronautical Engineer has advised that there appears to be no objection to the modifications mentioned in paragraph 1 (a), (b), (c) and (d) of Bristol Aircraft's letter of January 15th, 1959 provided standard installations are made. A Certificate of Airworthiness for Export will not be issued, however, for an aircraft of American origin. If Trans-Canada Air Lines applies for renewal of the Certificate of Airworthiness there would appear to be no objection to such a renewal if the modifications are in accordance with existing requirements.

3. If the aircraft is sold to a firm in Thailand, the Canadian registration will automatically be cancelled and it will be the responsibility of the new owners to obtain appropriate markings from their own country. Under such circumstances, the ferry permit should be obtained from appropriate Thailand authorities. As Thailand is a contracting State, there will be no objection to the flight of this aircraft from Winnipeg to the Canadian border for the purpose of that ferry flight.

4. If the aircraft is test flown while the property of T.C.A. and still registered as TEF, only sufficient radio equipment to provide radio communications with Air Traffic Control would be required during the test flight.

for Director of Civil Aviation.

5) Considerable information, including data sheets and sketches, has also been submitted by Aircraft Industries of Canada Ltd., to cover installation of six small tanks in CF-TEF, to be ferried to Shannon towards the end of February. Information submitted has been of a preliminary nature only, not for formal approval, and since this is to be a single crossing only, which could be carried out on a Ferry Permit, the RAI favours acceptance on the basis of inspection only, the contractor to assume full responsibility for the safety of the aircraft. Whether or not engineering approval is requested, sufficient information has been supplied already to check the essential factors, as in the case of CF-ILW, and it is proposed to review the details which are not yet clear, as requested by the contractor, as soon as a joint visit can be scheduled by the RAI.

(C.H. Skelton)
for
Regional Director, Air Services

Encl.

5010-10-117

J5

2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Que., January 30th, 1959
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 Dakota - Cabin Tanks CF-TEF - CF-IIW	5010-1-64 (AIQ) 5012-4 5008-T.5-6 5008-I.12-23

31740

TRANSPORT - RECORDS
FEB 3 A.M.
5008 - T5-6
File 5010-10-117

Director General, Air Services
No. 3 Temporary Building
Ottawa, Canada

Attention Chief Aeronautical Engineer

1) Two installations are under consideration, both to be used for trans-Atlantic crossings.

2) An installation in CF-IIW, belonging to Eastern Canada Stevedoring Co. Ltd., and installed by United Aircraft Technicians, is covered by a letter, Sketch #T-1, and a diagram showing the tie-in with the aircraft fuel system, and has been approved as indicated.

3) Because the tank will be filled only twice, and will be removed, in each case, immediately after the completion of the crossings, the normal requirements for isolation of the tank and for an external, sealed filled connection have been waived. Since the safety of the aircraft is affected, however, by the change in the fuel system, the introduction of the fire hazard, and the flight loads on the tank installation, which is a semi-permanent engineered structure, the essential factors have been checked and are covered by the approval and the technical records.

4) Because the tank is easily filled from the wing tanks with the aircraft booster pump, the need for filling from within the cabin has been eliminated. If the tank is run dry, when the main selector valve is turned on, the booster pump will immediately feed the engine-driven pump. Some fuel will flow back into the cabin tank until the outlet vavle is closed. Standard flex. lines connect the cabin tank to the existing connection for the original cabin tanks, which had been blanked off. The cradles and tie down attachments have been checked, and are obviously over strength. Tests include fuel flow, leakage, and air pressure, as indicated. The crew only will be carried, do not smoke, and will supervise filling operations personally. In addition, placards concerning passengers, smoking, removal of filler cap, filling procedure, etc., will be added. The tank itself is a Dakota Wing Tank.

COPY ON
5008-T5-6
..... 2-12-23

46

BRISTOL AERO-INDUSTRIES LIMITED
WINNIPEG DIVISION

P.O. BOX 874
WINNIPEG INTERNATIONAL AIRPORT
WINNIPEG, MANITOBA

YOUR REF.
OUR REF. 281-00

AIR SERVICES REGISTRY
WINNIPEG
MAR 16 1959
File 5008 T-5-6

13th March 1959

Mr R. C. Smith,
District Director of Air Services,
Department of Transport,
General Post Office,
WINNIPEG.

11096

Dear Sir:

For your approval we attach three copies of all the drawings listed on our general arrangement drawing 281-00004.

This set of drawings shows the work done in our plant to T.C.A. DC-3 aircraft CF-TEF on their behalf.

Yours very truly,
BRISTOL AERO-INDUSTRIES LIMITED
Winnipeg Division

W. E. ROBINSON
Chief Engineer

WRT/hs

Encl.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 47
10-56

Winnipeg General Post Office,
Winnipeg 1, Manitoba, March 17, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-6 (AIW)

SUBJECT: TCA - DC-3 Aircraft, CF-TEF

Orig 50-10-10-117 38236

TRANSPORT - RECORDS
5008-10-117
MAR 9 A.M.
5008-T-5-6
File

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Please find attached copy of a letter received from Bristol Aero-Industries Limited, Winnipeg Division. Under separate cover we are forwarding the drawings referred to in their letter.

R C Smith

for Regional Director, Air Services.

Enc.

RETAINED ON CARDS
No. 8 Dist.

CANADIAN NATIONAL TELEGRAPHS

SRL 722

48 LFC

1959 MAR 20 PM 2 19

CNTGA009 28/26

936

ST WINNIPEG MAN MARCH 20 1223PMC

DIRECTOR GENERAL AIR SERVICES ATTN CONTROLER

CIVIL AIR OPERATIONS AND REGULATIONS DOT OTTAWA

ARW
~~22~~73 DOUGLAS DC THREE CF- TANGO ECHO FOXTROT PURCHASED BY FEDERAL AVIATION AGENCY WASHINGTON PLEASE CANCEL REGISTRATION MARKINGS FROM CIVIL AIRCRAFT REGISTER AS OF THIS DATE.

REGIONAL DIRECTOR AIR SERVICES.

Cert cancelled 20.3.59
Noted & Coded
LJ

~~ARW73 DC CF- TANGO ECHO.~~

(215PME).

Certs held to DOT (?)

BRISTOL AERO-INDUSTRIES LIMITED

ENGINEERING REPORT #1520

WEIGHT AND BALANCE

DC-3 - CF-TEF (TCA)

Prepared by: W J Weir

Checked by: W R Torrance

Approved by: E Juzak

March 17/59.

WINNIPEG DIVISION

PREPARED BY W. Weir CHECKED BY ..... APPROVED BY	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA WEIGHT AND BALANCE DC-3 - CF-TEF	PAGE 1 OF 14 REPORT E.R. 1520 DATE March 17th, 1959.

CONTENTS

		PAGE No.
1.	Introduction.	2
2.	Centre of Gravity Limits	3
3.	Reference Datum	3
4.	Levelling Lugs	3
5.	Maximum Allowable Weights	3
6.	Centre of Gravity Position of Seated Passengers and Crew Members	4
7.	Fluid Tank capacities and Centre of Gravity Positions	5
8.	Example of Calculation of Centre of Gravity with full fuel load	6
9.	Example of Calculation of Centre of Gravity with full passenger load	7
10.	Aircraft Basic Weight Change Record	8
11.	Aircraft Weight Form	9
12.	Aircraft Weighing Record	10 and 11
13.	Basic Weight Check-off Sheets	12 and 13
14.	Station Diagram.	14

1. INTRODUCTION.

This report contains all information necessary for calculation of centre of gravity position prior to take-off.

Aircraft centre of gravity limits and C.G. positions of seated passengers, crew, fuel, oil, de-icer and water tanks, together with other relevant information are provided on the following pages.

The term basic weight of the aircraft is defined as the weight of the aircraft ready to fly, including all items of standard equipment, but excluding fuel, oil, de-icer fluid, water, passengers, crew and all other items of a variable nature. The basic weight includes all those items listed in the BASIC WEIGHT CHECK-OFF SHEETS (pages 12 and 13).

To compute aircraft C.G. position follow the procedure outlined below:

(a) Add the basic weight of the aircraft (from page 8) to the weights of fuel, oil, de-icer fluid, water, passengers, crew, baggage and all other items to be carried. This sum is the take-off weight and must not exceed the maximum allowable.

(b) Find the sum of the moments of the basic aircraft (from page 8) fuel, oil, de-icer fluid, water, passengers, crew, baggage and all other items included in step (a). To obtain moments multiply weight in pounds by distance in inches from Station 0. A station diagram is given on page 14 so that estimation of distances can be made accurately (e.g. Station 234 is 234 inches from Station 0).

(c) Divide the sum of the moments by the sum of the weights. The result is the station of the aircraft centre of gravity. If this position is between the limits given on page 3 and if the total weight is less than the maximum allowable the weight and balance of the aircraft are satisfactory for flight.

Examples of C.G. calculations are given on pages 6 and 7.

Each time an item is permanently removed or installed, the weight, station and moment of that item should be entered in the AIRCRAFT BASIC WEIGHT CHANGE RECORD SHEET (page 8). Corrected weight, moment and centre of gravity of the basic aircraft should be calculated and entered in the columns provided on this sheet.

When the aircraft is reweighed pages 8 - 13 incl. of this report should be renewed.

CENTRE OF GRAVITY LIMITS.

Forward limit	Stn. 239.6	(11% MAC)
Aft limit	Stn. 263.1	(28% MAC)

REFERENCE DATUM.

Stn. 222.84 is located on the centre line of the aft row of screws in the front spar of the wing below the centre of the aircraft.

LEVELLING LUGS.

Are located on the Port side of the fuselage at Stations 390 and 411 and under the wing centre section along the front spar.

MAXIMUM ALLOWABLE TAKE-OFF WEIGHT.

In Canada - not to exceed 26200 pounds in passenger operation.

In U.S.A. - not to exceed 25346 pounds in passenger operation.

PREPARED BY W. Weir	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA	PAGE 4 OF 14
CHECKED BY		REPORT E.R.1520
APPROVED BY	WEIGHT AND BALANCE DC-3 - CF-TEF	DATE March 17th, 1959.

CENTRE OF GRAVITY POSITIONS OF SEATED PASSENGERS AND CREW MEMBERS.

		Station.
Pilot and Co-pilot	(2 seats)	70
Radio Operator	(1 seat)	147
Passengers Row 1	(4 seats)	204
Passengers Row 2	(4 seats)	243
Passengers Row 3	(4 seats)	282
Passengers Row 4	(4 seats)	321
Passengers Row 5	(4 seats)	360
Passengers Row 6	(4 seats)	399
Passengers Row 7	(4 seats)	438

PREPARED BY W. Weir CHECKED BY APPROVED BY	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA WEIGHT AND BALANCE DC-3 - CF-TEF	PAGE 5 OF 14 REPORT E.R.1520 DATE March 17th, 1959

FLUID TANK CAPACITIES AND CENTRE OF GRAVITY POSITIONS.

	Weight.	Stn.	Moment.
FUEL.			
Two Front Tanks 168.3 Imp Gals each Total Weight at 7.2 lbs/Imp Gal.	2424	240.5	582972
Two Rear Tanks 166.7 Imp Gals each Total Weight at 7.2 lbs/Imp Gal.	2400	276.0	662400
OIL.			
Two Tanks 24 Imp Gals each Total Weight at 9 lbs/Imp Gal.	432	184.5	79704
DE-ICER FLUID.			
One Tank 9 Imp Gals Total Weight at 8.2 lbs/Imp Gal.	73.8	341	25166
WATER.			
One Tank 1.5 Imp Gals Total Weight at 10 lbs/Imp Gal.	15	510	7650

PREPARED BY W. Weir	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA	PAGE 6 OF 14
CHECKED BY		REPORT E.R.1520
APPROVED BY	WEIGHT AND BALANCE DC-3 - CF-TEF	DATE March 17th, 1959

EXAMPLE OF CALCULATION OF CENTRE OF GRAVITY WITH FULL FUEL LOAD.

		Weight.	Stn.	Moment
1. Basic Aircraft	(See page 8)	18925	248.5	4703279
2. Maximum Fuel Load				
Front Tanks	(" " 5)	2424	240.5	582972
Rear Tanks	(" " 5)	2400	276.0	662400
3. Maximum Oil Load	(" " 5)	432	184.5	79704
4. Maximum De-icer Fluid	(" " 5)	73.8	341	25166
5. Full Water Tank	(" " 5)	15	510	7650
6. Pilot and Co-pilot	(" " 4)	340	70	23800
7. Radio Operator	(" " 4)	170	147	24990
	TOTAL	24780	246.6	6109961
Assuming maximum allowable take-off weight of		26200		
Allowable weight of passengers and baggage		1420		
If passenger weight averages at 170-lb. with 30-lb. baggage, seven passengers may be carried.				
8. Four Passengers in row 7	(See page 4)	680	438	297840
9. Three " " " 6	(" " 4)	510	399	203490
10. Baggage (in aft compartment)		210	568	119280
	TOTAL	26180	257.1	6730571

NOTE that C.G. (Stn.257.1) is within limits (page 3) even though passenger load and baggage is as far aft as possible.

Aircraft is 20-lbs. below maximum allowable weight.

PREPARED BY. W. Weir	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA	PAGE. 7 OF. 14
CHECKED BY	WEIGHT AND BALANCE DC-3 - CF-TEF	REPORT. E.R.1520
APPROVED BY		DATE. March 17th, 1959.

EXAMPLE OF CALCULATION OF CENTRE OF GRAVITY WITH FULL PASSENGER LOAD.

		Weight.	Stn.	Moment.
1. Basic Aircraft	(See page 8)	18925	248.5	4703279
2. Maximum Passenger Load at 170-lb. each				
Row 1	(See page 4)	680	204	138720
Row 2	(" " 4)	680	243	165240
Row 3	(" " 4)	680	282	191760
Row 4	(" " 4)	680	321	218280
Row 5	(" " 4)	680	360	244800
Row 6	(" " 4)	680	399	271320
Row 7	(" " 4)	680	438	297840
3. Maximum Oil Load	(" " 5)	432	184.5	79704
4. Maximum De-icer Fluid	(" " 5)	73.8	341	25166
5. Full Water Tank	(" " 5)	15	510	7650
6. Pilot and Co-pilot	(" " 4)	340	70	23800
7. Radio Operator	(" " 4)	170	147	24990
8. Baggage at 30-lb. per passenger - 840 lbs.				
In aft compartment		420	568	238560
In forward compartment		420	136	57120
TOTAL		25556	261.7	6688229
Assuming maximum allowable take-off weight of		26200		
Allowable fuel load		644		
644 lbs. of fuel - 89.4 Imp. Gals.				
Assuming fuel loaded into aft tanks		644	276	177744
TOTAL		26200	262.1	6865973

NOTE that C.G. position (Stn. 262.1)
is within limits.

AIRCRAFT BASIC WEIGHT CHANGE RECORD.

Basic weight when last weighed 18771 lbs.

Basic moment when last weighed 4687417 in lbs.

C of G of Basic Aircraft when last weighed Stn. 249.7.

Item	Removed or Installed	Weight (+ or -) (lbs)	Stn. (in.)	Moment (+ or -) (in lbs)	Revised Aircraft Basic Weight (lbs)	Revised Aircraft Basic Moment (in lbs)	Revised C of G Stn. of Basic Aircraft	Signature and Date.
Propellers	Removed	-740	103	-76220	18031	4,611,197	-	
Propellers	Installed	+894	103	+92082	18925	4,703,279	248.5	

PREPARED BY W. Weir.....
CHECKED BY.....
APPROVED BY.....

BRISTOL AERO-INDUSTRIES LIMITED
WINNIPEG DIVISION
WINNIPEG CANADA

WEIGHT AND BALANCE
DC-3 - CF-TEF

PAGE 8 OF 14
REPORT E.R.1520
DATE March 17th, 1959.

BRISTOL AERO-INDUSTRIES LIMITED
WINNIPEG DIVISION

AIRCRAFT WEIGHT FORM

Inspection Report #167C

Date 10th March, 1959.

Aircraft CF - TKF Type DC-3

(1) Weight Port 8729 Scale No. Red Calibration 0 Total 8729
Weight Stbd 8870 Scale No. Yellow Calibration 0 Total 8870
Weight Tail 930 Scale No. Blue Calibration 0 Total 930
Total Weight 18,529 Total Calibration 0 Total Weight 18,529

(2) Weight Port 8700 Scale No. Blue Calibration 0 Total 8700
Weight Stbd 8860 Scale No. Red Calibration 0 Total 8860
Weight Tail 910 Scale No. Yellow Calibration 0 Total 910
Total Weight 18,470 Total Calibration 0 Total Weight 18,470

(3) Weight Port 8720 Scale No. Yellow Calibration 0 Total 8720
Weight Stbd 8860 Scale No. Blue Calibration 0 Total 8860
Weight Tail 915 Scale No. Red Calibration 0 Total 915
Total Weight 18,495 Total Calibration 0 Total Weight 18,495

Total of 3 Weighings 55,494 Average 18,498

REMARKS: Fuel system empty, Oil system 32 Imp. Gals. Anti-icer system 9 Imp. Gals.
Main spar reference datum to tail jacking point - 41.31' = 495.72"
Main spar reference datum to forward jacking point - .04' = .48"

Weighing carried out by: W. Sharkey

Weighing witnessed by: [signature]

BRISTOL AIRCRAFT (WESTERN) LIMITED

AIRCRAFT WEIGHING RECORD

DATE WEIGHED 10 March 59 TYPE AND MARK DC-3 NO CF-TEF

PLACE WEIGHED Bristol Aero-Industries Ltd. WEIGHING OFFICER W.F.Weir

WHEEL	SCALE READING	TARE	NET WEIGHT	ARM (Inches)	MOMENT
LEFT MAIN			8717		
RIGHT MAIN			8863		
SUB-TOTAL (Both Main)			17580	222.36	3,909,089
NOSE OR TAIL			918	718.56	659,638
TOTAL (As Weighed)			18498	H(C of G) 247.0	4,568,727

MEASUREMENTS

l = 222.84 inches, the distance from the reference datum to some accessible exterior jig point or frame of the aircraft from which a plumb bob can be dropped to the ground. ~~Obtain from the diagram on the balance computer or relevant EO.~~

E = 222.36 inches, the distance from the reference datum to the centre line of the main ~~wheels~~ jacking points.

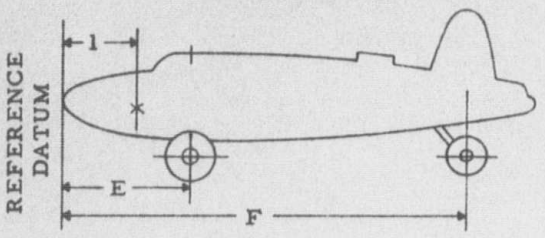
F = 718.56 inches, the distance from the reference datum to the centre line of the ~~nose or~~ tail ~~wheel~~ jacking point.

BALLAST

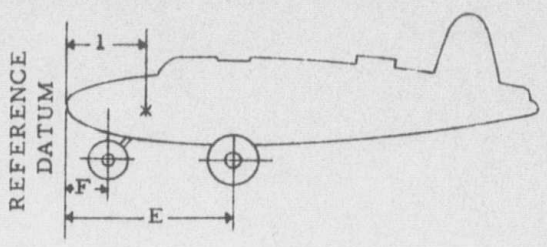
Weight, Arm and Moment of all Ballast installed is to be given

WEIGHT	ARM	MOMENT
---	---	---
---	---	---

TAIL WHEEL AIRCRAFT



NOSE WHEEL AIRCRAFT



DIAGRAMS FOR MEASURING VARIOUS TYPES OF AIRCRAFT TO DETERMINE ARM OF SUPPORT POINTS

AIRCRAFT WEIGHING RECORD (CONT'D)

DESCRIPTION	NET WEIGHT	ARM	MOMENT	MOMENT / 1000
TOTAL (As Weighed)	18498	247.0	4568727	
OIL IN AIRCRAFT	- 288	184.5	- 53136	
TOTAL OF ITEMS WEIGHED BUT NOT PART OF BASIC WEIGHT (From Col. 1 Below)	- 73.8		- 25166	
TOTAL OF BASIC ITEMS NOT IN AIRCRAFT WHEN WEIGHED (From Col. 2 Below)	+ 634.5		+ 196992	
BASIC AIRCRAFT	18771	C of G 249.7	4687417	

NOTE: See revised basic weight and moment on page 8.

COLUMN 1

ITEMS WEIGHED BUT NOT PART OF BASIC WEIGHT	WEIGHT	ARM	MOMENT
De-icer fluid			
9 Imp.Gals @ 8.2			
lbs./Imp.Gal.	73.8	341	25166
TOTAL	73.8		25166

COLUMN 2

BASIC ITEMS NOT IN AIRCRAFT WHEN WEIGHED	WEIGHT	ARM	MOMENT
Cartridges	4.0	85	340
Log Book	2.5	85	213
P.A.Telephone	1.0	85	85
VHF ARC-1	46.0	170	7820
Passenger Seats	581.0	324.5	188534
TOTAL	634.5		196992

Remarks: Type of Scales used Cox & Stevens Electronic #1696

Method of Support Main and Tail Jacking Points.

Attitude (Level-Normal) Level

PREPARED BY W.Weir CHECKED BY APPROVED BY	BRISTOL AERO-INDUSTRIES LIMITED WINNIPEG DIVISION WINNIPEG CANADA WEIGHT AND BALANCE DC-3 - CF-TEF	PAGE 12 OF 14 REPORT E.R.1520 DATE March 17th, 1959.

BASIC WEIGHT CHECK-OFF SHEETS.

The following items are included in the basic weight of the aircraft. Items which are not in the aircraft when it is weighed must be entered in column 2 of the second page of the Aircraft Weighing Record.

Compartment	Item	Weight	Stn.	Moment / 1000	In aircraft when weighed	Not in aircraft when weighed
Cockpit	Log Book	2.50	85	.2125		x
	Bulbs and Fuses - spare	1.50	75		x	
	Emergency Landing Papers Stowage	1.75	85		x	
	Fire Extinguisher CO2	7.20	75		x	
	Headsets (2)	1.00	86		x	
	Microphones (2)	1.20	86		x	
	Safety Belts - Crew (2)	2.00	70		x	
	Seat Cushions		70		x	
	Very Pistol		85		x	
	Cartridges (6)	4.00	85	.340		x
	P.A.Telephone	1.00	85	.085		x
Radio Operator's Compartment.	Jump Seat and Safety Belt		86		x	
	Janitrol Heater	105.00	170		x	
	Fire Axe		86		x	
	Mic and Headset		130		x	
	Seat Cushions and Safety Belt		147		x	
	H.F.Receiver BC-348R		127		x	
	Transmitter ART-13		147		x	
	Antenna Loading Unit		150		x	
	Localizer Receiver BC-733-D		160		x	
	P.A.System Amplifier G-269B		160		x	
	Transceiver ARC-1 (VHF)	46.00	170	7.820		x
	Loop Control MN31C		172		x	
	Marker Beacon Receiver MN53A		167		x	
	Compass Receiver MN26 (2 units)		167		x	
	Glide Path Receiver 51V-2		160		x	
	Inverters (2)		166		x	
	Dynamotor DY17/ART-13		170		x	

PREPARED BY W. Weir
CHECKED BY .....
APPROVED BY .....

BRISTOL AERO-INDUSTRIES LIMITED
WINNIPEG DIVISION
WINNIPEG CANADA

WEIGHT AND BALANCE
DC-3 - CF-TEF

REPORT E.R.1520
DATE March 17th, 1959

Compartment	Item	Weight	Stn.	Moment / 1000	In aircraft when weighed	Not in aircraft when weighed
Cabin	Fire Extinguisher CO2	7.20	435		x	
	Curtains and Tie Backs (14)	7.70	325		x	
	Attendant's Jump Seat				x	
	Crash Axe	3.10	498		x	
	Cabin Fans (4)	9.60	289		x	
	Passenger Seats, Row 1	83.00	207.5	17.222		x
	" " Row 2	83.00	246.5	20.459		x
	" " Row 3	83.00	285.5	23.697		x
	" " Row 4	83.00	324.5	26.934		x
	" " Row 5	83.00	363.5	30.170		x
	" " Row 6	83.00	402.5	33.408		x
	" " Row 7	83.00	441.5	36.644		x
	(One double seat weighs 83 ÷ 2 = 41½ lbs)					
	TOTAL PASSENGER SEATS	581.00	324.5	188.534		
Washroom	Toilet Container	2.00	530		x	
	Toilet tissue	.50	538		x	
	Paper Towels	.60	530		x	
	Kleenex Package	.50	524		x	
Galley	Garbage Container		479		x	
	First Aid Kit	4.20	522		x	
	Plates	8.40	530		x	
	Thermos (one gallon) (2)		522		x	
	Thermos " " (1)		486		x	
	Food Warmer Boxes (2)		522		x	
	Teapot		516		x	
	Coffee Pot		516		x	
Miscellaneous	Batteries	152.00	124		x	
	Oxygen bottle	33.00	390		x	

NOTE: Basic weight includes all items necessary for flight, plus the above items, but does not include:

Fuel	Water	Baggage
Oil	Passengers	
De-icer fluid	Crew	

or other variable items.

PREPARED BY W.Weir

CHECKED BY

APPROVED BY

BRISTOL AERO-INDUSTRIES LIMITED

WINNIPEG DIVISION

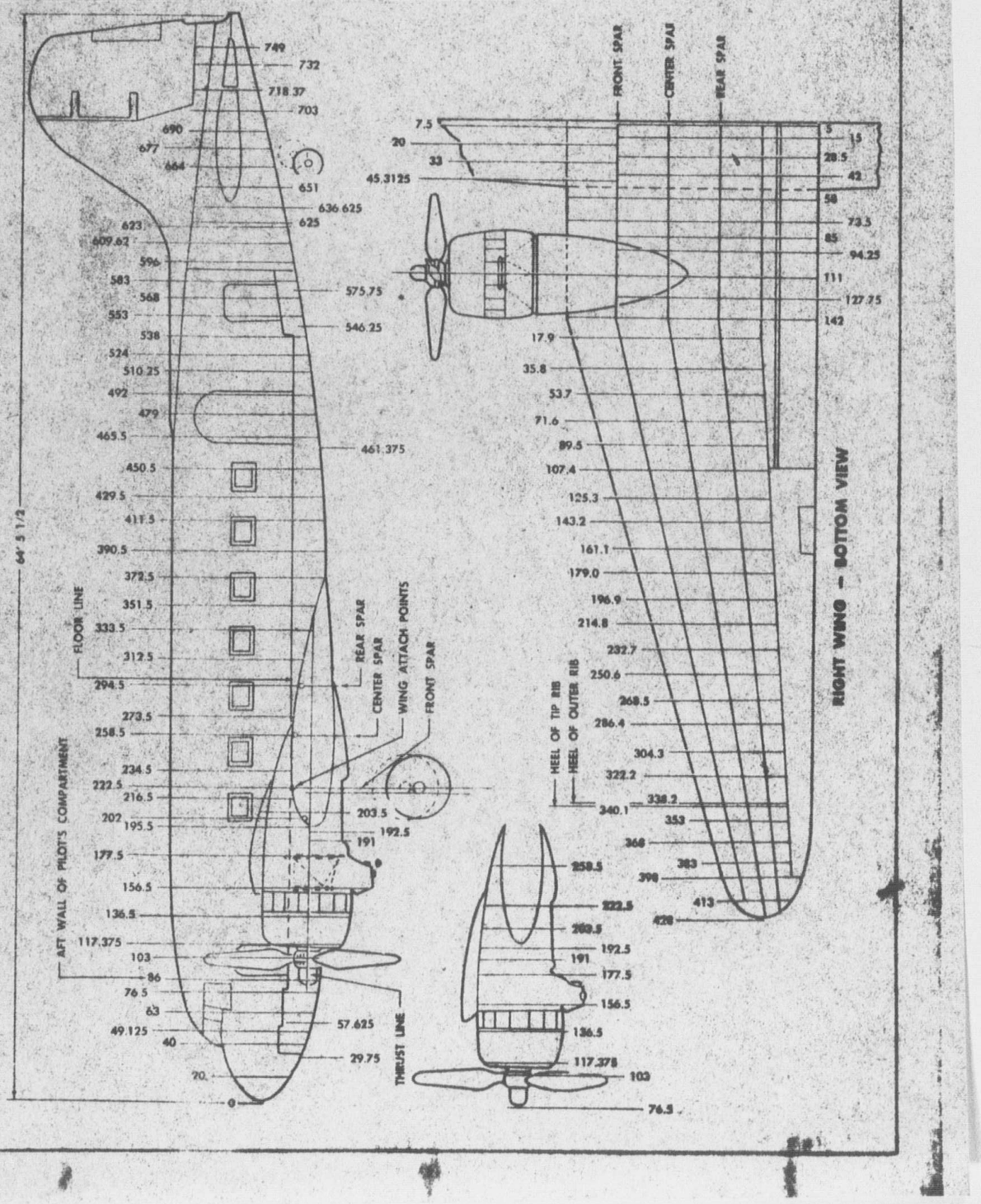
WINNIPEG CANADA

PAGE 14 OF 14

REPORT E.R.1520

DATE March 17th, 1959

WEIGHT AND BALANCE
DC-3 - CF-TEF



CF-TEF
11-5337 to
11-5340.

March 18th, 1959.

Log Book Report - Douglas DC-3 - CF-TEF.

The following is our report of work carried out on the subject aircraft during reconditioning to a "Zero Hour Check" and modifications as requested:

FUSELAGE EXTERIOR:

NOSE SECTION:

1. Upper fuselage nose cover, dressed out small cracks, patch repaired large cracks and straightened distortions.
2. Replaced and re-glued rubber sealing strips on inside attachment flanges.
3. Nose cover attachment brackets primed and painted.

EXTERIOR FUSELAGE:

1. R.H. ice shield panel removed and straightened (Ref. DSB. 115).
2. Stop drilled cracks, air scoop flange, Janitrol Heater.
3. Repaired Stbd. battery carrier door and re-fitted.
4. Straightened and re-fitted front cargo loading door.
5. Replaced fire extinguisher blow-out disc.
6. Replaced sponge rubber stripping, cabin escape hatches.
7. Stop drilled cracks, Dzus spring hole in lavatory fuselage access panel.
8. Lavatory access compartment painted with acid resistant black paint.
9. Sound-proofing in nose section re-glued and replaced as necessary.
10. Installed thick washer under nut, R.H. brake valve tuning fork bolt.
11. Installed rubber plug, external power spare fuse grommet cover.
12. Manufactured and installed tunnel cover, front hydraulic tubing, as per sample.
13. Manufactured and installed tunnel cover, middle hydraulic tubing, as per sample.
14. Manufactured and installed tunnel cover, front electrical tubing, as per sample.
15. Re-glued felt pad on rear electrical tunnel cover.
16. Installed felt strips as per sample, front and centre electrical tunnel covers.
17. Installed rivet, rear hinge, middle electrical tunnel cover.
18. Installed rivets, middle electrical tunnel cover.
19. Installed grommet, heater drain line at fuselage.
20. Installed grommet, R.H. battery box drain line at fuselage.
21. Replaced engine control cable fairleads, under control column cross-shaft, Pt.#1110293 - 5 required.

(Cont'd on Page 2).

FUSELAGE (Cont'd):

EXTERIOR FUSELAGE (Cont'd):

22. Brake control valve removed, bench checked and re-installed.
23. Installed rivet, top front of rear cargo door.
24. Replaced all fuselage screws, Dzus buttons as required.
25. Re-glued wing fillet felts.
26. Replaced wing fillet dill nuts as required and straightened skin.
27. Replaced hose clamps and hardware as necessary, on fuel tank vent system.
28. Patch repaired fuselage skin at 1st cabin escape hatch, R.H. side.
29. Patch repaired rear oxygen bottle stowage.
30. Replaced rear hold-down clamp, rear oxygen bottle.
31. Replaced lock, rear oxygen bottle clamp.
32. Cadmium plated all hardware, oxygen bottle hold-down.
33. Welded lower mounting bracket, oxygen system filler valve.
34. Dressed out crack, front oxygen bottle stowage.
35. Replaced wooden strips, L.H. battery tray.
36. Straightened rear hold-down rod, L.H. battery.
37. Battery compartments painted with acid proof paint.
38. Installed rivet, rear tubing tunnel cover.
39. Replaced lower hinge pin, middle tubing tunnel, Pt.#1218735081-2228.

COCKPIT SECTION:

1. Secured sound-proofing at cockpit bulkhead, under pilot's window.
2. Manufactured and installed new hold-down bungee, pilot's storm window.
3. Cleaned out pilot's windshield trough drain hose.
4. Repaired lining at front of pilot's sliding window.
5. Tightened lower mounting bolt, flap position indicator.
6. Re-finished flap position indicator.
7. Freed, cleaned and lubricated pilot's rudder pedal adjustments.
8. Re-finished lettering on fuel usage instruction placard at Left Engine fuel selector.
9. Installed washers and tightened Left Engine fuel selector valve handle.
10. Straightened pilot's heat outlet duct, installed sheet metal screws and wrapped.
11. Repaired sound-proofing at pilot's rudder pedals.
12. Repaired and secured sound-proofing under pilot's windshield.
13. Replaced elevator horn dust excluder, Pt.#5110547-1.
14. Installed shorter bolt, pilot's left pedal brake rod.
15. Re-sealed windshield wiper control valve fittings and tightened.
16. Applied Koroseal to pitot static lines under pilot's control column.
17. Replaced rudder trim tab decal, Pt.#1005690.
18. Replaced elevator trim tab decal, Pt.#1004164.
19. Tightened nut on elevator trim tab position pointer bolt.
20. Tightened clip securing radio control box conduit under throttle quadrant.
21. Replaced leather band, throttle lock, Pt.#1116241-1.
22. Replaced screw securing cable stop for left propeller control in quadrant drum.
23. Replaced tail wheel lock decal on co-pilot's side of pedestal, Pt.#132350-1.
24. Applied identification to engine control lever knobs.
25. Re-painted engine control pedestal.
26. Cleaned pulleys, drums, cables, etc., inside engine control pedestal and lubricated.
27. Straightened bulkhead flange behind pilot.
28. Straightened bulkhead at top hatch, L.H. stop.

(Cont'd on Page 3).

FUSELAGE (Cont'd):

COCKPIT SECTION (Cont'd):

29. Installed locknuts on top hatch stops.
30. Replaced weather stripping, top hatch.
31. Re-rigged de-icer control cables.
32. Installed placard, de-icer control.
33. Re-glued sound-proofing over co-pilot's head.
34. Re-positioned hydraulic line behind co-pilot's side of fuselage.
35. Painted flare release cover "red" and filled lettering with Monofil.
36. Painted flare release handles "red" and filled lettering with Monofil.
37. Re-glued sound-proofing on bulkhead behind pilot.
38. Re-wrapped pilot's heater ducting under cockpit floor.
39. Cleaned fuel dump valve compartment and filled instruction lettering with Monofil.
40. Straightened co-pilot's flooring flanges.
41. Re-worked spring lock, fire extinguisher access door.
42. Re-painted fire extinguisher access door and re-applied lettering.
43. Re-painted hydraulic hand pump "red".
44. Re-painted cockpit as required.
45. Installed parking brake placard on control pedestal, Pt.#1032692.
46. Replaced pilot's oxygen outlet.
47. Bench checked oxygen pressure gauge and replaced 90° fitting.

PILOT'S & CO-PILOT'S SEATS:

1. Dry-cleaned pilot's and co-pilot's seat cushion covers.
2. Dry-cleaned pilot's and co-pilot's back rest cushion covers.
3. Cleaned and re-painted pilot's and co-pilot's seat assemblies.
4. Replaced leather covers, pilot's and co-pilot's arm rests.

FUSELAGE INTERIOR:

FRONT CARGO COMPARTMENT:

1. Cleaned hydraulic system, filled lettering on operating placard with Monofil.
2. Tightened all unions and fittings on hydraulic components on R.H. Bulkhead.
3. Enlarged cut-out for shut-off cock.
4. Installed clamps on rear hose on battery compartment.
5. Cleaned pulley cluster between battery compartments and replaced eight (8) pulleys, Pt.#AN210-3B.
6. Re-activated loop crystals.
7. Rsplaced rivets and pipe clamp, L.H. rear floor, channel forward of radio rack.
8. Re-wrapped heater duct.
9. Cleaned and re-painted area below cargo flooring.
10. Re-stitched canvas head lining.
11. Secured holding strips on canvas lining.
12. Re-installed and secured insulation and padding.
13. Cleaned R.H. side lining.
14. Canvas head lining, cleaned and painted.

REAR CARGO COMPARTMENT:

1. Installed new clamp on fire extinguisher spray tube support.
2. Tightened fresh air duct at lavatory wall cut-out.
3. Installed fresh air duct to galley correctly.

(Cont'd on Page 4).

FUSELAGE (Cont'd):

REAR CARGO COMPARTMENT (Cont'd):

4. Re-installed upper front support brace at upper stowage.
5. Tightened all attachment screws, fresh air duct to galley.
6. Food stowage, R.H. rear bottom attachment angle, dressed out crack and installed missing screws.
7. Installed longer screws in upper stowage rear attachment.
8. Installed screw correctly in upper stowage, front attachment
9. Installed attachment screw, upper L.H. front panel above door.
10. Straightened centre floor panel and dressed out crack.

PASSENGER COMPARTMENT:

1. Re-painted all luggage support riblets.
2. Removed and repaired L.H. front upholstery bag.
3. Installed top attachment strip screw, R.H. front corner, leather upholstery.
4. Removed leather padding, L.H. and R.H. top luggage compartments, cleaned out compartments and re-installed padding correctly.
5. Re-glued and patch repaired L.H. and R.H. upper side upholstery as required.
6. Cleaned and touched up paint surface, L.H. and R.H. upper side upholstery.
7. Re-tightened fresh air inlet valve mounting rings.
8. Dressed out cracks, straightened distortions and re-painted oxygen outlet housing brackets.
9. Dressed out cracks, straightened distortions and loosened controls, hot air inlet covers.
10. Replaced attachment screw, R.H. front upholstery, leather hold-down strip to heater duct.
11. Replaced locking clip, L.H. fan screen.
12. Trimmed insulation, L.H. heater duct at lower flange.
13. Tightened all seat attachment bolts at L.H. and R.H. sides.
14. Removed both cabin air vents, cleaned and lubricated.
15. Replaced and tightened support clamps on hydraulic lines at R.H. side, inside fuselage bottom.
16. Tightened attachment screws and replaced riv-nuts, fire axe stowage at R.H. rear bulkhead of cabin.
17. Straightened garbage disposal door at L.H. cabin, rear bulkhead.
18. Replaced main door hinge bolts with clevis bolts, Pt.#AN23-38 (10/32).
19. Tightened main door hinge bracket attachment bolts at fuselage.
20. Replaced attachment screws, main door upholstery hold-down strips.
21. Replaced attachment screw, main door control handle spacer plate.
22. Replaced rubber sealing, main door.
23. Main door upholstery, cleaned leather and painted upper part.
24. Dressed out cracks and straightened distortions, main door hinge bracket fairings.
25. Re-painted lavatory compartment inside.
26. Straightened paper stowage bracket in lavatory.
27. Replaced lower leather upholstery, lavatory door.
28. Straightened used towel stowage.
29. Replaced riv-nuts, "Kleenex" stowage, outboard bracket.
30. Reworked slide channels for sliding door, rear upper food stowage, in galley.
31. Reworked door and slide channels, rear lower food stowage.
32. Straightened door stop, galley upper food stowage compartment.
33. Straightened rear flange, galley upper L.H. front food stowage compartment.
34. Manufactured and installed sliding door handle, upper L.H. rear food stowage compartment.

(Cont'd on Page 5).

FUSELAGE (Cont'd):

PASSENGER COMPARTMENT (Cont'd):

35. Straightened stewardess' call control panel and installed Dzus fasteners.
36. Stop drilled cracks in heater duct at front 'branch off', Stbd. side.
37. Stop drilled crack in angle bracket at Sta.294½, top Port side.
38. Dressed out crack at third lightening hole, bottom Port side at Sta.372½.
39. Dressed out cracks in angle brackets at bottom, Port and Stbd. sides at Sta.429½.

WING ASSEMBLY, PORT:

1. Installed Tinnerman clamps on de-icer hoses at leading edge, inboard and checked hoses.
2. Patch repaired Rib #2 at stringers, aft of rear spar.
3. Enlarged rear spar lightening hole at bottom area, Rib #3, aft.
4. Removed flap actuating arm, lower roller at Rib #1, lubricated and re-checked.
5. Replaced attachment screws, landing light and anti-glare shields.
6. Replaced glass cover, landing light.
7. Replaced safety wiring, landing light, top glass cover.
8. Repositioned inner landing light shade, inboard.
9. Replaced all attachment screws, de-icer strip.
10. Replaced all attachment screws, upper inspection panel and outer wing tip.
11. Replaced all attachment screws, navigation light bracket.
12. Replaced outboard wing de-icer boot.
13. Replaced inboard wing de-icer boot.
14. Replaced aileron actuator arm, rear bearing and eye-bolt.
15. Replaced aileron inboard hinge bracket bonding strip.
16. Patch repaired aileron inboard hinge cover bracket and installed rivet.
17. Patch repaired aileron hinge bracket #2 cover.
18. Replaced aileron centre actuating arm bearing and eye-bolt.
19. Straightened aileron hinge bracket #4 cover.
20. Replaced bearing, aileron hinge bracket #5.
21. Renewed static discharger, outer wing tip.
22. Installed stiffener, upper skin panel at outer wing tip.
23. Installed stiffener, upper skin panel between Rib #6 and #7 at trailing edge.
24. Installed rubber cushions at front, centre and rear spars at root rib.
25. Replaced front anchor nut, bottom root rib, rear fairing attachment.
26. Replaced flap rubber bumper pads.
27. Replaced flap hinge.
28. Lubricated flap actuating shaft and roller brackets.
29. Tightened jam nuts, bulb in front of landing light.
30. Installed stiffeners, lower skin panels, between Ribs #13 and #14.
31. Installed stiffeners, lower skin centre panels, between Rib #9 and #10.

WING ASSEMBLY, STBD. - (Replaced, supplied by T.C.A.)

1. Installed de-icer boot.
2. Replaced de-icer strips.
3. Replaced wing tip attachment stock.
4. Replaced glass cover in landing light (from Old Wing Assembly).
5. Re-fitted navigation light glass cover in bracket.
6. Dressed out crack at Rib #2, aft of rear spar.
7. Renewed leather patches at rear spar cut-outs, inboard and centre aileron actuating rod.
8. Straightened aileron hinge, lower cover bracket #2.

(Cont'd on Page 6).

WING ASSEMBLY, STBD. (Cont'd):

9. Replaced bearings, both aileron hinge actuating arms.
10. Straightened root rib, rear support flange under flap.
11. Patched bottom skin between Ribs #17 - #18.
12. Patched outer wing tip rib at static discharger, inboard.
13. Patch repaired outer wing tip trailing edge, at outer end.
14. Replaced attachment screws, upper wing at rear spar between Ribs #2 - #7.
15. Replaced attachment screws, aileron bellcrank cover.

WAFFLE PLATES, PORT WING:

1. Replaced upper wing waffle plates, Nos. 1, 20, 21 and 22 and machined to ∱.002" to ∱.005" interference.
2. Spar butt plates, Nos. A, B and C shimmed to ∱.002" to ∱.005" interference.

WAFFLE PLATES, STBD. WING:

1. Replaced upper wing waffle plates, Nos. 3, 4, 5, 8, 9, 10, 11, 14, 15, 16 and 17 and machined to ∱.002" to ∱.005" interference.
2. Replaced lower wing waffle plate No. 15 and machined to ∱.002" to ∱.005" interference.
3. Spar butt plates, Nos. A, B, C, D, E and F shimmed to ∱.002" to ∱.005" interference.

CENTRE SECTION, PORT:

1. Re-glued wing root rubber cushions at front, centre and rear spars.
2. Replaced attachment bolts, upper nacelle skin to centre section skin.
3. Re-primed between Ribs #1 and #3, wing root section.
4. Replaced bolts and locknuts, upper and lower rear spar attachment between Ribs #1 and #2.
5. Wing root rear, straightened stringers, re-rivetted panel and installed padding on flanges.
6. Port front fuel tank bay, re-rivetted gang channel anchor nuts.
7. Dressed out crack at fuel outlet fitting cut-out.
8. Dressed out crack, tank outlet cut-out.
9. Replaced rubber shoe, fuel outlet fitting.
10. Installed anchor nut, L.H. rear corner.
11. Re-rivetted L.H. front anchor nut gang channel at Port rear fuel tank bay.
12. Repositioned and supported conduit tubing for potentiometer wiring.
13. Straightened flap hinge at centre.
14. Re-rivetted spacers at trailing edge, centre section Rib #6 and #7.
15. Dressed out cracks in cut-outs at jack, flap actuator arms.
16. Installed Adel clamp on hydraulic line inside centre section above aileron control sector.
17. Replaced leather shim at filler plate, Port rear fuel tank bay, lower section of inner bulkhead under dumping valve outlet.
18. Replaced Adel clamp supporting flap indicator tubing at rear fuel tank bay bulkhead.
19. Re-tightened fuel line fairlead attachment bolts at centre spar, Port rear fuel tank, inner bulkhead.
20. Re-tightened attachment bolt on bonding strip, fuel tank vent lines.
21. Compression angles shimmed to ∱.002" to ∱.005" interference as required.
22. Spar butt plates shimmed to ∱.002" to ∱.005" interference as required.

CENTRE SECTION, STBD.:

1. Outboard rib trailing edge, patch repaired cracks at rear and stop drilled crack at front.
2. Re-primed inside area, outboard rib.

(Cont'd on Page 7).

CENTRE SECTION, STBD. (Cont'd):

3. Removed surface corrosion and re-primed.
4. Re-tightened attachment bolt outboard, at centre spar.
5. Replaced rubber buffer pads, Pt.#5110501-2 (12 required).
6. Replaced attachment screws, exhaust shroud fairing, Pt.#AN526-8 and #AN526-10.
7. Replaced attachment bolts, nacelle to centre section, Pt.#AN3c-5 and #AN3c-7A.
8. Replaced attachment screws, nacelle inspection panel, Pt.#AN526-1032-9c.
9. Removed flap control rods, cleaned and cadmium plated fork ends and replaced attachment stock.
10. Replaced felt packing on attachment face.
11. Re-primed inside area of centre section.
12. Reposition solid fuel lines at Stbd. fuel shut-off.
13. Patch repaired fuel jettison elbow.
14. Re-primed inside area under cabin floors.
15. Compression angles shimmed to ∱.002" to ∱.005" interference as required.
16. Spar butt plates shimmed to ∱.002" to ∱.005" interference as required.

CENTRE CABIN FLOORING INTERCOSTALS:

1. Intercostal #1, straightened flange.
2. Intercostal #2, diagonal bracket at radius patch repaired.
3. Intercostal #3, replaced rivets.
4. Intercostal #4, replaced rivets.
5. Intercostal #5, diagonal brackets patch repaired.
6. Intercostal #6, bracket patch repaired.
7. Intercostal #8, straightened flange.
8. Intercostal #9, replaced anchor nut.
9. Intercostal #13, straightened flanges.
10. Intercostal #14, set anchor nut rivets.
11. Intercostal #14, dressed out burrs on diagonal bracket surplus holes.
12. Intercostal #15, installed doubler, lower mounting bracket holes.
13. Intercostal #16, diagonal brackets patch repaired.
14. Intercostal #17, installed rivets on anchor nuts.
15. Intercostal #17, diagonal bracket patch repaired.
16. Replaced all loose fibre nuts.

STBD. CABIN FLOORING INTERCOSTALS:

1. Intercostal #2, straightened flange and dressed out radius.
2. Intercostal #5, straightened flanges.
3. Intercostal #6, straightened flange and dressed out radius.
4. Intercostal #10, straightened lower mounting bracket flange and lightening hole patch repaired.
5. Intercostal #14, replaced rivets.
6. Intercostal #14, replaced rivet on inner triangle bracket.
7. Intercostal #15, installed doubler on lower mounting brackets.
8. Intercostal #17, diagonal bracket patch repaired.
9. Replaced all loose fibre nuts.

ENGINE ASSEMBLY, PORT:

1. Replaced #12 Cylinder head baffle.
2. Installed rubber hose, cowl ring, #1 Cylinder.
3. Replaced spark plug cooling tubing, #4 Cylinder head baffle.
4. Tightened Constant Speed Unit fairlead bolts at fixed engine baffle.
5. Tightened cannon plug at oil pressure transmitter.

(Cont'd on Page 8).

ENGINE ASSEMBLY, PORT (Cont'd):

6. Carburettor heat control rod removed and painted.
7. Mixture control rod removed and painted.
8. Tightened clamps on fire extinguisher line.
9. Oil cooler support rods, struts and rear plate removed and painted.

ENGINE ASSEMBLY, STBD.:

1. Replaced de-icer hoses from propeller blades to slinger ring.
2. Replaced bonding on #6 Cylinder.
3. Installed smaller size Adel clamps on fire extinguisher, right side centre.
4. Wire-locked blanking plug at fitting by Left Hand Magneto.
5. Removed exhaust pipe, welded hole at outlet end and re-installed.

WHEEL WELL, PORT:

1. Control rod and fork joint to oil shut-off valve removed and cadmium plated.
2. Feathering pump attachment bolts and washers removed and cadmium plated.
3. Feathering pump casing, attachment nuts, re-painted.
4. Feathering pump removed and re-painted.
5. Lock-wired blanking bolt.
6. Lock-wired electrical connection at firewall under oil tank, inboard side.
7. Re-tightened Adel clamp above junction box, inboard side.
8. Vertical undercarriage jack attachment bolts removed and cadmium plated.
9. Vertical jack attachments and stays removed and painted.
10. Removed corrosion from bolts securing plate between oil tank cut-out.
11. Replaced nuts and bolts securing bonding wire to oil tank.
12. Exhaust stack housing, brackets cleaned with Met-L-Prep, primed and re-painted.
13. Replaced nuts and bolts on firewall.
14. Replaced undercarriage rear trunnion attachment reinforcement brackets.

WHEEL WELL, STBD.:

1. Oil shut-off control rod and fork end removed and cadmium plated.
2. Removed Constant Speed Unit main pulley wheel, checked bearing for freedom and re-lubricated.
3. Exhaust duct attachment angles, rivets and frame cleaned with Met-L-Prep, primed and re-painted.
4. Propeller feather pump, attachment bolts and washers replaced.
5. Propeller feathering casing, bolts removed and cadmium plated.
6. Propeller feathering pump adaptor attachment stock replaced.
7. Inboard oil tank attachment strap tightened and secured.
8. Replaced Constant Speed Unit pulley wheels, Pt.#AN210-1A.
9. Patch repaired L.H. rear metal draft panel as marked.
10. Replaced L.H. solid undercarriage bumper pad, Pt.#4116528.
11. Replaced L.H. rubber undercarriage bumper pads, Pt.#1142707 (2 required).
12. Replaced R.H. rear rubber undercarriage bumper pads, Pt.#1142707 (2 required).
13. Stop drilled crack at L.H. forward corner of lower wheel well.
14. Removed outboard grounding plug, cleaned and cadmium plated.
15. Replaced rivets, trimmed and dressed L.H. lower area of centre bulkhead.

UNDERGEAR SECTION:

MAIN UNDERCARRIAGE, L.H.:

1. Left landing gear shock strut, Ser.#TCA-41E-396E installed, overhauled by T.C.A.
2. Right landing gear shock strut, Ser.#TCA-41E-358E installed, overhauled by T.C.A.

(Cont'd on Page 9).

UNDERGEAR SECTION (Cont'd):

MAIN UNDERCARRIAGE, L.H. (Cont'd):

3. Brace strut, Ser.#TCA-41H-329H installed, overhauled by T.C.A.
4. Undercarriage actuating ram, Ser.#TCA-41J-345E installed, overhauled by T.C.A.
5. Truss assembly, Ser.#TCA-41Q-15B installed, overhauled by T.C.A.

MAIN UNDERCARRIAGE, R.H.:

1. Right landing gear shock strut, Ser.#TCA-41E-21E installed, overhauled by T.C.A.
2. Left landing gear shock strut, Ser.#TCA-41E-371E installed, overhauled by T.C.A.
3. Brace strut, Ser.#TCA-41H-332H installed, overhauled by T.C.A.
4. Undercarriage actuating ram, Ser.#TCA-41J-311E installed, overhauled by T.C.A.
5. Truss assembly, Ser.#TCA-41Q-304B installed, overhauled by T.C.A.

TAIL UNDERCARRIAGE:

1. Landing gear shock strut, Ser.#TCA-42D-19C installed, overhauled by T.C.A.
2. Tail wheel fork assembly, Ser.#TCA-42G-21 installed, overhauled by T.C.A.
3. Tail wheel spindle assembly, Ser.#TCA-42H-317A installed, overhauled by T.C.A.

EMPENNAGE SECTION:

HORIZONTAL STABILIZER:

1. Straightened bottom flange, L.H. elevator torque tube support bracket.
2. Cleaned, applied Met-L-Prep and painted bottom skin.
3. Replaced attachment stock, centre attachment angles, top and bottom.
4. Replaced attachment anchor nut, L.H. tip.
5. Dressed out crack, L.H. elevator torque tube support bracket at rear spar.
6. Patched L.H. de-icer boot intake hose at boot.
7. Patched L.H. de-icer boot in air channels.
8. Patched vent holes, L.H. de-icer boot.
9. Replaced attachment screws, L.H. de-icer boot strips.
10. Replaced R.H. de-icer boot, Pt.#2-364-4-1.
11. Replaced attachment screws, R.H. de-icer boot strips.
12. Upper fuselage fairing attachment, install riv-nut at top L.H. and replaced riv-nuts at L.H. and R.H.
13. Replaced all elevator hinge bracket eye-bolt bearings.

VERTICAL STABILIZER:

1. Replaced de-icer boot, Pt.#2-364-5-1.
2. Straightened guard, rear rudder trim tab pulleys.
3. Replaced fabric patches on rear spar and painted.
4. Replaced upper tip attachment screws.
5. Replaced lower attachment screws.
6. Replaced all rudder hinge bracket eye-bolt bearings.
7. Re-set rivets, L.H. rear to tailcone.

SURFACE CONTROLS:

AILERON, PORT, SER.#C-2:

1. Installed one grommet and opened up outer grommet, outboard bottom of aileron.
2. Patch repaired fabric cover.

(Cont'd on Page 10).

SURFACE CONTROLS (Cont'd):

AILERON, PORT (Cont'd):

3. Rejuvenated fabric and re-doped along trailing edge and at inboard and centre section.
4. Dressed out cracks, outboard aileron hinge attachment bracket.
5. Renewed bonding, aileron hinge bracket #2.
6. Hinge bracket cut-outs on rib flanges, reset and installed rivets and patch repaired cracks.
7. Replaced riv-nut, aileron static discharger at bottom.
8. De-burred aileron hinge attachment bracket holes.
9. Aileron re-balanced - 137.25 in.lbs.

AILERON, STBD., SER.#TCA-14A-311K:

1. Trimmed aileron trim tab as marked.
2. Patch repaired fabric cover.
3. Rejuvenated fabric cover and re-doped along top and at leading edge.
4. Patch repaired flanges, aileron hinge bracket cut-outs, installed and re-set rivets.
5. De-burred aileron hinge attachment bracket holes.
6. Removed fabric and re-doped to clear trim tab.
7. Aileron re-balanced - 164.25 in.lbs.

WING FLAP, PORT, SER.#TCA-15A-1N:

1. Wing flap section installed, replacement supplied by T.C.A.

WING FLAP, STBD., SER.#TCA-15A-315T:

1. Wing flap section installed, replacement supplied by T.C.A.

CENTRE SECTION FLAP, SER.#TCA-15A-304U:

1. Centre section flap installed, replacement supplied by T.C.A.

ELEVATOR, PORT, SER.#TCA-B-325:

1. Replaced grommets.
2. Replaced static discharge wicks, Pt.#ASA-3B.
3. Replaced riv-nut at static discharge wick.
4. Replaced screws at static discharge wick.
5. Patch repaired fabric at outboard edge.
6. Patch repaired fabric at hinge attachment points.
7. Patch repaired fabric at rear inboard edge.
8. Patch repaired fabric at inboard edge by lightening holes.
9. Replaced trim tab attachment bolts.
10. Patch repaired fabric at trim tab inspection holes.
11. Patch repaired fabric at trim tab control rod.
12. Replaced trim tab bearing, Pt.#K-4, Fafnir.
13. Re-doped entire fabric covering.
14. Elevator re-balanced - 158.6 in.lbs.

ELEVATOR, STBD., SER.#TCA-B-383:

1. Replaced trim tab attachment bolts, nuts and split pins.
2. Replaced static discharge wicks, Pt.#ASA-3B.
3. Patch repaired fabric at trim tab drum inspection panel.
4. Replaced attachment screws, in inspection panel, Pt.#AN526-832-8.
5. Patch repaired drain grommets.
6. Patch repaired fabric at attachment lugs.

(Cont'd on Page 11).

SURFACE CONTROLS (Cont'd):

ELEVATOR, STBD. (Cont'd):

7. Patch repaired fabric at trim tab cut-out.
8. Dressed trim tab leading edge to prevent fouling.
9. Patch repaired fabric at inboard lightening holes.
10. Replaced elevator trim tab control rod bearing, Pt.#K-4, Fafnir.
11. Replaced elevator trim tab bearing, Pt.#KP-3L.
12. Checked and tightened bearing end, elevator trim tab actuating rod.
13. Re-doped entire fabric covering.
14. Elevator re-balanced - 157.5 in.lbs.

RUDDER, SER.#TCA-21A-315H:

1. Rudder Assembly installed, replacement supplied by T.C.A.

ANTI-ICER TANK AND SYSTEM:

1. Tank cleaned, repaired and pressure tested.
2. Dipstick black anodized.
3. Replaced felt packing strips.
4. Repaired drain cock, Pt.#W7600-2.
5. Checked solid lines to anti-icer pumps and replaced where necessary.

HYDRAULIC SYSTEM:

1. Hydraulic cowl flap control valve, L.H., Ser.#TCA-73Z-324B installed, overhauled by T.C.A.
2. Hydraulic cowl flap control valve, R.H., Ser.#TCA-73Z-313C installed, overhauled by T.C.A.
3. Hydraulic main landing compensator, Right, Ser.#TCA-41R-308 installed, overhauled by T.C.A.

OIL SYSTEM:

1. Oil shut-off valve, L.H., Ser.#TCA-65E-321C installed, overhauled by T.C.A.
2. Oil shut-off valve, R.H., Ser.#TCA-65E-347C installed, overhauled by T.C.A.

FUEL SYSTEM:

FUEL TANK, L.H. FRONT, SER.#534:

1. Dismantled tank and steamed.
2. Inspected tank, interior and exterior.
3. Replaced gaskets as required.
4. Tank re-assembled and pressure tested to 1½ p.s.i.

FUEL TANK, L.H. REAR, SER.#5043:

1. Dismantled tank and steamed.
2. Inspected tank, interior and exterior.
3. Replaced gaskets as required.
4. Tank re-assembled and pressure tested to 1½ p.s.i.

ENGINE COWLINGS:

PORT ENGINE COWLINGS:

1. Welded crack in oil cooler fairing assembly at front outboard corner under intake.
2. Straightened distortions in oil cooler fairing air intake at bottom.

(Cont'd on Page 12).

ENGINE COWLINGS (Cont'd):

PORT ENGINE COWLINGS (Cont'd):

3. Re-rivetted fixed hinge, oil cooler fairing bottom panel.
4. Replaced rear attachment Dzus fasteners, oil cooler fairing, L.H. & R.H.
5. Replaced asbestos strip, oil cooler fairing, front outboard drain tube cut-out.
6. Straightened L.H. & R.H. upper stiffener angles, stop drilled crack at outboard rear.
7. Replaced all Dzus fasteners, lower inboard rear panel.
8. Reinforced lower inboard rear cowl panel stiffener angle at centre.
9. Straightened lower inboard rear cowl panel rear corners.
10. Replaced Dzus fasteners and straightened outboard rear panel.
11. Straightened outboard rear panel and reinforced stiffener angles.
12. Replaced all Dzus fasteners, front cowl panel.
13. Replaced Dzus fasteners, lower front cowl panel inboard.
14. Installed attachment bracket bushing, lower front cowl panel, inboard cowl flap.
15. Tightened attachment nuts on cowl flap actuators, lower outboard front cowl panel.
16. Replaced cowl flap mounting bracket bushing, lower inboard front cowl panel.
17. Installed washer under bolt head on cowl flap jack actuating arm attachment, lower inboard front cowl panel.
18. Replaced all Dzus fasteners, lower inboard front cowl panel.
19. Replaced cowl flap connector arm bearing, lower inboard front cowl panel.
20. Tightened cowl flap attachment nuts, lower front cowl panel inboard.
21. Lower front cowl panel inboard, dressed out cracks and straightened upper mating edge.
22. Replaced cowl flap mounting bracket bushings, front top cowl panel.
23. Cowl flap guide springs, replaced rubber pad, front top cowl panel.
24. Replaced inner bonding strip, front top cowl panel.
25. Plugged rivet holes, front top cowl panel.
26. Replaced screws and anchor nuts, front top cowl panel.

STBD. ENGINE COWLINGS (Cont'd):

1. Oil cooler fairing assembly, stop drilled cracks at inboard side and bottom panel and dressed out rear inboard corner.
2. Straightened distortions in oil cooler fairing at bottom rear.
3. Replaced all Dzus fasteners in oil cooler fairing.
4. Re-rivetted upper front plate, oil cooler fairing at air intake.
5. Replaced drain line cut-out asbestos strip, oil cooler fairing.
6. Replaced all Dzus fasteners, lower inboard rear panel.
7. Replaced all Dzus fasteners, rear cowl panel.
8. Replaced all Dzus fasteners, top rear cowl panel.
9. Patch repaired outboard centre rear cowl panel at front.
10. Replaced all Dzus fasteners, outboard centre rear cowl panel.
11. Rivetter rear flanges, outboard centre rear cowl panel inside stiffeners.
12. Replaced front asbestos strip, rear cowl panel.
13. Replaced all Dzus fasteners, rear cowl panel.
14. Replaced all Dzus fasteners, inboard rear cowl panel.
15. Replaced front asbestos strip, inboard rear cowl panel.
16. Replaced Dzus fasteners, bottom rear cowl panel.
17. Replaced Dzus fasteners, front inboard cowl panel.
18. Installed bonding strip, front inboard cowl panel inside.
19. Patch repaired bottom rear cowl panel at inboard edge and rear Dzus fasteners.

(Cont'd on Page 13).

ENGINE COWLINGS (Cont'd):

STBD. ENGINE COWLINGS (Cont'd):

20. Straightened cowl flap actuating rods, front inboard cowl panel.
21. Replaced inboard cowl flap actuator link bearing, front inboard cowl panel.
22. Tightened attachment nuts, cowl flap actuator, front inboard cowl panel.
23. Installed rivets, front inboard cowl panel skin at rear Dzus fasteners.
24. Replaced rivet, angle bracket at lower inboard locking handle, front inboard cowl panel.
25. Replaced Dzus fasteners, front outboard cowl panel.
26. Front outboard cowl panel, dressed out crack at mating edge and straightened, at rear.
27. Removed and cadmium plated connector links, front outboard cowl panel.
28. Replaced leather padding on mating edge, front top cowl panel.
29. Replaced all screws, front top cowl panel.
30. Dressed out scratches, cowl flap link bearing housings, front top cowl panel.
31. Straightened outboard cowl flap, front top cowl panel.
32. Front top cowl panel, reworked centre fixed flap and dressed out scratches, centre cowl flap.
33. Re-bushed outboard cowl flap mounting bracket, front top cowl panel.

FAIRINGS:

PORT FUSELAGE:

1. Re-rivetted Port wing root fairing connections.
2. Replaced protective taping along inside edges of fairing, Pt.#CS-E-102.
3. Dressed out cracks and straightened distortions.
4. Patch repaired area at front bottom end.
5. Straightened, de-burred and reinforced attachment holes at Port bottom rear fairing.
6. Dressed and trimmed holes on centre section fairing.
7. Replaced patch repairs on fairings.
8. Dressed out dents and scratches on skin.
9. Dressed out scratches, centre section nose fairing.
10. Replaced rubber sealing on all fairings.
11. Replaced attachment screws.
12. Removed corrosion on upper surface and re-painted.

STBD. FUSELAGE:

1. Patch repaired anti-icer filler door at hinge.
2. Replaced spring, anti-icer tank filler door lock, Pt.#113811L.
3. Replaced springs, rear oxygen bottle filler door locks.
4. Dressed out all fairing attachment holes, straightened and patched.
5. Straightened fairing at rear end.
6. Straightened front inside ribs.
7. Patch repaired and straightened front ground receptacle cut-out.
8. Straightened fuel filter access door frame.
9. Re-painted markings, fuel filter access door.
10. Straightened Rib #7, patch repaired flange.
11. Plugged hole and straightened trailing edge at lower rear.
12. Replaced attachment stock, Pt.#AN526-832-8, anti-icer pump and fuel filter access doors.
13. Re-painted markings on anti-icer and oxygen bottle filler doors.
14. Straightened fairing at front end.
15. Replaced and re-glued inside rubber sealing, Pt.#CS-E-102.

(Cont'd on Page 14).

FAIRINGS (Cont'd):

STBD. FUSELAGE (Cont'd):

16. Replaced and re-glued rubber sealing on front fillets, Pt.#CS-E-102.
17. Straightened three front fillets.
18. Dressed out front fillet attachment holes and straightened skin.
19. Replaced attachment screws, Pt.#AN526-832-6, -8 and -10.
20. Dressed out rear and connecting ends of wing root fairing.
21. Replaced protective taping, inside edge of wing root fairing, Pt.#CS-E-102.
22. Re-rivetted top and bottom connections.
23. Straightened distortions.
24. Patch repaired lower centre part, inboard.
25. Bottom rear fairing attachment holes, dressed out, straightened and reinforced.

TAIL:

1. Replaced static discharger and replaced riv-nuts.
2. Replaced attachment stock on both tail light fairings.
3. Replaced rear section mounting screws, Pt.#AN526-8-8.
4. Replaced fuselage mounting screws, Pt.#AN526-8-8.
5. Replaced R.H. inspection panel attachment screws, Pt.#AN526-8-8.
6. Patch repaired inside rib at stringers.
7. Patch repaired upper R.H. front corner.
8. Straightened L.H. front attachment flange.

HORIZONTAL STABILIZER, L.H.:

1. Dressed out attachment holes.
2. Replaced all attachment screws.
3. Under-surface re-primed.

TELECOMMUNICATIONS:

COCKPIT:

1. All radio units removed and bench checked by T.C.A.
2. Cleaned pilot's jack box cover.
3. Installed longer mounting screws in radio overhead panel.
4. Cleaned and re-lettered radio overhead panel.
5. Straightened HF and VHF placard holders.
6. Replaced window on frequency placard holder.
7. Re-painted and re-lettered radio selector box, aft of throttle.
8. Touched up knobs on selector box and radio overhead panel with red, green and black paint as required.
9. Replaced mounting screw, co-pilot's jack box cover.
10. Re-set co-pilot's panel light control knob.
11. Organized wiring, taped and stowed unused wires when ART-13 installed.
12. Installed thin washers, Pt.#AN-960L-10, Main junction box terminal nuts.
13. Tightened mounting bolt, MHF antenna leas-in insulator, 2nd top shelf.
14. Lock-wired dehydrator crystals, 2nd top shelf outboard.
15. Flexible drives clipped and tightened, Radio Compass and Gyro Amplifier and forward Radio Compass mounting.
16. Replaced identification strip, main junction box, lowest terminal.
17. Tightened plugs, VHF mounting rack.
18. Tightened lock nut, cable feed-trough, main junction box.
19. Cleaned VHF mounting rack.
20. Replaced shielding, ground lead, forward of ILS mounting rack.
21. Replaced mounting bolt, co-ax cable clamp on 2nd top shelf.
22. Replaced VHF antenna lead-in plug, PL-259 on Receiver end.

(Cont'd on Page 15).

TELECOMMUNICATIONS (Cont'd):

COCKPIT (Cont'd):

23. Cleaned and painted jack box, Type MN-18, above hydraulic reservoir.

PASSENGER COMPARTMENT:

1. Secured telephone cord on inside of junction box, galley and lavatory wall.
2. Secured terminal lug, pilot's call switch.

FUSELAGE:

1. MHF antenna insulator connection, replaced nuts and washers.
2. Replaced MHF antenna wire.
3. Replaced MHF antenna mounting, Pt.#75-2057.
4. Replaced MHF antenna lug with Burndy lug.
5. Replaced MHF antenna thimble.
6. Replaced MHF antenna mounting string.
7. Re-painted VHF antenna mast.
8. Replaced mounting screws, ILS antenna mast.
9. Re-painted ILS mast.
10. ARN-7 loops removed and bench checked by T.C.A.
11. Replaced top (2) loop seals.
12. Replaced aft 6 pin loop connector plug, Pt.#BA30085.
13. Checked all antenna tension units.
14. Replaced all hardware on antennae mountings.
15. Replaced Rear Marker antenna tension unit, Pt.#5-13990-1.
16. Checked antenna lead-in insulators in belly of aircraft.

INSTRUMENTS:

COCKPIT:

1. Replaced temperature control placard on throttle.
2. Re-painted pilot's and co-pilot's oxygen outlet.
3. Re-lettered anti-icing selector panel, co-pilot's seat, outboard, below jack box and touched up with paint as required.
4. Straightened anti-icing selector panel mounting.
5. Re-painted and re-lettered oxygen selector on cockpit wall.
6. Replaced all shock-mounts on main instrument panel, Pt.#AN-8006D10.
7. L.H. and R.H. Instrument Panels removed and all instruments bench checked by T.C.A.
8. The following instruments were removed and replacements supplied by T.C.A.:
   Climb Indicator, Left, installed Ser.#TCA-71E-17C.
   Climb Indicator, Right, installed Ser.#TCA-71E-50C.
   Oxygen Flow Meter, installed Ser.#TCA-71AC-26D.
   Vacuum Relief Valve, Cockpit, installed Ser.#TCA-72B-376C.
   Oxygen Low Pressure Regulator (fuselage) installed Ser.#TCA-79C-115.
   Oxygen Pressure Gauge (cockpit) installed Ser.#TCA-79D-81.
   Fuel Quantity Gauge installed, Ser.#TCA-71Z-12E.

PASSENGER COMPARTMENT:

1. Cleaned all cabin oxygen outlets.
2. Cleaned lavatory oxygen outlets.

FUSELAGE:

1. Replaced all hardware on pitot masts.
2. Replaced both oxygen lines and cleaned bottle connections and fittings.
3. Replaced Oxygen Pressure Gauge, Ser.#TCA-71R-17C, replacement supplied by T.C.A.

(Cont'd on Page 16).

ELECTRICAL:

NOSE SECTION:

1. Replaced spring, Port windshield wiper.
2. Secured mounting bolts in micarta blocks holding instrument panel for junction box cables.
3. Tightened nut on terminal strips in instrument panel junction box.
4. Removed old tape and installed Burndy lugs on Port outboard terminal strip.
5. Organized wiring, Port outboard junction box.
6. Removed, reconnected and installed transflex on Inverter "#1 - off - #2", switch connections.
7. Inverter "#1 - off - #2" switch guard, cleaned, straightened and applied Monofil to lettering.
8. Replaced attachment washers, Port and Stbd. windshield wipers.
9. Mounting for Port and Stbd. windshield wipers painted.

COCKPIT:

1. Replaced Port and Stbd. Propeller Feathering Switches, Port Ser.#TCA-74K-32B and Stbd. Ser.#TCA-74K-9B, supplied by T.C.A.
2. Replaced mounting screws, electrical overhead panel, R.H. side, "primer-starter" switch.
3. Installed fastener, spare lamp box lid.
4. Re-painted and re-lettered spare lamp box.
5. Taped and secured pilot's upper and lower ultra-violet cockpit light cable.
6. Fastened conduit-feed-thru on heat-power switch box behind pilot's seat.
7. Replaced terminals and lugs, co-pilot's light junction box.
8. Installed new lugs, co-pilot's light junction box, cockpit light wire.
9. Stowed and secured cable and plug, Ignition Analyzer behind co-pilot's seat.
10. Touched up with black paint, Ignition Analyzer panel.
11. Secured, taped and stowed loose wires, R.H. electrical overhead panel wiring.
12. Painted warning horn behind co-pilot's seat - "red".
13. Replaced Adel clamp on pilot's upper ultra-violet cockpit light.
14. Organized and secured wiring forward of main instrument panel.
15. Replaced nuts and mounting screws, pilot's junction box.
16. Replaced cord holding light junction box cover.
17. Replaced L.H. and R.H. electrical overhead panel mounting screws.
18. Replaced switch mounting screws on overhead panel as required.
19. Removed "Volt" and "Amp" meters, adjusted and re-installed.
20. Replaced shockmounts on "Volt-Amp" meter panel.
21. Organized overhead junction box wiring, taped and stowed unused wires.
22. Tightened overhead junction box nuts.
23. Replaced cord holding overhead junction box cover.
24. Installed decals "on-off" on dome light switch.
25. Replaced elastic band on lower inverter dust cover.
26. Tightened both inverter plugs and installed string ties on cables as required.

FRONT CARGO COMPARTMENT:

1. Tightened lock nut on cable feed-thru, junction box above Port wing ice light.
2. Secured cables on power junction box.
3. Removed and replaced four (4) shock-mounts on Inverter rack, Pt.#3-74513.
4. Replaced shock-mounts, Pt.#26155, Gyro Amplifier.
5. Replaced Gyro Amplifier mounting screws.
6. Tightened Gyro Amplifier plugs.

(Cont'd on Page 17).

ELECTRICAL (Cont'd):

PASSENGER COMPARTMENT:

1. Lock-wired emergency "on-off" switch on ignition unit.
2. Tightened and re-locked cannon plugs, aft of Stbd. wing ice light.
3. Straightened heater "on-off" switch guard and painted "red".
4. Installed Adel clamp on heater ignition cable bracket.
5. Re-painted circuit breaker panel.
6. Tightened mounting screws, circuit breaker panel.
7. Replaced Daus fastener, circuit breaker panel.
8. Replaced cabin light lenses.
9. Replaced forward Stbd. fan mounting bolt.
10. Installed correct type clamp on cable forward Stbd. fan.
11. Cleaned contacts on soup warmer.
12. Replaced 28V bulb, soup warmer pilot light.
13. Cleaned kitchen dome light lenses.
14. Cleaned relay contacts, switch panel, lavatory wall junction box.
15. Re-connect middle and forward relays.
16. Re-worked switch panel Daus fastener springs.
17. Cleaned switch panel and filled lettering with Monofil.
18. Replaced mounting screws, switch panel junction box, lavatory wall, switch - "hot cup - casserole".
19. Re-painted junction box.

REAR CARGO COMPARTMENT:

1. Installed gasket, forward dome light.
2. Installed decals on dome light switch and "on-off".
3. Installed gasket and "on-off" decal on rear dome light.

FUSELAGE - Exterior:

1. Replaced seal and cleaned glass, top and belly navigation lights.
2. Cleaned glass and replaced screws, top and belly "red" flasher units.
3. "White" tail light replaced, Grimes Model #C1-ATC-20-CP-15, Pt.#AN1943-1-305.
4. Replaced spring, "red" tail light.

PORT WHEEL WELL:

1. Tightened terminal nuts, rear junction box outboard.
2. Re-glued rubber, rear inboard junction box.
3. Replaced cord, forward inboard junction box cover.
4. Installed thin type washers under terminal nuts, forward inboard junction box.
5. Re-glued rubber on forward junction box.

STBD. WHEEL WELL:

1. Tightened terminal nuts, wheel well junction box.
2. Re-glued rubber, junction box.
3. Tightened terminal nuts, lower junction box.
4. Tightened terminal nuts, upper junction box.
5. Forward junction box, re-glued rubber seal.
6. Replaced cord, forward inboard junction box cover.
7. Re-clamped and secured surplus wiring, L.H. junction at centre bulkhead.

(Cont'd on Page 18).

DOUGLAS SERVICE BULLETINS - Incorporated:

1. #10 Location of Different Length Wing Attaching Bolts.
2. #17 Suggestions to Prevent Loss of Fuel Tank Caps.
3. #24 Maintenance of Flap Indicator.
4. #30 Landing Gear Oleo Inflation.
5. #31 Additional Locking Device on Fuel Tank Caps.
6. #37 Suggested Reinforcements for Rudder Stock.
7. #58 Inspection and Adjustment of Brake Linkage.
8. #68 Method of Preventing Wear on Cowl Flap Segments.
9. #97 Recommended Inspection Procedure.
10. #111 Improved Wing Inspection Strips.
11. #112 Re-adjustment of Ball End - Tail Wheel Spindle Upper End.
12. #115 Inspection of Skin under Ice Protection Strips.
13. #119 Inspection of Rib Flange which anchors the Elevator Torque Tube Support Bearing.
14. #122 Correct Fluid for Hydraulic System.
15. #123 Re-bushing Aileron Flap Bracket.
16. #123S Bushing of Additional Aileron Flettner Control Parts.
17. #133 Approved Method of Bushing Retracting Strut Eye-bolt Hooks.
18. #133S Correction of Bushing Dimension.
19. #134 Information on Heating and Ventilating System Gasket.
20. #142 Discussion of New Type Spherical Pressure Accumulator.
21. #143 Installation of Additional Parts to make Dump Valve Chute Extensible.
22. #147 Cant Rib Reinforcement.
23. #148 Adjustment of Wing Attachment Elastic StopNuts.
24. #149 Flight Wheel Brakes.
25. #158 Horizontal Stabilizer Reinforcement.
26. #182 Reinforcement of Aileron Hinges.
27. #186 Tail Wheel Fork #5006445 Drainage.
28. #186S Tail Wheel Fork #5006445 Drainage.
29. #188 Elevator Tab Push Rod Hood Revision.
30. #188S Rudder Tab Push Rod Revision.
31. #192 Extensible Dump Chute Trigger Revisions.
32. #193 Revised Dump Chute Operating System.
33. #195 Inboard Aileron Support Bracket Reinforcement.
34. #196 Instructions for Adjusting the Landing Gear Mechanical Latch.
35. #198 Rudder Pedal Adjusting Lever Guard.
36. #198S Rudder Pedal Adjusting Lever Guard.
37. #200 Control Pedestal Shaft Revision.
38. #201 Fuel Tank Bay Revisions.
39. #202 Fuel and Oil Tank Caps, Pt.#2075832 and #2005270.
40. #203 Cabin Emergency Exit Doors.
41. #204 Procedure for Adjusting the Wing Flap Mechanism.
42. #206 Surface Control Rigging Specifications.
43. #207 Surface Control Balance.
44. #211 Attach Angle to Spar Cap Bolts.
45. #213 Propeller Feathering Pump Motor Rework.
46. #214 Addition of Clip to Wing Rib.
47. #215 Wing Tip Structure Alterations.
48. #215S Wing Tip Structure Alterations.
49. #216 Reinforcement of Wing Flap Operating Tube Support Beam Attach Angle.
50. #217S Inspection of Elevator Torque Tubes.
51. #218 Rudder hinge Bracket Support.
52. #219 Replacement - Engine Section Throttle Rod.
53. #220 Replacement - Outboard Wing Lower Attach Angle Doubler and Installation of Spar Bolt Locking Device.

(Cont'd on Page 19).

DOUGLAS SERVICE BULLETINS (Cont'd):

54.	#222S	Rudder Pedal Torque Tube Support Bracket Attachment (#2005242).
55.	#223	Replacement of Elevator Trim Tab Control Horn.
56.	#224	Reinforcement of Aileron Spar.
57.	#225	Installation of Wing Tip Inspection Strips.
58.	#226	Cracking of Horizontal Stabilizer Ribs.
59.	#227	Repair Centre Station Attach Angle Skin Cracks.
60.	#227S	Repair Centre Section Attach Angle Skin Cracks.
61.	#230	Cracking - Outer Wing Ribs, No.7 to 10 incl., Sta.125.3, 143.2, 161.1 and 179.
62.	#231	Control Column Canvas Boot Assembly (#5035184-16 and -17).
63.	#233	Inspection and Repair of Landing Gear Rear Brace Strut Fitting, Pt.#230659.
64.	#233S	Re-design of Landing Gear Rear Brace Strut Fitting, Pt.#230659.
65.	#234	Replacement of Elevator Trim Tab Control Horn.
66.	#236	Removal of Starter-Generator Supports, P. & W. R1830 Power Plant Installation.
67.	#237	Wing Tip Skin Failures, DC-3.
68.	#238	Engine Mount to Firewall Attach Fitting, Pt.#5-81486-4 (Forward Half only) Beryllium Copper.
69.	#241	Addition of Drain Hole on DC-3 Extensible Fuel Dump Chute Assembly.
70.	#243	Wing Attach Angle Corrosion.
71.	#245	Replacement of Main Landing Gear Rubber Bungee to Hydraulic
72.	#248	Inspection of Flexible Hose in Engine Sections on DC-3, C-117 and C-47 Series Aircraft.
73.	#249	Special Bolt - Outer Wing Attach DC-3.
74.	#250	Installation of Fire Detectors in Engine Accessory Sections and Smoke Detector in Rear Baggage Compartment.
75.	#253	Master Battery Switch Circuit Revision.
76.	#256	High Temperature "O" rings for Engine Oil Shut-off Valves.
77.	#259	Installation of Shut-off Valves on Lines Carrying Combustible Fluids into the Engine Accessory Section.

CAA AIRWORTHINESS DIRECTIVES - Incorporated:

1.	43-12-1	Elevator Hinge Brackets.
2.	46-43-2	Rudder Pedal Slide Tube Support Bolt.
3.	47-2-10	Elevator Rib Inspection and Reinforcement.
4.	47-33-2	Cowl Flap Hydraulic Lines.
5.	48-17-1	Fire Prevention Modifications.
6.	50-46-1	Oil Tank Standpipe (1½ gals.)
7.	52-25-1	Vacuum System Rework.
8.	55-15-3	Fire Resistant Feathering Lines.
9.	56-14-2	Revised Take-off Weight.
10.	58-12-1	Inspection of Compression Angles and Waffle Plates.

(Cont'd on Page 20).

MODIFICATIONS INCORPORATED:

1. Installation of Very Pistol, Mount, Holster and Cartridge Rack:

Dwg.#281-83005 - Inst'n Very Pistol and Holster.
281-36001 - Inst'n Flare Cartridge Rack.
281-83004 - Inst'n Very Pistol Mount.

2. Installation of Speakers in Pilot's and Co-Pilot's Positions:

Dwg.#281-72014 - M1-51A Speaker Mod.
281-72017 - Inst'n Pilot's Control Head Bracket.

3. Installation of ART-13A Radio:

Dwg.#281-72006 - Main Beam Assembly.
281-72012 - Inst'n Receiver BC-348.
281-72015 - T47A/ART13A Transmitter.
281-72009 - Antenna Loading Unit, CU-32/ART13.
281-72008 - Inst'n Lower Intercostal.
281-72010 - Inst'n Radio Operator's Table and Seat.
281-72011 - Inst'n Gusset Bracket.
281-72002 - Inst'n ART-13A Set Dynamotor.
281-72007 - Wiring Diagram ART-13 Radio System.

4. Installation Cabin P.A. Speaker System:

Dwg.#281-72005 - Inst'n Speaker System.
281-72013 - Wiring Diagram.

5. Installation of Twenty-Eight (28) Passenger Seats:

Dwg.#281-21011 - Inst'n 28 Passenger Seats and Cabin Floor.
281-21013 - Inst'n Sidewall Intercostals.

GENERAL:

1. All attachment screws on fairings, fillets, inspection panels, etc., replaced.
2. All plumbing re-color coded.
3. All new electrical wiring identified to standard specification and and all deteriorated coding re-identified.
4. Anti-corrosion treatment carried out on all internal structure and removed components using zinc chromate primer.
5. Aircraft painted as per customer specifications - white top surfaces and aluminum under surfaces.
6. Compass swing carried out and deviation cards installed in aircraft.
7. Aircraft weighed and Weight and Balance Determined. (See E.R. 1520).
8. Aircraft re-assembled, rigged, systems function tested and aircraft test flown.

(Cont'd on Page 21).

- - - - - - - - - - - - - - - - - -

...ing and Power Plant Controls inspected and certified airworthy.

J.R.Matheson J. Longstaff W Gus 369

- - - - - - - - - - - - - - - - - -

A.I.-12 Issue 2

INSPECTION RELEASE CERTIFICATE

Complete Aircraft - After Overhaul, Major Repair or Major Modification

Aircraft Registration - CF-TEF

Work Done By: Bristol Aero-Industries Limited, Winnipeg Division. Approval No.2-58.

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft as detailed in the attached sheet have been completed satisfactorily; that all work has been done with certified material, and in accordance with the Engineering and Inspection Manual Part I, Chap. II, Para. 2.5.

I further certify that all log book entries required by The Engineering and Inspection Manual have been properly completed.

Signed: E Dunsk
"M" Licence Engineer Category "B".

Date: 19 Mar 1959

Aircraft Airworthy and Certified for Flight:-

Signed: J. Longstaff W.Gus 369
"M" Licence Engineer Category "A".

Date: March 18/1959

- - - - - - - - - - - - - - - - - -

/MEC.
Mar.19/59.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
10-56

Winnipeg General Post Office,
Winnipeg 1, Manitoba, March 23, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-6 (AIW)

SUBJECT: Douglas DC-3 Aircraft - CF-TEF - Owned by Trans-Canada Air Lines

TRANSPORT - RECORDS
MAR 26 P.M.
File 5008-T-5-6

CAE
J.P.V.

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

39096

1. Enclosed please find one copy of the Log Book Report on the subject aircraft, which was reconditioned to a "Zero Hour Check". We also enclose one copy of the Weight and Balance Report, (Engineering Report No. 1520).

2. For your information, please.

R.C. Smith

for Regional Director, Air Services.

Enc.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Winnipeg General Post Office,
Winnipeg 1, Manitoba, March 25, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-6 (AIW)

SUBJECT: TCA - DC-3 Aircraft, CF-TEF

TRANSPORT RECORDS
5008-T-5-6
File

19250

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Further to our letter of March 17, 1959, relating to the marginally noted subject, please find attached copy of a letter received from Bristol Aero-Industries Limited, Winnipeg Division, together with enclosures.

for Regional Director, Air Services.

Encs.

COPY ON
5008-T-5-6

50
47 52

935 SRL 790

VAA 71 CYHQ
VFN 19 VAA
CYUL RO 23 0316422

1959 APR 3 PM 12 12

JJ DIGEN OV ATTN COR
BT
ARG 457 PLEASE ADVISE IF DC-3 AIRCRAFT CHARLIE FOXTROT TANGO ECHO FOXTROT HAS BEEN REMOVED FROM REGISTER AND CERTIFICATES CANCELLED
REDAS MONTREAL

FORM 2195 GJ/MD

DEPARTMENT OF TRANSPORT
DEPARTMENTAL COMMUNICATIONS

FILE NO. 5008-T5-6 SRL

DATE April 3rd 1959

RDAS
MONTREAL

SRL 409 REUR ARQ 457 DOUGLAS DC-3 AIRCRAFT TANGO
ECHO FOXTROT REMOVED FROM REGISTER AND CERTIFICATES
CANCELLED TWENTIETH ULTIMO.

DTCAV.

cc: Winnipeg

FILE COPY

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Que., April 6th, 1959
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 Dakota (CF-TEF) Ferry Fuel Tank Installation	5010-1-64 (AIQ) 6008-T.5-6

5010-10-117

1422

TRANSPORT - RECORDS
APR 8 P.M.
508-T5-6
File 5010-10-117

Director General, Air Services
No. 3 Temporary Building
Ottawa, Canada

Attention Chief Aeronautical Engineer

1) Further to the letter of January 30th, 1959, Aircraft Industries of Canada Limited Engineering Order No. AI-DC3-318, dated March 25th, 1959, has been approved in conjunction with the Operating Instructions which form a part of Amendment No. 1 to the Weight and Balance Report for DC-3 aircraft N.5590A (Formerly CF-TEF) as covering, for one flight only, the installation of four (not 6) 100-Gal. Lockheed Aircraft Corp. tanks in the cabin of a Dakota.

2) As indicated, on March 25th, 1959, the design of the mounting structure and tie-downs, the plumbing, and the fuel system were reviewed on a visit to St. Johns and approved at the specific request of the Contractor, as an aid to the final certification of the aircraft. This will be done in the United States, prior to the ferry flight, and, in consequence, another authority will have jurisdiction over the loading and operation of the aircraft for this flight.

COPY ON
508-T5-6

C.H. Skelton

(C.H. Skelton)
for
Regional Director, Air Services

Certs (?) to be read.

LM/MHK

Ottawa, Ontario, April 22nd 1959.

5008-T5-6 SRL

DOUGLAS DC-3 aircraft, CF-TEF.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. Reference is made to Douglas DC-3 aircraft, CF-TEF, which was sold to Federal Aviation Agency, Washington, by Trans Canada Airlines.

2. The registration mark of this aircraft has been deleted from the Aircraft Register effective April 3rd, 1959, but to date we have not received advice as to the whereabouts of the Certificates of Registration and Airworthiness.

3. Will you kindly advise if these certificates have been returned to your regional office. If they have not been returned Trans Canada Airlines should be requested to surrender them to this Department in order to complete our records.

Director of Civil Aviation.

cc: R.D.A.S. MONTREAL

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

602 Winnipeg General Post Office, Winnipeg 1, Man., April 29/59
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
April 22/59	5008-T5-6 (SRL)	5008-T-5-6 (ARW)

SUBJECT: DOUGLAS DC-3 aircraft - CF- T E F

TRANSPORT - RECORDS
MAY 1 P.M.
File 5008-15-6

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

4796

Attention: Controller, Civil Air Operations and Regulations

1 Reference is made to the above noted letter and subject concerning the Certificate of Registration and Airworthiness for Douglas DC-3, CF- T E F.

2 Please be advised that the Certificate of Registration No. 5366 and Certificate of Airworthiness No. 1848 are on file at this Office and marked cancelled.

for Regional Director, Air Services.

JEV/JC

57
5-5

Ottawa, Ontario, May 4, 1959

5008-13-6 (CAE)
5010-10-117

March 17 and March 25 5008-T-6-6 (AIW)

Equipment Installation - Douglas DC-3 CF-TEF

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba

Attention: Regional Airworthiness Inspector

1. With reference to your letters of March 17 and 25, 1959, Bristol Aero-Industries Limited, Winnipeg Division, Drawings Nos. 281-83005/A, 281-83004/A, 281-72017/A, 281-72015/C, 281-72014/A, 281-72013/C, 281-72012/C, 281-72011/B, 281-72010/B, 281-72009/B, 281-72008/A, 281-72007/A, 281-72006/A, 281-72005/B, 281-72002/A, 281-21010/B, and 281-00002/A, detailing the modifications on the subject aircraft, are approved subject to R.A.I. inspection and test. Two sealed copies of each of the above drawings are returned herewith.

2. We cannot approve Drawings 281-21011/A, and 281-21013/A until the passenger seat attachments and supporting structure have been substantiated for strength either on the basis of CAR 3.386 or CAR 4 (a).193 for the seat spacing chosen by the applicant. The relevant stress analysis and/or strength test reports should be submitted to this office.

3. When satisfactory reports covering the strength of the seat installation are received and the seating arrangement has been found to conform to the related emergency exit requirements, we will approve Drawings Nos. 281-21011/A and 281-21013/A. The General Arrangement Drawing 281-00004/B will then be approved as covering the complete modification of the subject aircraft.

Encls.

for Director, Civil Aviation.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8—57

Winnipeg 1, Man. (PLACE) May 25, 1959. (DATE) 58

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-6(AIW)

SUBJECT: Equipment Installation - Douglas DC-3 CF-TEF

TRANSPORT - RECORDS
5008-T5-6
File 5010-10-117

5010-10-117

Director General, Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: Chief Aeronautical Engineer

8462

1. With reference to your letter of May 4, 1959, relating to the marginally noted subject, please find enclosed copy of a letter received from Bristol Aero-Industries Limited, Winnipeg Division, together with three copies of their Engineering Report No. 4074, entitled "CF-TEF(DC-3) 28 Seat Installation" for your approval.

for Regional Director, Air Services.

Enc.

5008-T5-6

JPV/JG

Ottawa, Ontario, June 9, 1959

May 25 5008-T-5-6 (AIW) 5010-10-117 (CAE)
5008-T5-6

Equipment Installation - Douglas DC-3 CF-TEP

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba

Attention: Regional Airworthiness Inspector

1. With reference to your letter of May 25, 1959, Bristol Aero-Industries Limited, Winnipeg Division, Drawings Nos 281-00004/B, 281-21013/A and 281-21011/A, and Engineering Report No. 4074 covering and substantiating the strength of the subject installation are approved for a twenty-eight passenger seat configuration subject to R.A.I. inspection.

2. Inspection is to verify that the four exits authorized for passenger use are not blocked and can be reached freely.

3. It should be noted, however, that each particular seating arrangement, differing from this one, will require separate approval when such matters as identification, eligibility and location of the seats and the related emergency exit requirements will be checked.

4. Two sealed copies each of Drawings Nos 281-0004/B, 281-21013/A, and 281-21011/A and Engineering Report No. 4074 are returned herewith.

Encls.

for Director, Civil Aviation.

FILE No. 5008 TEH

VOLUME No. 1

VOL. 1

5008 - 45 TEH

DEPARTMENT OF TRANSPORT

FROM DECEMBER, 1946
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TEH - DOUGLAS DC - 3

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
NOV 6 1953	48548	CAR		SJ	NOV 17 1953
NOV 17 1953	—	CAE		—	NOV 17 1953
OCT 25 1954	17350	CAR		SJ	OCT 26 1954
JUN 14 1955	8410	ARL		SJ	JUN 15 1955
FEB 19 1957	29205	ARL		SJ	FEB 19 1957
OCT 27 1958	21763	ARL		[illegible]	OCT 27 1958
OCT 27 1958	—	SAE		GL	[illegible]

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

1/8 52

1
3-46
K.P. 58825
D.L.L. Co.

FILE No. 5008 - T 5 - 8

VOLUME No. 1

VOL. 1
5008 - T.5 - 8

DEPARTMENT OF TRANSPORT

FROM DECEMBER - 1946
TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
REGISTRATION, INSPECTION AND OPERATION

SUB-SUBJECT

FILE TITLE CF-TEH — DOUGLAS DC-3.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
DEC 3 1946	59588	A.A.R	~~11-12-46~~	WJ	DEC 5
DEC 1946 JAN 3 1947	BF 11-12-46	SAR		WJ	DEC 11 1946
	68313	C.A.R	~~25.2.47~~	WJ	FEB 14 19
FEB 27 194	BF Feb 28	CAR			
APR 25 1947	7845	CAR			MAY 23 1947
APR 29 1947		Treas.			MAY 2
MAY 7 1947		CRI			MAY 30 1947
		CAD			
DEC 5 47	28620	CAR			MAY 23 194
	(5008-TC-8) B9052	CAE			DEC 12 4
NOV 29 48	34372	CAR			MAR 3 - 48
JAN 3 1950	39616	CAR		WJ	DEC 1 -
		CAE		WJ	JAN 5 1950
	23950	CAR			JAN 5 1950
NOV 10 1950		CAE		WJ	NOV 10 1950
DEC 12 1950	28734	CAE			DEC 12 1950
NOV 12 1951	42880	CAR		HJG	NOV 10 1950
NOV 12 1951		CAE			NOV 12 195
	(5008-T5-7) 46081	G			NOV 13 1951
NOV 10 1952	40023	CAR			NOV 26 1951
NOV 13 1952		CAE			NOV 13 1952
	19207	CAR	~~24/10/53~~	WJG	OCT 16 1953
OCT 16 1953	WU Gordon 43869	CAR		WJG	NOV 2 1953
28/10/53	BF 30/11/53	CAR		WJG	NOV 4 1953

TGS/MMC

File Copy 1A

Ottawa, Ontario, November 28, 1946

5008-T5-8

Trans-Canada Air Lines,
Douglas DC-3
Registration Markings

5008-T5-8
5008-T59
5008-T510
5008-T518
5008-T5-19

Pl/es2

District Inspector, Air Regulations
910 Confederation Building,
1253 McGill College Avenue,
Montreal 2, P.Q.

1. Reference your letter of November 23, 1946, and copy of letter attached thereto from Trans-Canada Air Lines, dated November 14, 1946. The Registration markings refered to in T.C.A.'s letter namely: CF-TEH; CF-TEI; CF-TEJ; CF-TER and CF-TES were included in a block of markings allotted for use by them on December 6, 1945. No reference was made, however, concerning Manufacturer's Serial Numbers, or T.C.A.'s numbers.

2. We see no objection in assigning the markings to the aircraft specified as requested.

(S. Graham),
Superintendent, Air Regulations

Original on
7150-6

TRANS - CANADA AIR LINES

C
O
P
Y

P.O. Box 2973,
Winnipeg, November 14, 1946.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910, Confederation Bldg.,
Montreal, Quebec.

Subject: Application for Registration and Certificate of Airworthiness - Douglas DC-3C3G Aircraft

Dear Mr. Blondeau:

Please find appended "Application for Registration" forms, duly completed in triplicate, covering five Douglas DC-3C aircraft presently being converted by Canadair Ltd., Montreal for Trans-Canada Air Lines.

It would be appreciated if registration markings could be assigned to specific aircraft as set out hereunder:

Aircraft	T.C.A. No.	Mfgr's Serial No.	Registration Marking
DC-3C-S1C3G	81	12440	CF-TEH
"	82	12442	CF-TEI
"	85	13357	CF-TEJ
"	90	12253	CF-TER
	91	11906	CF-TES

Our Accounting Department is arranging to forward a cheque in the amount of Fifty Dollars ($50.00) covering the Registration and Certificate of Airworthiness fees at $10.00 per aircraft.

Yours truly,

(Sgd) J.T. Dyment,
Director of Engineering.

TRANSCO RECORDS
DEC A.M. 946
5008-T5-8
File

910 Confederation Building,
Montreal 2, Que., Nov. 30, 1946.

59588

Trans-Canada Air Lines,
1478 Peel Street,
Montreal, P.Q.

Gentlemen:

Re: Douglas CF-TEH

This letter will constitute your authority not valid after January 29, 1947, for the operation of the subject aircraft on your regular lines.

The maximum all-up take-off weight must not exceed 25,346 pounds and the landing weight, 24,546 pounds.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

dg

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6101 B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	S
NIGHT MESSAGE	S
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			COLLECT PREPAID

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

To TRANS CANADA AIR LINES 910 CONFEDERATION BUILDING
A WINNIPEG MANITOBA MONTREAL QUEBEC JANUARY 30S 1947

ATTENTION A H SUTHERLAND

68313

JAN 31 A.M.
5008-T5-8
File

AR 825 PREVIOUS AUTHORITY GRANTED OPERATION DOUGLAS DC3 CARE EASY
NOW EXTENDED NOT VALID AFTER MARCH TWENTY NINTH FORTY SEVEN SUBJECT AIRCRAFT
AIRWORTHY

J L MCGUIRE
CIVIL AVIATION

59:30 hrs
AR

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	✓
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS	PREPAID

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

910 CONFEDERATION BUILDING
MONTREAL QUEBEC JANUARY 30 1947

TRANS CANADA AIR LINES
WINNIPEG MANITOBA

ATTENTION A M SUTHERLAND

AR 825 PREVIOUS AUTHORITY GRANTED OPERATION DOUGLAS DC3 TARE EASY

HOW EXTENDED NOT VALID AFTER MARCH TWENTY NINTH FORTY SEVEN SUBJECT

AIRCRAFT AIRWORTHY

J L BLONDEAU
C I V I L AV I AT I O N

09.30 hrs.
AR

5008-T5-8

910 Confederation Building,
Montreal 2, Que., Nov. 30, 1946.

Trans-Canada Air Lines,
1478 Peel Street,
Montreal, P.Q.

Gentlemen:

Re: Douglas CF-TEH

This letter will constitute your authority not valid after January 29, 1947, for the operation of the subject aircraft on your regular lines.

The maximum all-up take-off weight must not exceed 25,346 pounds and the landing weight, 24,546 pounds.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

dg

5905

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RH-0-120

TITLE FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TEH.

MODEL C47-DC3/P

PREPARED H. H. Whiteman. December 2, 1946.

CHECKED December 2, 1946.

APPROVED December 2, 1946.

DATE

PREPARED H. H. Whiteman
CHECKED 2nd December '46.
APPROVED

CANADAIR LIMITED
MONTREAL - CANADA

REPORT RH-0-120
MODEL C47-DC3/P.

5904

SUBJECT— FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TEH.

AIRCRAFT LICENSE.....CF-TEH

SERIAL NO. (DOUGLAS).....12440

JOB NO. (CANADAIR).....44341

DATE TESTED.....Nov. 29/46.

1.0 INTRODUCTION:

This report is to be attached as an appendix to report RH-0-103, the equipment and procedure being the same.

2.0 RESULTS:

No indication of carbon monoxide was obtained in the forward cabin, in the vicinity of the heater or in the flight compartment during operation of the heater.

3.0 CONCLUSION:

The carbon monoxide concentration due to heater operation is less than .005 to .007 of one percent by volume in living quarters.

WITNESS: Mr. M. Clements,
Department of Transport.

14

- AEROPLANE INSPECTION RELEASE CERTIFICATE -

(FOR PRODUCTION AEROPLANE HAVING CANADIAN TYPE APPROVAL)

REGISTRATION CF-TEI

AEROPLANE TYPE Low Wing Monoplane — LANDPLANE [redacted] [redacted] — MODEL DC3C-31C30

MANUFACTURER Douglas Aircraft Co. Inc. — SERIAL NO. 12440

CERTIFICATE OF AIRWORTHINESS REQUIRED FOR:
(DELETE CATEGORIES AND SUBDIVISIONS - NOT REQUIRED).

CATEGORY:

NORMAL — (A - PUBLIC TRANSPORT PASSENGER [redacted]

[redacted] — [redacted]

[redacted] — [redacted]

PARTICULARS OF ENGINE(S):-

	LEFT SIDE		RIGHT SIDE	
TYPE	Pratt & Whitney			
MODEL	R1830-92 (S1C3G)			
SERIAL NO.	17436		11529	
TAKE-OFF POWER	1200 H.P.		1200 H.P.	
TAKE-OFF R.P.M.	2700 R.P.M.		2700 R.P.M.	
TAKE-OFF MANIFOLD PRESSURE	48" Hg.		48" Hg.	
TAKE-OFF OCTANE RATING OF FUEL	91 (C.F.R.)		91 (C.F.R.)	
MAXIMUM POWER (CONTINUOUS OPERATION)	1050 H.P.		1050 H.P.	
MAXIMUM POWER R.P.M.	2550 R.P.M.		2550 R.P.M.	
MAXIMUM POWER MANIFOLD PRESSURE	41.5" Hg.	Sea Level	41.5" Hg.	Sea Level.
MAXIMUM POWER OCTANE RATING OF FUEL	91 (C.F.R.)		91 (C.F.R.)	

PARTICULARS OF AIRSCREWS:-

13

	LEFT		RIGHT	
Maker	HAMILTON STANDARD PROPELLORS.			
Type	HYDRAULATIC QUICK FEATHERING WITH CONSTANT SPEED CONTROL.			
Blade Drawing No.	6571A-0		6571A-0	
Blade Serial No.	516591		516621	
	516592		516622	
	516593		516623	
Hub. Drawing No.	33D50-101		33D50-101	
Hub Serial No.	159242		159252	
Blade Settings	18.5° Low	89.5° High	18.5° Low	89.5° High
Diameter	11'6½"		11'6½" High	

PARTICULARS OF ALIGHTING GEAR:

WHEELS: Make Bendix Model B1 (Tail) B3 (Main) Tire Goodyear (Tail) Goodyear (Main)

FLOATS: Installation Assembly Drawing No. N.A.

SKIDS: Installation Assembly Drawing No. N.A.

Tail Skid: N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

	FUEL Position	CAPACITY Imp. Gals.		OIL Position	CAPACITY Imp. Gals.
(1)	Centre plane left front (Main)	168	(1)	Left Nacelle	24
(2)	Center plane right front (Main)	168	(2)	Right Nacelle	24
(3)	Centre plane left rear (Aux.)	167	(3)		
(4)	Centre plane right rear (Aux.)	167	(4)		
(5)			(5)		
(6)			(6)		

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE

AEROPLANE

12

DRAWING AND ISSUE NO.		DESCRIPTION
	1.	6000 hour overhaul and C-47A to DC-3C conversion to Douglas Aircraft Co. Inc. drawings and Canadair Ltd. engineering orders, drawings and specification, (RD-1-106, RD-1-111) with additional requirements as specified in RD-1-108).
	2.	Compliance with all applicable inspection and special notes in C.A.A. Airworthiness Directive AD-365.
	3.	Mandatory Douglas Service Bulletins for C-47 Aircraft as noted in C.A.A. Spec. A-669-4 are accomplished.
	4.	Units and components serialized to comply with T.C.A. spec. 19 issue 2.
	5.	The following Douglas Service Bulletins for DC-3 aircraft were accomplished:-
D.S.B. 98 Supp. 2		Floor beam re-work - sta. 294½.
D.S.B. 207		Control surface balance.
D.S.B. 211		Inspection of spar cap bolts.
D.S.B. 216 S		Re-inforcement of wing flap operating tube support beam attach angle.
D.S.B. 217 S		Inspection of elevator torque tube.
D.S.B. 218		Replacement of rivets with bolts - rudder lower hinge bracket.
D.S.B. 219		Inspection of engine section throttle rod.
D.S.B. 220 Sect. III Only.		Installation of spar cap bolt locking device.
D.S.B. 222		Rudder pedal torque tube support bracket - re-work.
D.S.B. 226		Repair to rib - sta. 42.
D.S.B. 231		Control column canvas boot replace with rubber.
D.S.B. 234		Elevator tab control horn modified.
D.S.B. 238		Inspection of engine mount to firewall fittings.
D.S.B. 241		Drain hole in fuel dump chute.
D.S.B. C47-101		Install additional bolt in rudder pedal attachment to torque tube.
	6.	Parachute flare installation carried out as per Douglas Dwg. 5315811.
	7.	Rudder horn 5118056 modified to clear elevator "up" cables as per Canadair E.O. 020303-204.

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE - 11

AEROPLANE

DRAWING AND ISSUE NO.		DESCRIPTION
	8.	
D66-02B-2/2	17077	Instruction plate - fuel filling and using.
D62-05D-2/1	17078	Flare release cable guard installation.
D72-04B-1/1	17079	Pressure line - vacuum oil seperator.
D51-04C-5/1	17069	Rear cargo comp't. door latch - standardization.
D51-04C-5/2	17068	Rear cargo comp't. door latch - warning sign.
D41-02A-1/1	17081	Flight wheel brakes.
U74-03D	18075	Generator blast tube scoop.
	17085	Microphone holder.
Oxygen system.	1.	Oxygen system cylinder mounting tubes. (E.O. 040801-303-304-305-306-307-321-322-361.)
	2.	Doors to oxygen cylinder comp't. (E.O. 010004-215-216.)
	3.	High pressure plumbing. (E.O. 040801-310 to 320 inclusive. E.O. 040801-324 to 329 inclusive. E.O. 040801-343-358-360-366-367-370 and 371.)
	4.	Oxygen system flow meter assembly. (E.O. 040801-353 and 359.)
	5.	Captains oxygen outlet and mounting. (E.O. 040801-366-372 & 354.)
	6.	Lines from low pressure regulator to 1st. cabin outlets (E.O. 040801-333-334-338-340-341-342.)
	7.	Passengers outlet assembly. (E.O. 040801-356- T.C.A. 3-79-072 and 073.)
D77-03C-2/2	17077	Stainless steel fuel lines for Janitrol.
D71-08B-2/1	17082	Oil pressure gauge and carburator heat gauge.
D64-03-2/1	17042	Propeller feathering switch guards. (Dwg. 40304-351.)
D71-06A-1-1	17083	Flumgate compass (Dwg. 40404-35).
D74-10E-2/1	17064	Wing navigation lights. (E.O. 040306-323).
	17087	Rear cabin fire extinguisher relocation. (E.O. 040904-200.)
		Fuel tank selector indicators. (E.O. 030701-204.)
		Relocation of rear cabin door entrance light.

10

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT
(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS
Airspeed Indicator	Pioneer	1486-1AF-A1	55926 339023
Altimeter	Kollsman	571K-01	3780 3774
Compass Magnetic	Pioneer	1818-1-A	AF-42-49040
Engine Speed Indicator	Gen. Elect.	8DJ15AGD	2708985 2696515
Oil Pressure Gauge	U.S. Gauge	AN1 9/8 14022	
[illegible] Cyl. Temp.	Weston	827T9Y2	
[illegible] Oil Temp.	Weston	727T02Y2	
Safety Belt(s)			
Fire Extinguisher(s) Hand	Kiddie	82511	
Engine			

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT:
(Make extra sheets as required, using following pro forma and classification).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS
AIRCRAFT INSTRUMENTS:	Direc. Gyro	Sperry	649742	14394
Flying and Navigation, E.G. Bank and Turn Indicator, etc.,	Turn & Bank	Pioneer	1722-1AR-31	329110
	Turn & Bank Elec.	Pioneer	15300-2A-A2	11
	Gyro Horizon Elec.	Pioneer	12401-1C-A1	245
Aircraft Operating e.g.,	Gyro Horizon	Sperry	656768	11567
	Rate of Climb	Pioneer	1654-1AF-A1	34000 33985
Cabin Temperature				
Outside "	Out. Air Temp.	Weston	726T35Y2	
Flap Indicators.	De-Icer Press.	U.S. Gauge	AN-1-7/8-15-AC2	
etc.,				
POWER PLANT INSTRUMENTS	Hyd. Press.	U.S. Gauge	AN-1-7/8-17-CN2	
		Auto-Lite	AN5771Br 10632-A	44.45644
	Suction guage	U.S. Guage	AN-1-7/8-21-W 2811	
ELECTRICAL EQUIPMENT other than signalling	Man. Fold Press.	Pioneer	1919-1B-A1	2811
	Fuel Press.	U.S. Guage	1919-1V-A1	16042
			AN-1-7/8-15-[illegible]T2	
SIGNALLING EQUIPMENT	Car. Air Temp.	Weston	727T6842	
	Anti-Icer Fluid	Liquidometer	MA-102-39-L2-24	
SAFETY AND EMERGENCY EQUIPMENT	Fuel Quantity	Liquidometer	MA-134-8-L2-24	
	Radio Compass			
AMENITIES	Ammeters	Gen. elec.	8DW55BAAC5	
	Volt	Gen. Elec.	8DW55BAAC-2	2B120
8DW55	Azimuth	Pioneer	MN-48-A	K1-46
	Remote Compass			
(fluxgate)	Master	Pioneer	12010-2A-A1	1157
	Repeater	Pioneer	10061-1AF-B1	530190
	Oxygen flowmeter	Heidbrink	22210-A	
	Oxygen low press.	"	38-06-020-AC.	

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38).

		Landplane		Seaplane		Skiplane	
Maximum permissible Gross Weight	Take-off:	25,346	lbs.	XXX	lbs.	XXX	lbs.
	Landing :	24,546	lbs.	XXX	lbs.	XXX	lbs.
I.C.A.N. Weight Empty:		18,000	lbs.	XXX	lbs.	XXX	lbs.
Disposable load :			lbs.		lbs.		lbs.

Centre of Gravity of Aeroplane at above tare weight is . 252.1 . inches behind/

~~in front of~~ Nose reference Line. or. 20.1.% M.A.C. . . . . .

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	LBS.	DESCRIPTION	LBS.
Ref.: Wt. and Balance Report #RW-0-212.			

List of moveable equipment included in I.C.A.N. weights

DESCRIPTION	LBS.	DESCRIPTION	LBS.
Ref.: Wt. and Balance Report #RW-0-212.			

8

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38)

	Landplane		Seaplane		Skiplane	
Maximum permissible Take-off:	25,346	lbs.	XXX	lbs.	XXX	lbs.
Gross Weight : Landing :	24,546	lbs.	XXX	lbs.	XXX	lbs.
Basic Operational Weight empty:	19,123	lbs.	XXX	lbs.	XXX	lbs.
Disposable Load :		lbs.		lbs.		lbs.

Centre of Gravity of Aeroplane at above tare weight is 251.9 inches behind/

Nose reference Line or 19.9 % M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft.)

List of fixed/ standard/ [redacted]/ equipment included in empty weight:

DESCRIPTION	Lbs.	D ESCRIPTION	Lbs.
Ref.: Wt. and Balance Report #RW-0-212.			

List of moveable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Ref.: Wt. and Balance Report #RW0-212			

7

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origine that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed ..... date NOV 25 1946
Chief Inspector.

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log Book to this effect has been made.

Signed ..... Air Engineer ..... Chief Inspector.
NOV 25 1946

CERTIFICATE OF FACTOR Y TEST PILOT.

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of type Aeroplane.

Signed ..... date NOV 29 1946
Test Pilot

CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category .....
Subdivision ..... is recommended.

Signed ..... Nov. 29/46.
Resident Inspector, A. I. D.,
Department of Transport.

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) .....

Signed 29/11/46
District Inspector, Civil Aviation

ACTUAL WEIGHT & BALANCE

MODEL DC-3

T.C.A. C F - T E H

REPORT RW-O-212.

Canadair
Limited

5905

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO.

TITLE

MODEL

PREPARED A Paterson

CHECKED E Grose

APPROVED W. Burnas.
L J Hebert

DATE

PREPARED D. Patyson
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL · CANADA

REPORT RW-0-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I N T R O D U C T I O N

Airplane model C-47A converted to a DC-3 for commercial use under contract for Trans-Canada Air Lines bearing registration number ~~CF-TDU~~ CF-TEH was weighed at Canadair Limited Montreal, Canada on

November 15th, 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system. Hydraulic system was full.

PREPARED D Paterson
CHECKED Ed Evans
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 2
REPORT RW-0-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Galley Equipment						
1	Water Thermos (incl. water - 1 Gal)	W	1	17.0	497	8,449
2	Aluminum Pitcher	W	1	0.4	520	208
3	Lunch Boxes, less food	W	24	35.3	520	18,356
4	Thermos - 2 qt. less fluid	W	5	20.3	520	10,556
5	Silverware - Complete sets	-	24	9.4	530	4,982
6	Paper Drinking Cups	-	25	0.2	530	106
7	Lucite Cup Handles	-	30	2.1	530	1,113
8	Lunch Box Inserts	-	30	3.1	520	1,612
9	Plastic Cups & Plates, sets	-	24	5.7	530	3,021
10	Hot & Cold Cups	-	60	1.8	530	954
11	General Utensils, Allowance	-	-	2.0	530	1,060
12	Casseroles & Covers (Round)	-	24	24.0	540	12,960
13	Service Trays - Large	-	6	6.0	540	3,240
14	Cafetray - small	-	2	0.6	540	324
15	Snack Kit		1	6.8	520	3,536
Stewardess Supplies						
1	Pillows (at seats, complete with covers & slips)	-	21	21.4	332	7,105
2	Sickness Containers (at seats)	-	21	2.5	332	830
3	Whisk (1) Toy Broom (1) & Dusters (2)	-	-	1.2	530	636
4	Dust Pan - Long Handle	-	1	0.4	530	212
5	Cleansing Tissue - Kleenex - 1 box	-	1	0.6	524	314
6	Stewardess Satchel	-	1	7.9	521	4,116
7	Linen Hand Towels (12" x 10")	-	12	0.9	502	452
8	Flyswatter (1) & Atomizer (1)	-	-	1.2	540	648
9	Blankets (in rear service compt.)	-	12	36.0	553	19,908
10	Headrest covers (on seats)	-	21	2.1	332	697
11	Sanitary Napkins	-	12	1.0	540	540
12	First Aid Kit	-	1	4.1	522	2,140
13	Shopping Bags	-	3	0.6	545	327
14	Oxygen Masks (above seats)	-	21	15.8	332	5,246
15	Spare Sickness Containers	-	10	1.2	554	665
16	Spare Towels (12) Headrest Covers(10)	-	-	1.9	554	1,053
17	Spare Oxygen Masks	-	5	3.8	554	2,105
18	Spare Pillows Complete	-	3	3.1	554	1,717

PREPARED D. Paterson
CHECKED Ed Cross
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 3
REPORT RW-C-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Misc.	1	Crew Baggage	-	3	60.0	147	8,820
	2	Magazines (in binders)	-	10	17.9	177.5	3,177
	3	Bible	-	1	1.5	177.5	266
	4	Life Belts - Passengers	-	21	54.6	332	18,127
	5	Life Belts - Crew	-	3	7.8	147	1,147
	6	Wash Water (2½ Imp. Gals)	-	-	25.0	492	12,300
	7	Cargo Tie-Down Straps (Cargo Compt.) Sets	-	10	10.0	308	3,080
Cold Weather Equipment	1	Anti-Icer Fluid (Std.Qty. 2½ Imp. Gal)*	-	-	19.9	341	6,786
	2	De-Icers - Propellers	*	6	6.0	117.5	705
	3	" " - Wing, Inner	*	2	12.4	200	2,480
	4	" " - Wing, Outer	*	2	38.1	252	9,601
	5	" " - Stabilizer	*	2	12.0	650	7,800
	6	" " - Fin	*	1	4.3	660	2,838
	7	Cabin & Toilet Frost Shields	*	15	0.9	325	293
	1	Stewardess		1	120.0	521	62,520

* Max. capacity 9.6 Imp. Gal. or 76.2 lbs.
19.5
56.3

PREPARED D. Paterson
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

SUBJECT- ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "E" LIST (Fixed)

Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
	Cockpit					
1	Fire Extinguisher-Cockpit & Fwd.Cargo	*	1	7.2	83.5	601
2	Flashlight	*	1	1.2	74	89
3	Log Book	*	1	2.5	71	178
4	Tools	*	-	2.3	76	175
5	Standard Oxygen Bottles	*	2	66.0	390	25,740
6	Safety Belts - Pilots & Observer	*	3	3.0	98	294
7	Can of Hydraulic Fluid	-	1	9.5	88	836
8	Web Gates - Cargo Compt.	*	-	54.0	122.7	6,626
	Cabin					
1	Carpet - Complete	*	1	53.0	343	18,179
2	Curtains with Tie Back Straps	*	14	7.7	325	2,503
3	Coat Hangers	*	24	4.0	480	1,920
4	Coat Strap	*	1	0.2	480	96
5	Fire Extinguisher	-	1	7.2	493	3,550
6	Safety Belts - Passenger	*	21	21.0	332	6,972
7	Safety Belt - Stewardess	*	1	1.0	521	521
8	Cabin Thermometer	*	1	0.3	492	148
9	Casserole Carriers	-	2	27.6	540	14,904
10	Food Box Carriers	-	3	20.1	512	10,291
	Toilet					
1	Soap - Powdered - in dispenser	-	-	0.2	500	100
2	Toilet Container	*	1	2.0	530	1,060
3	Toilet Tissues	-	-	0.3	538	161
4	Waste Container	*	1	2.0	536	1,072
5	"Air - Wick" Bottle	*	1	0.8	538	430
	Misc.					
1	Storage Batteries	*	2	152.0	124	18,848
2	Janitrol Heater	*	1	105.0	172	18,060
3	Flares (Landing) Type S-A-6	*	2	36.0	604	21,744

PREPARED D. Paterson
CHECKED Ed Groer
APPROVED

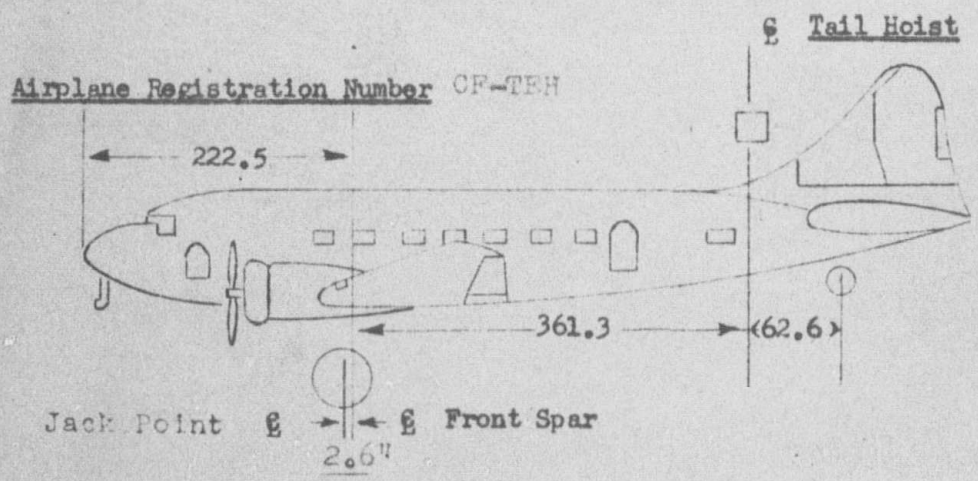
CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 5
REPORT RW-0-212
MODEL DC-3

5904

SUBJECT Actual Weight and Balance.

Weight Empty Data



Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	8,125	- 25	0	8,100
Right Wheel	8,308	- 10	0	8,298
Tail Hoist	1,620	- 10	0	1,610
Total	18,053	- 45	0	18,008

Less _____ Gals. Oil Sta. 184.5 (Corrections) _____

_____ * _____

I.C.A.O. Empty Weight 18,000 lbs.

Remarks: * See page "7" for corrections to obtain weight empty.

PREPARED D. Paterson
CHECKED E. d. Bros
APPROVED

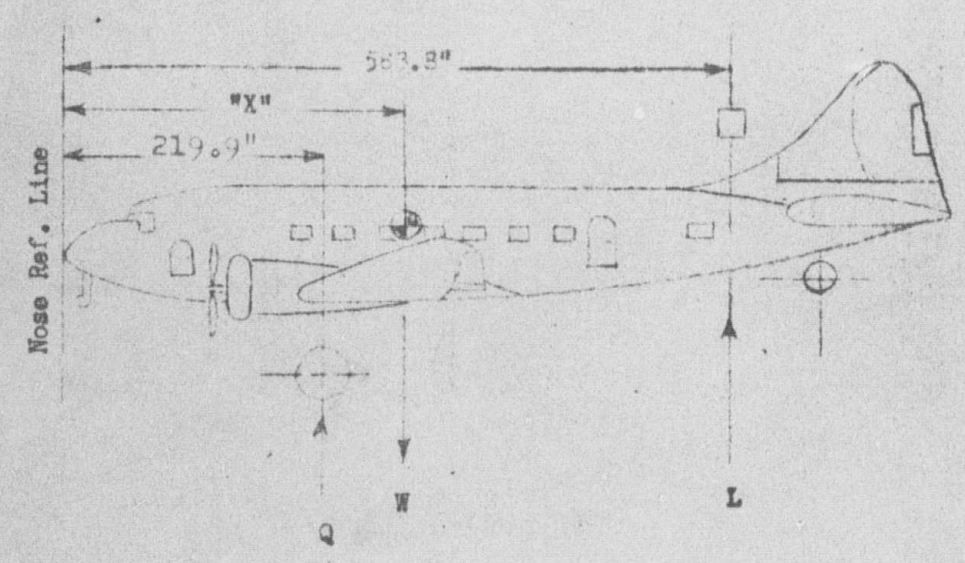
CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 6
REPORT. RW-0-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TAIL-UP WEIGHING



Main Wheel, left, net		8,100
Main Wheel, right, net		8,298
Total Main Wheel	Q =	16,398
Tail Hoist Load Reaction	L =	1,610
Aircraft, as weighed	W =	18,008

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 219.9) + (L \times 583.8) = (W \times X) = 0$$

$$\frac{(Q \times 219.9) + (L \times 583.8)}{W} = X$$

$$\frac{(16,398 \times 219.9) + (1,610 \times 583.8)}{18,008}$$

$$\frac{4,545,838}{18,008} = 252.4"$$

C.G. Location (X) aft of nose ref.: = 252.4 inches

PREPARED W. Paterson
CHECKED Ed Brose
APPROVED

CANADAIR
LIMITED
MONTREAL CANADA

PAGE 7
REPORT, R[illegible]-0-212
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE.

I.C.A.N. WEIGHT EMPTY

	Weight	Arm	Moment
Aircraft as weighed	18,008	252.4	4,545,838
Fixed Equipment to be added			
1. Fire ext. (cabin)	7.2	493.0	3,550
2. Fire ext. (cockpit)	7.2	83.5	601
3. Log book	2.5	71	178
4. Tools	2.3	76	175
5. Can of Hydraulic fluid	9.5	88	836
6. Powdered soap	.2	500	100
7. Toilet tissue	.3	538	161
8. Flashlight	1.2	74	89
9. Trapped fuel & oil	51.0	175	8,925
10. Casserole carriers	15.3	540	7,452
11. Food box	20.1	512	10,291
Removable Equipment to be Deducted			
1. Cargo tie down straps	10.0	308	3,080
2. De-icer Propeller	6.0	117.5	705
3. De-icer Wing Inner	12.4	200	2,480
4. De-icer Wing Outer	37.1	252	9,601
5. De-icer Staoilizer	12.0	650	7,800
6. De-icer Pin	4.3	660	2,838
7. Cabin & Toilet Frost shields	.9	325	293
8. 5 gals anti-icing Fluid (Imp.)	40.0	341	13,640
I.C.A.N. WEIGHT EMPTY	18,000	252.1	4,537,759

C.G. in % M.A.C. = $\frac{252.1 - 224.4}{138.1} \times 100$

" " " = 20.1 % M.A.C.

PREPARED N. Paterson
CHECKED E. Elwood
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 8
REPORT RW-0-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
I.C.A.N. Weight Empty	18,000	252	4,537,759
Removable equipment "F"	-631	410.8	- 259,128
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,123	251.9	4,817,115

Operational Weight empty Arm = $\frac{4,817,115}{19,123}$

= 251.9 inches

C.G. in % M.A.C. = $\frac{(251.9 - 224.4)}{138.1} \times 100$

= 19.9%

- - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346 lbs.

Basic operational Weight empty (winter oper) = 19,123 lbs.

Disposable Load = 6,223

* Disposable for fuel, passengers, stewardess and cargo.

PREPARED W. Paterson
CHECKED Ed Brow
APPROVED

CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 9
REPORT. RW-0-212
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

PREPARED D. Paterson
CHECKED Ed Bros
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 10
REPORT HW-C-212
MODEL DC-3

5904

SUBJECT- Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum line).

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs:

L.H. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

(h) Trapped Fuel & Oil.

51 lbs. (175.0" aft of horizontal reference line).
(1) Trapped oil = 32#
(2) Trapped fuel = 19#

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)

Aft limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 25,200 lbs. (with dump valves.)
Max. Take-off 24,400 lbs. (without dump valves)
Max. Landing 24,400 Lbs.

SUBJECT- ACTUAL WEIGHT AND BALANCE

Reference:

Aircraft Specification "A-669-A" Douglas Model DC-3 Series, dated 15 Jan. 1946.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

Reference:

Douglas DC-3 Dwg. No.: 5071540

Form ACA 317
(Rev. 3-1-41)

16

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC., (Manufacturer)
certify that the aircraft DOUGLAS (Make), C-47A (Model),
12440 (Serial number), has been manufactured, under Production Certificate No. None,*
in conformity with the data forming the basis for Type Certificate No. 669 and any
revision or modification thereof approved by the Administration as of 2-4-44 (Date),
with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-4 dated January 15, 1946.

DATE September 12, 1946

Schuyler Kleinhans
(Signature)
Schuyler Kleinhans
Assistant Chief Engineer
(Title)

* Delete this phrase if not applicable.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co.
Conversion by: Canadair Ltd., Montreal, P.Q.

Type DC-3C-S1C3G (converted C-47A) Maker's No. 12440

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95' 0"	-
Length o/a in feet	64' 5"	-
Height o/a in feet	16' 11"	-

Cubic Capacity (of Airship or Balloon) N.A.

Weight equipped, but without load, fuel, or oil ~~17,300 lbs.~~ See weight report

Total weight authorized (fully loaded) in lbs 25346 Air speed 257 miles per hour Indicated

EQUIPMENT—(Give number and type).

1. Instruments See List No. 1 attached
2. Gauges See List No. 2 attached
3. Lights See List No. 3 attached
4. Signals See List No. 4 attached
5. Fire Extinguishers 2 CO_2 (9½ lbs.) - Engines & Heater Comp. & Rear Baggage
   1-2lb.CO_2 - Pilots Comp.; 1-2lb.CO_2 - Cabin
6. Parachutes None
7. Tools Pilot's Tool Kit Only
8. Other Equipment See List No. 5 attached.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R.H.	R.H.		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on November 29, 1946.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved modifications

Registration recommended with the following special conditions

REGISTRATION RECOMMENDED

Date November 30, 1946.

Signature J. L. Blondeau

Registration approved and Registration Mark C.F. TEH allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413

27

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in triplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:— 84410.

Registration.....$5.00 ✓

Certificate of Airworthiness.....$5.00 ✓
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... John T. Wyman
for Trans-Canada Air Lines

Date of Application..... November 13, 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. Symington	Chairman & President	Montreal	Canadian
Hon. Wilfred Gagnon	Director	"	"
J. A. Northey	"	Toronto	"
R. C. Vaughan	"	Montreal	"
Hon. C. P. Edwards	"	Ottawa	"
Geo. Herring	"	"	"
J. A. Wilson	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station Montreal, Toronto, Winnipeg - other Canadian & U.S. Airports

Date of ~~manufacture~~ reconstruction November, 1946

Crew required Minimum Crew: Pilot & Co-Pilot

Accommodation for what number of passengers 21 pass., plus 2 pilots, 1 observer, 1 attendant

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

noted

LIST NO. 1 - INSTRUMENTS

Item	No.	Make and Type
Ind. Airspeed	2	Pioneer 1426-1AD2
Pitot Static Head	2	Kollsman 372C-02
Altimeter	2	Kollsman 371K-05
Turn and Bank	1	Pioneer 1722-1AT
Turn and Bank (Elect)	1	Pioneer 15300-2A-A2
Rate of Climb	2	Pioneer 1634-1AA-A1
Gyro Horizon	1	Sperry 656768
Gyro Horizon	1	Pioneer 12401-1C-A1
Gyro Direction	1	Sperry 649742
Magnetic Compass	1	Pioneer 1821-6-A
Flux Gate Compass		
Master Indicator	1	Pioneer 12010-2E-A1
Repeater Indicator	1	Pioneer 10061-1AR-B1
Clock	2	Pioneer 3315-2D-3

LIST NO. 2 - GAUGES

Item	No.	Make and Type
Oil Temperature	2	Weston 727 T 59Y2
Outside Air Temp.	1	Weston 728 T 35Y2
Carburetor Air Temp.	2	Weston 727 T 68Y2
Cylinder Temperature	2	Weston 827 T 9
Manifold Pressure	2	Pioneer 1919-1B-A1
Fuel Pressure	2	U.S. Gauge AW-1 7/8-15-BT2
Tachometer	2	G.E. 8DJ-13-AGD
Oil Pressure	2	U.S. Gauge AW-1 7/8-14-CZ2
De-Icer Pressure	1	U.S. Gauge AW-1 7/8-16-AC2
Oxygen Pressure	1	U.S. Gauge AW-1 7/8-AD8287
Suction	2	Kollsman 97-02
Hydraulic Pressure	2	U.S. Gauge AW-1 7/8-17-CN2
Fuel Quantity	1	Liquidometer EA-134-8-24
Anti-Icer Fluid Quantity	1	Liquidometer EA-102-39-24

19

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. Regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture. - G.E. 4560

5. Passing Light - red bulb in L.H. landing light fixture. - G.E. 310

LIST NO. 4 - RADIO EQUIPMENT

Item	No.	Make and Type
Communication Unit (H.F.)	1	Bendix RTA-1B
Compass Receiver	1	Bendix MN-26L
Automatic Control Unit	2	Bendix MN-31C
Loop (Compass)	2	Bendix MN-36C
Compass Receiver	1	Bendix MN-26T
Indicator	1	Bendix MN-58A
Localizer Receiver	1	Airnco BC-733D
Glide Path Receiver	1	Airnco R89 B/ARN-5A
Antenna System	1	Airnco AS-27A/ARN-5
Indicator	2	Airnco 1D-48AF/ARN
Communication Unit (VHF)	1	Airnco RT-18/ARC-1
Antenna	1	Airnco AN-104 AX
Marker Receiver	1	Bendix MN-53A

17

LIST NO. 5 - OTHER EQUIPMENT

1	Flashlight
1	Verey Pistol
26	Oxygen Masks
1	Emergency First Aid Kit
2	Mechanically Operated Flares
24	Life Belts
24	Safety Belts

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

23 2 8-45

910 Confederation Building,
Montreal 2, Que., January 31, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
EAR	Douglas DC3 CF-TEH	5008-T5-8

FEB 1 A.M.

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

68532 File 5008-T5-8

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans-Canada Air Lines.

(b) Fees $10.00 (Department Receipt No. 84410,) forwarded under Cash Book Folio 3328.

(c) Copy of Statement of Conformity.

(d) Weight and Balance Report.

(e) Copy of Inspection Release Certificate.

(f) Copy of Canadair's statement regarding Carbon Monoxide Test.

(g) Copies of our letter and wire of authority for operation.

2. We understand that proof of ownership has been submitted direct to Headquarters by the Company.

3. The radio equipment in this aircraft has been inspected by our Radio Division and found satisfactory.

4. This application appears in order and issue of certificates is recommended.

J.L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

16

L.P.

24

TRANS-CANADA AIR LINES
Serves the Nation.

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2445-S.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-S1C3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-S1C3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-TEA
62	CF-TDO	76	CF-TEB
63	CF-TDP	77	CF-TED
64	CF-TDQ	78	CF-TEE
66	CF-TDS	79	CF-TEF
67	CF-TDT	81	CF-TEH
68	CF-TDU	82	CF-TEI
70	CF-TDW	83	CF-TEJ
71	CF-TDX	91	CF-TES
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

25-

L.P.

CAR

ORIGINAL
ON FILE 7150-6

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

76734

TRANSPORT - RECORDS
MAR 24 A.M.
File 8-T-5-8

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

5008-T4-15-T4
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL ON FILE LEJC.

7150-6

CAR

TRANS--CANADA AIR LINES

FOR FILE 26

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

TRANSPORT - RECORDS
APR 1 P.M.
0323
File 5008-T0-8

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12095	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	26313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11908	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED ON CARDS

5008-T5-8

CAR

910 Confederation Building,
Montreal 2, Que., March 26, 1947.

TRANSPORT - RECORDS
MAR 28 A.M.
5008-T5-8
File

Mr. A.M. Sutherland,
Director of Mtce. & Overhaul,
Trans-Canada Air Lines,
P.O. Box 2973,
Winnipeg, Manitoba.

77558

Dear Sir:

Re: Douglas DC-3 CF-TKH.

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is subject to the conditions outlined in the original letter of authority.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations.

CAR
27-2

27

~~5008-T5-19~~
~~5008-T5-9~~
5008-T5-8

HEW/TD

Ottawa, April 2nd,1947.

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sirs:-

In order to complete the issue of the Certificates of Registration and Airworthiness for Douglas D.C.3.(SIC3G) aircraft, it will be necessary to submit copies of Bills of Sale for the noted aircraft in order to establish proof of ownership.

Aircraft requiring Bills of Sale:-

Registration Markings CF-TEH - Constructors No.12440

Registration Markings CF-TEI - Constructors No.12442

Registration Markings CF-TES - Constructors No. 11906

Yours truly,

(H. Graham)
Superintendent, Air Regulations

c.c. DIAR MONTREAL

28

CANADAIR LIMITED

BILL OF SALE

SALES ORDER #44341

KNOW ALL MEN BY THESE PRESENTS: That CANADAIR LIMITED, a corporation formed under the laws of Canada, having its principal place of business in Montreal, Canada, releases:

1 - only - Douglas C-47 Aircraft
Manufacturer's Serial No. 12440,
Army Serial No. KG405

TEH

For and in consideration of the monies received, which are hereby acknowledged, Seller does hereby sell, assign, transfer and deliver all right, title and interest in and to the above described aircraft together with all appurtenances attached to or installed therein, unto: **Trans-Canada Air Lines,**
Winnipeg, Manitoba.
its (or his) successors and assigns, to have and to hold, all and singular, the said aircraft forever.

IN WITNESS WHEREOFF, the Seller has duly executed this instrument this **30th day of November, 1946.**

CANADAIR LIMITED.

D. H. Macfarlane
V.P.

WITNESS:

H Thatcher

TRANS-CANADA AIR LINES

29

P.O. Box 2973,
Winnipeg, Manitoba,
April 22nd, 1947.
File: VP-1331-190.

Mr. A.D. McLean,
Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

Dear Mr. McLean:

With a view to establishing proof of ownership, I am sending you attached the duplicates of Bills of Sale covering six Douglas type C-47 aircraft which we purchased from Canadair Limited.

It will be appreciated if you will advise your Superintendent, Air Regulations, at Ottawa and your District Inspector, Air Regulations, at Montreal that these documents are on file with the Department to ensure that there is no hold-up in the issuance of Certificates of Registration and Airworthiness for these aircraft because of this feature.

Very truly yours,

W.F. English,
Vice President.

Attach.

cc: Mr. S. Graham, Superintendent, Air Regulations, Ottawa, Ont.
This has reference to your letter of April 2nd.

cc: Mr. J.L. Blondeau, District Inspector, Air Regulations, Montreal, Quebec.
This has reference to your letter of April 12th.

TCA TRANS-CANADA AIR LINES

Serves the Nation

30

P.O. Box 2973,
Winnipeg, Manitoba,
April 22nd, 1947.
File: VP-1331-19C.

7845

TRANSPORT-RECORDS
APR 24 A.M.
5008-TS-8
File

Mr. A.D. McLean,
Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

Dear Mr. McLean:

With a view to establishing proof of ownership, I am sending you attached the duplicates of Bills of Sale covering six Douglas type C-47 aircraft which we purchased from Canadair Limited.

It will be appreciated if you will advise your Superintendent, Air Regulations, at Ottawa and your District Inspector, Air Regulations, at Montreal that these documents are on file with the Department to ensure that there is no hold-up in the issuance of Certificates of Registration and Airworthiness for these aircraft because of this feature.

Very truly yours,

COPY ON
7150-6
5008-TS-9
-8
-10
-18
-19
-20

Attach.

W.F. English,
Vice President.

5542(R)
1973(A)

ENTERED
ON CARDS

6 Copies
22-4-47

XXX/XX

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2975,
Winnipeg, Man.

ATTENTION: Mr. J. T. Dyment.

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. WINNIPEG MONTREAL

2462A
8-41

35

CANADA

DEPARTMENT OF TRANSPORT

/20

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5542

NATIONALITY AND REGISTRATION MARKS CF-TEH

1. Type and description	Douglas DC3(S1C3G)
2. Name and address of constructor	Douglas Aircraft Company Inc., Santa Monica, California, U.S.A.
3. Constructor's serial number	12440
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill Street, Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 30th, day of November, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TEH and is of Canadian nationality.

Given at Ottawa this 5th, day of May, 1947.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

ENGINES

18. Number installed: Two

19. Makes: Pratt and Whitney

20. Types: S1C3G

21. International power of the engine or engines at

(a) Sea Level 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

(b) Rated Altitude 1050 H.P. at 2550 revolutions per minute. (International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) (b)

23. Oil: (a) Hamilton (b)

24. Airscrews — Number fitted: Two Types: Standard No.

Pitch: Constant Speed full feathering Diameter

25. Weight of aircraft empty (including water in the radiators): (a) Landplane ~~18611~~ 18064 (14.11.47) lbs.; (b) Seaplane lbs.; (c) Skiplane lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon) 4824 lbs.

(a) Number of tanks: Four

(b) Capacity of tanks: 670 Imp. gals.

27. Oil (at 9·0 lbs. per gallon) 432 lbs.

(a) Number of tanks: Two

(b) Capacity of tanks: 48 Imp. gals.

28. Weight allowed for crew 540 lbs.

29. Weight allowed for equipment, excluding wireless apparatus lbs.

30. Weight of wireless apparatus lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full L.P. ~~1295~~ 1540 (14.11.47) lbs.

32. Maximum total weight authorized lbs.

Landplane (Landing) 24,400 (excepting in case of emergency) (Take-off) 25,200 lbs.

~~Seaplane~~ lbs.

~~Skiplane~~ lbs.

Klukka 10.11.49

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)

Landplane Take-off Twenty-five thousand two hundred pounds.

~~Seaplane~~

~~Skiplane~~ Landing Twenty-four thousand four hundred pounds.

34. Minimum crew necessary Two (excepting in case of emergency)

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) m.p.h. and (b) m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated November 30, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 5th. day of May, 19 47.

Superintendent, Air Regulations.

34

2462
7-45

/20

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1975

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines.
2. Christian name
3. Address 360 McGill St., Montreal, P.Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Company Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TEH

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3(S1C3G) Constructor's No. 12440
8. Place and year of construction of aircraft Santa Monica, California, U.S.A.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) Twenty-five

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a, b, c, d & e
15. Maximum span (in flying position) 95'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

/MIM
/ZC
/MM

33

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

DC3C (SIC3G) Weight and Speed Limitations.

32

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level) Dump Valves
Take-off - 26,200 lbs. at sea level) not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		November 30, 1947. Nov. 28/48 23/11/49 9.11.50 9.11.51	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

31

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Landing Lights.
2 Engine Revolution Counters
2 Oil Pressure Gauges
2 Oil Temperature Gauges
Emergency Flares.

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit.

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

New DC3 (S1C3G) Weight & Speed Limitation inserted (10.11.49)

"Maximum Take-off and Landing Weights DC3 aircraft - revised 28.9.54" inserted in C of A 13.6.55

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

/RM

18000
631
120-

18511*

5008-T5-8 36

Ottawa, Ontario.
May 12th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5542 and Certificate of Airworthiness No. 4973, together with Engine and Journey and Aircraft Log Books, for your Douglas aircraft, CF- TEH. DC3(S1C3G)

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.) (1)	17.0	lbs.
Aluminum Pitcher (1)	0.4	"
Lunch Boxes, less food (24)	35.3	"
Thermos, 2 qt. less fluid (5)	20.3	"
Silverware - complete sets (24)	9.4	"
Paper Drinking Cups (25)	0.2	"
Lucite Cup Handles (30)	2.1	"
Lunch Box Inserts (30)	3.1	"
Plastic Cups & Plates, sets (24)	5.7	"
Hot & Cold Cups (60)	1.8	"
General Utensils, allowance	2.0	"
Casseroles & Covers (Round) (24)	13.0	"
Service Trays, large, (6)	6.0	"
Cafatray, small, (2)	0.6	"
Snack Kit (1)	6.8	"
Pillows (at seats, complete with covers & slips) (21)	21.4	"
Sickness Containers (at seats) (21)	2.5	"
Whisk, Toy Broom and 2 Dusters	1.2	"
Dust Pan - long handle (1)	0.4	"
Cleansing Tissue, Kleenex, 1 box	0.6	"
Stewardess Satchel (1)	7.9	"
Linen Hand Towels (12"x 10") (12)	0.9	"
Flyswatter (1) & Atomizer (1)	1.2	"
Blankets (in rear service compartment) (12)	36.0	"
Headrest covers (on seats) (21)	2.1	"
Sanitary Napkins (12)	1.0	"
First Aid Kit (1)	4.1	"
Shopping Bags (3)	0.6	"
Oxygen Masks (above seats) (21)	15.8	"
Spare Sickness Containers (10)	1.2	"
Spare Hand Towels (12) Headrest Covers (10)	1.9	"
Spare Oxygen Masks (5)	3.8	"
Spare Pillows complete (3)	3.1	"
Crew Baggage (3)	60.0	"
Magazines (in binders) (10)	17.9	"
Bible (1)	1.5	"
Life Belts - Passengers (21)	54.6	"
Life Belts - Crew (3)	7.8	"
Wash Water (2½ Imp. gals.)	25.0	"
Cargo Tie-down straps (cargo compts.) 10 sets	10.0	"
Anti-Icer Fluid (2½ Imp. gals.)	19.9	"
Propeller De-Icers (6)	6.0	"
Wing, inner, De-Icers (2)	12.4	"
Wing, outer, De-Icers (2)	38.1	"
Stabilizer De-Icers (2)	12.0	"
Fin De-Icers (1)	4.3	"
Cabin & Toilet Frost Shields (15)	0.9	"
Stewardess	120.0	"
	619.8	lbs.

Amendments to C. of A. No. 1973 dated November 29, 1947:

Item 25 - "18511" deleted. "18064" inserted. ✓

Item 31 - "1193" deleted. "1540" inserted. ✓

F. W. Bone,
District Inspector, Air Regulations.

FWB/MC

AIRCRAFT INSPECTION REPORT

37

DEC 5 AM

Date of Inspection November 29,1947 Owner Trans-Canada Air Lines Registration Markings CF-TEF

Type DC-3C S1C3G-92 Serial No. 12440 Purpose Commercial

C. of R. 5542 C. of A. 1973 Date of Last Inspection December 1, 1946.
Previous C. of R. & A. Expires November 30, 1947. Present C. of R. & C. of A. Expires November 28, 1948.

AIRFRAME

Crew Two Passengers Twenty-one No. of Fuel Tanks Four

Capacity 670 Imp. gals. No. of Oil Tanks Two Capacity 48 Imp. gals.
Total Hours Since New 4646:49 Since Conversion 25/11/46 Since Overhaul 3346:49 Reconditioned --

noted

A28620

WEIGHTS

	Gross	Tare	Empty	Carrying Capacity
Landplane Passenger	25,200	(1) 18,714	(2) 18064	1540
Landplane Freighter				
Seaplane Passenger	(1)Includes Item "F" I.C.A.N.			
Seaplane Freighter	(2) Includes de-icing equipment.			
Skiplane Passenger				
Skiplane Freighter				

Mrs Jones Tl note 6-12-47

ENGINE(S)

LEFT		RIGHT	
Make P. & W.	Model S1C3G	Make P. & W.	Model S1C3G
Serial No. 24034	H.P. 1050 @ 2550	Serial No. A81381	H.P. 1050 @ 2550
Total Hrs. Since New	4085:46	Total Hrs. Since New	4363:18
Since Complete Overhaul	581:58	Since Complete Overhaul	495:03

PROPELLER(S)

LEFT		RIGHT	
Make Hamilton Standard	Model Hydromatic Full Feathering	Make Hamilton Standard	Model Hydromatic full feathering.
Diameter 11'6"	Pitch 18.5° to 89.5°	Diameter 11'6"	Pitch 18.5° to 89.5°
Blade Design 6571A-0		Blade Design 6571A-0	
Mfg.No.1 513939 2 513940 3 513941		Mfg. No.1 514720 2 514721 3 514722	
Total Hrs.1 4180:42 2 4180:42 3 4180:42		Total Hrs.1 1484:58 2 1484:58 3 1484:58	
Hub Design 33D50-233	Mfg. No. 158428	Hub Design 33D50-101	Mfg. No. 158634
Total Hours 4180:42	Since Last Overhaul 1491:16	Total Hours 3351:25	Since Last Overhaul 1484:58
Date of Last Overhaul	14/6/47	Date of Last Overhaul	6/6/47
Date of Last Inspection	29/11/47	Date of Last Inspection	29/11/47
Date Purchased	14/6/46	Date Purchase	22/10/46

UNDERGEAR

Skis --
Floats --
Wheels Bendix B3

~~Radiotelephone~~ 1947-48 Radio Licence applied for.
Chassis --
Chassis Standard - Retractable.

Over

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

38 2 2-48

717 Dominion Public Building,
Winnipeg, Manitoba, November 25, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-8	Douglas DC-3 - CF-TEH	5008-T5-8

A34372

TRANSPORT-RECORDS
NOV 29 A.M.
File 5008-T5-8

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations

1. Please be advised that the Certificate of Registration No. 5542 and Certificate of Airworthiness No. 1973 covering the above noted aircraft have been renewed, valid until November 23rd, 1949. Radio Certificate No. 79 is valid until March 31st, 1949.

for D. G. Joy,
District Controller of Air Services.

JDC/ET

noted EJT

39696

TRANSPORT - RECORDS
JAN 8 A.M.
5008-T5-8
File
39

AIRCRAFT INSPECTION REPORT

Date of Inspection Nov. 10/49 Owner T.C.A. Reg. Marks ~~CF TEH~~

Type Douglas DC3 Serial No 12440 Purpose Commercial

C. of R. No 5542 C. of A. No 1973 Present C. of R. & A. Expires Nov. 9th, 1950

AIRFRAME

Crew Two Passengers 23 No. of Fuel Tanks four

Fuel Capacity 670 Imp.Gals. No. of Oil Tanks 2 Oil Capacity 48 Imp.Gals.

Total Hours Since New 9848:06 Date Last Overhaul N/A Hours Since Overhaul N/A

ENGINES

LEFT		RIGHT	
Make P & W	Model Twin Row S1C3G	Make P & W	Model Twin Row S1C3G
Serial No 17456	H.P 1200	Serial No 22686	H.P 1200
Total Hours Since New 13430:04	Since c/Overhaul 731:16	Total Hours Since New 7611:03	Since c/Overhaul 762:45

PROPELLORS

LEFT		RIGHT	
Make H.S.S.	Model Cons. Sp. F.F.	Make H.S.S.	Model Cos. Sp. F.F.

UNDERGEAR

Main Ski Base Main Ski Pedestals

Floats Float Chassis

Wheels Standard Wheel Chassis Standard Retractable

WEIGHTS

	EMPTY	GROSS	COMMERCIAL LOAD
Landplane	18064	25200	1540
Seaplane			
Skiplane			

AMENDMENTS TO CERTIFICATES & REMARKS

Added note page 3 of Certificate of Airworthiness in accordance with H.Q. letter dated June 15, 1949.
New DC3 (S1C3G) Weight and Speed Limitation inserted. ✓

C. of A. Items 25 - 37 - deleted en bloc. ✓

Noted
ESJ

Aircraft inspected, considered airworthy and recommended for renewal of the Certificate of Airworthiness for 12 months.

Signed N/A
District Aircraft Inspector.

C. of A. renewed by F.W. Bone
Date November 10th, 1949.

FWB/AB

F. W. Bone,
District Inspector, Air Regulations.

Trans Canada Air Lines

40 2444 4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEH SERIAL NO. 12440

1. C. of A. No. 1973 Expires Nov. 9/50 C. of R. No. 5542 Expires Nov. 9/50

AIRCRAFT DATA—Manufacturer Douglas Aircraft Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	A - 79470 Left		
(2)	351909 Right		
(3)			
(4)			

Signature of Applicant E. Gee

Date Nov. 6, 1950

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Gee "B" ENGINEER

Date Nov 6-50

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed ..... TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5542 ..... and C. of A. No. 1973 ....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [illegible] DISTRICT AIRCRAFT INSPECTOR

Date Nov 6/50

7. C. of A. and C. of R. renewed, not valid after (Date) November 9th, 1951.

Permissible Gross Weights— Wheels (Landing) 24,400 lbs. (Take-off) 25,200 lbs.

Skis

Floats

NOTED

Signed A R Pinder DSJ

for DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 6th, 1950.

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

23960

TRANSPORT - RECORDS
NOV 7 1950
File 5008-T5-8

41

CAR
CAL

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W...November.6th,.1950.

Your File
5008-T5-8

SUBJECT Renewal of Certificates of Registration and Airworthiness CF-TEH

Our File
5008-T5-8

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for **Douglas DC3 aircraft, CF-TEH.**

a R Pinder

for. (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

43 DEC 8 1950 2 1950 1

EDMONTON, Alberta. December 1, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	T.C.A. ENGINE FAILURE.	7150-6

28734

TRANSPORT - RECORDS
DEC 11 P.M.
File 5228-TJ-8

Director of Air Services,
OTTAWA, Ontario.

Attention: C.C.A.

1. Herewith, for your information and records, please, copy of engine failure report dated November 30, 1950, as submitted by T.C.A., Edmonton, and which is self-explanatory.

2. Submitted, please.

Noted 12/12/50 Hutc.

KFS/H
Encl.

for District Controller Air Services.

FILE
INDEX
CARTON
2 3 4
RECORDS

19

COPY

42

TRANS-CANADA AIR LINES 27682 DEC 8 1950

Maintenance Department,
Municipal Airport,
Edmonton, Alberta.

November 30th, 1950.

File #1400.

Mr. K. F. Saunders,
District Superintendent of Air Regulations,
Department of Transport,
EDMONTON, Alberta.

Dear Sir:

This is to advise you that aircraft (DC-3) 381, registration CF-TEH returned to ramp after twenty one minutes flying with left engine feathered.

Investigation revealed metal in screen which deemed an engine change. Engine number 61A11E removed and number 61A7E installed. Unserviceable engine since last overhaul 966.12 hours.

Aircraft then test flown, found serviceable and returned to line service.

Yours truly,

"R.W. Cuthill"
Chief Mechanic.

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

2444
4-50

47

REGISTRATION—CF-~~TEH~~ SERIAL No. 12240

1. C. of A. No. 1973 Expires Nov. 9/51 C. of R. No. 5542 Expires Nov. 9/51

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New 14900:37 Since Overhaul

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE 3 G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 4115618		
(2) 350102		
(3)		
(4)		

Signature of Applicant J Hymson

Date 9-11-51

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed J Hymson VZM-24
~~ENGINEER~~

Date 9-11-51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5542 and C. of A. No. 1973, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed E Bell
DISTRICT AIRCRAFT INSPECTOR

Date Nov 9/51

7. C. of A. and C. of R. renewed, not valid after (Date) November 9th 1952

Permissible Gross Weights— Wheels - 25,200 lbs.
Skis
Floats

Signed [signature]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 9th 1951

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

42880

TRANSPORT - RECORDS
NOV 12 A.M. 1951
File 5008-T5-8

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W... November 9th 1951.

Your File 5008-T5-8

SUBJECT Renewal of Certificates of Registration and Airworthiness

Our File 5008-T5-8

CF - T E H

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E H

2. Copy of T.C.A. Log Sheet attached.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
1.

40023

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
NOV 10 P.M. 1952
File 5008-T5-8

48

TORONTO, 260 Richmond St. W. ...November..7th.1952.

Your File 5008-T5-8 | SUBJECT Renewal of Certificates of Registration and Airworthiness | Our File 5008-T5-8

CF T E H

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E H

2. Flight Report attached.

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
2

4

2444
4-50

41

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEH SERIAL No. 12440

1. C. of A. No. 1973 Expires Nov. 9/52 C. of R. No. 5542 Expires Nov. 9/52

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A6E		
(2) 61A63E		
(3)		
(4)		

Signature of Applicant E Glee

Date Nov 7/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E Glee
"B" ENGINEER

Date Nov 7/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed H Ball A.I.
DISTRICT AIRCRAFT INSPECTOR

Date Nov 7/52

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) November 9th 1953

Permissible Gross Weights— Wheels - 25, 200 lbs.
Skis
Floats

Signed [signature]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 7th 1952

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

(7) **AIRCRAFT TIME DATA**

STATION YZ DATE 6-11-82	
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	549:22
TOTAL AIRCRAFT TIME	17940:56

(8) **WORK TO BE DONE NEXT CHECK STATION**

	STA.	BY

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

AIRCRAFT No. 381 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	W.E. BRISTOW	DESIGNATOR	DATE
FIRST OFFICER	D.N. PLATT	275-6	6-11-52
STEWARDESS	F. BLITSTEIN	274-6	6-11-52
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	CLE	16.23	17.45	1	22
CLE	XU	18.23	19.27	1	04
XU	YZ	20.01	20.39		38

OIL ADDED — INDICATE QUARTS

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

TOTAL TIME

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED W E Bristow per DH CAPTAIN

Copy log sheet

TRANSPORT · RECORDS
SEP 25 A.M.
File 7150-6

TRANS-CANADA AIR LINES

INTERNATIONAL AVIATION BUILDING
MONTREAL
CANADA

September 24, 1953.

Major R. Dodds,
Comptroller of Civil Aviation,
Civil Aviation Branch,
Department of Transport,
Ottawa, Ontario.

19207

Dear Sir,

Regarding Flight 235-1 of September 1st, London - Ontario, following is a report regarding an incident on this flight (DC-3 Aircraft 381) at London, Ontario with Captain W. N. Spratt in command.

The Flight was held in the vicinity of the city of London while a severe local storm causing 3.2 ins. of rainfall in 45 - 50 mins. was occurring. When this storm passed off, leaving generally C.A.V.U. conditions, Flight 235-1 made (according to the Captain and substantiated by witnesses including the D.O.T. tower operator) a normal approach and landing on to runway 8; touchdown at approximately 90 m.p.h. at the intersection of 8-14 was made, into a NE 20 and gusty wind. There were pools of 2 - 3 ins. of water on the runway at the time. The aircraft appeared to "hydroplane" through the water giving a very poor braking action. There is about 150 ft. of over-run at the end of runway 8 before reaching the boundary fence. There are 10 ft. high runway markers just off the end of the runway. The aircraft was partially ground looped on reaching the runway end, to prevent over-run; in so doing one of the markers was struck, damaging the right wing tip and aileron. Shortly after landing, official weather reports indicated a wind-shift to westerly 4 m.p.h. The Captain states that he had planned approach for gusty conditions with the possibility of a wind -shift.

Our investigation shows that the Captain was not at fault in this case. There were 21 passengers aboard, none of whom was injured. Sixteen of these passengers were local deplaning. Due to lack of spare equipment, the remaining five passengers were sent by cab to Windsor.

Very truly yours,

H.W. Seagrim,
General Manager, Operations.

ENTERED ON CARDS
No. 3 Bldg.

TRANSPORT

DEPARTMENT OF P[redacted]

CENTRAL REGISTRY

REFERENCE SLIP

FILE NUMBER 7150-6 SERIAL NUMBER 19207 1/7/50

CHARGED TO CAE DATE 25/9

DATE (1)	ROUTED TO (2)	INITIALS (3)	DATE (4)
25/9	CAR (WU Gordon)	[illegible] 30/10/53	30/10/53
	CAT	30/10/53	

INITIAL COLUMN 3 TO ENSURE EFFICIENT DISTRIBUTION SERVICE. COLUMN 4 SHOULD SHOW DATE DOCUMENT LEFT YOUR OFFICE. USE COLUMN 2 FOR ADDITIONAL REFERENCES

THIS FORM WILL BE DESTROYED WHEN PAPERS ARE BEING FILED. THEREFORE THE ATTACHED DOCUMENT SHOULD BEAR YOUR INITIALS AS WELL AS ALL MINUTES OR REMARKS OF A PERMANENT NATURE.

WVG/SEK

~~138.5~~ 1

OTTAWA, Ontario, September 29th, 1953.

Aircraft Accident - Douglas DC-3
Registration unknown
- September 1st, 1953.

~~7250-6~~
5008-T5-8

District Controller of Air Services,
260 Richmond Street West,
TORONTO, 2B, Ontario.

Attention: District Superintendent, Air Regulations.

1. Attached hereto is a copy of a letter from Trans-Canada Air Lines dated September 24th, 1953, in which the subject accident is reported.

2. It will be noted that the registration marks of the aircraft have not been mentioned in the letter.

3. It would be appreciated if the registration marks of the subject aircraft could be ascertained and forwarded.

4. It may be of interest to know that Page 30, paragraph 21, of Trans-Canada Air Lines' Regulations dealing with accidents, dated 6th April, 1953, requires that the Regional Operations Manager or Station Manager notify "the District Inspector (Superintendent?) of Air Regulations."

W.V.G.
for (C.T. Travers),
Superintendent, Air Regulations.

Encl.

C

~~139~~

52

7150-1

260 Richmond St. West,
Toronto, Ontario,
September 30th, 1953.

TRANSPORT - RECORDS
5008-T5-8
OCT 1 P.M.
File ~~7150-6~~

REGISTERED

19828

Mr. F. I. Young,
Operations Manager,
Trans-Canada Air Lines,
Box 428, Terminal "A",
TORONTO, Ontario.

Dear Sir:

Re: Aircraft Accident - Douglas DC-3,
September 1st, 1953, London, Ont.

A copy of an accident report, dated September 24th, 1953, submitted by Mr. W. H. Seagrim to the Controller of Civil Aviation, has been directed to this office, in which the registration of this aircraft was not made known. This aircraft was on Flight 235-1, September 1st, 1953, Capt. W. N. Spratt being in command.

It is requested, please, that the registration of this aircraft be made known to this office, as is required under Information Circular 0/10/52.

Aircraft accidents reportable to the Minister are required to be investigated by a Departmental Investigator, and accidents of this nature, according to Paragraph 8.3.1.2 of The Air Regulations, must be reported forthwith. In this particular instance, it would appear that the accident occurred on September 1st, and a report not made to the Minister until September 24th.

You are also referred to Page 30, paragraph 21 of Trans-Canada Air Lines' Regulations dealing with accidents, dated 6th April, 1953, which requires that the Regional Operations Manager or Station Manager notify the District Inspector (Superintendent) of Air Regulations direct.

May this matter receive your immediate attention, please.

Yours very truly,

ENTERED
ON CARDS
No. 8 Bldg.

(D. W. Saunders)
District Superintendent, Air Regulations,
Toronto.

DWS/am
cc: H.Q. (File: 7150-6)

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-52

TORONTO Ontario October 13, 1953
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
7150-6	Aircraft Accident - Douglas DC-3 Registration unknown - September 1st, 1953.	7150-1;5008-T5-8

In Reply Refer to File

TRANSPORT - RECORDS
OCT 15 P.M.
File 5008-T5-8

Director of Air Services,
Department of Transport,
Ottawa.

Attention C.A.R.

43869

1. Further to your letter of September 29th, and reference our registered letter of September 30th addressed to Trans-Canada Air Lines (copy to our Headquarters), we have now been advised that the registration of the aircraft in question is CF-TEH.

2. Is there any further information required, please?

(D. W. Saunders),
District Superintendent, Air Regulations,
for District Controller of Air Services,
Toronto.

ENTERED ON CARDS
No. 3 Bldg.
Entered on Accident Cards

WVG/MM

54

OTTAWA, Ontario, Nov. 2, 1953.

7150-1
5008-T5-8

ACCIDENT - Douglas DC-3 Aircraft, CF-TEM,
- September 1st, 1953. 5008-T5-8(CAR)

District Controller of Air Services,
260 Richmond St. West,
TORONTO 2B, Ontario.

Attn:- District Supt., Air Regulations.

1. This will acknowledge your letter of October 13th, 1953, concerning this subject accident.

2. With reference to paragraph 2 of your letter now that you have obtained the registration marks of the aircraft and instructed the local Trans-Canada Air Lines' office in the required procedure, it would appear that nothing further need be done.

W.V.G.
for (C.T. Travers),
Superintendent, Air Regulations.

WKA

48548

TRANSPORT - RECORDS
NOV 6 P.M. 1953
File 5008-T5-8

57

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W..... November 14th 1953.

Your File 5008-T5-8

SUBJECT Renewal of Certificates of Registration and Airworthiness

Our File 5008-T5-8

CF T E H

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E H

Maurice E Leach

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach. 2.

2444
8-52

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF -TEH SERIAL No. 12440

1. C. of A. No. 1973 Expires 9-11-53 C. of R. No. 5542 Expires 9-11-53
Aircraft Data—Manufacturer DOUGLAS Model DC-3
Hours flown—Since New 21020.59 Since Overhaul
Engine Data—Manufacturer PRATT & WHITNEY Model SIC3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) LT. 61A 51E		460.57
(2) RT. 61A 30E		460.57
(3)		
(4)		

Signature of Applicant J. Hymson
Date 5/11/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed J. Hymson YZM-24
"M" Licence No.
Date Nov. 11/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot
Date

4. The following documents are attached:

Certificate of Airworthiness	☒
Certificate of Registration	☒
Weight and Balance Report (when applicable)	☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed
District Aircraft Inspector
Date 5-11-53

7. C. of A. and C. of R. renewed, not valid after.

Date November 9th 1954

Permissible Gross Weights—Wheels 26,200 lbs.
—Skis
—Floats

Signed
District Superintendent, Air Regulations
Date November 5th 1953.

Other Action:—
26,200 lbs. inserted on C. of A. No. 1973 issued CF-TEH.

8. H.Q. Action C.A.R.
C.A.E.

(8)

AIRCRAFT TIME DATA

STATION YZ DATE 5/11/53	
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	460.57
TOTAL AIRCRAFT TIME	21020.59

(9)

WORK TO BE DONE NEXT CHECK STATION

	STA.	BY

(10)

DEFECTS RECTIFIED AND OTHER WORK DONE

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	DATE	SIGNATURE
	A/C P/F CHK. COMPLETED	YZ	5-11-53	L J Hardypiw JA.

(11) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1) **AIRCRAFT No.** ..... **TRANS-CANADA AIR LINES FLIGHT REPORT**

TCA-620

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	V.H. BURFORD	DESIGNATOR	DATE
FIRST OFFICER	D.P. McDONALD	251-5	NOV. 5/53
STEWARDESS	L. CLARK		
STEWARD	S/N G.W. HENDERSON		

(4) **FLIGHT TIME DATA**

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
VL	OW	06.34	07.17		43
OW	YZ	07.45	09.09	1	24
			TOTAL TIME	2	07

(5) **OIL ADDED**

INDICATE QUARTS			
LEFT	RIGHT	STA	BY

(6) **INSTRUMENT READINGS**

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(7) **REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT**

DEF. NO.		DEF. NO.	
	Copy		

SIGNED J.B. Burford per J. Hymers ..... CAPTAIN

O BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T5-8

DUPLICATE - DIST.FILE NO. T5-8

TO: Director of Air Services,
Ottawa, Ont, Attn: S.A.R.

TRANSPORT - RECORDS
OCT 25 A.M.
5008-T5-8

AIRCRAFT LICENSING RECORDS

17350

1. Registration mark CF- TEH 2. Old C of R No. File.....

3. New C of R No. ..... Date .....

4. C of A No. 1973 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....
Christian name ....

8. Address of owner .....
.....
Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐
Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from November 9th, 1954, to November 9th, 1955,
Temporary authority from ..... to .....

Date October 22nd, 1954.

(F. W. Bone),
District Superintendent Air Regulations

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-8

DUPLICATE - DIST. FILE NO. _____

TRANSPORT - RECORDS
JUN 14 A.M.
File 5008-T5-8

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T E H 8410 2. Old C of R No. ...

3. New C of R No. ..... Date .....

4. C of A No. 1973 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐; Commercial ☐ to State ☐ to Private ☐; Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans Canada Air Lines Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not otherwise covered C. of. Page 3- "Maximum Take-oof and Landing Weights-DC3 Aircraft. Revised Sept. 28, 1954." - inserted. ✓
Endorsed re validity of C. of A. as per Instructions H.Q. letter file No. 7150-6, dated May 13, 1955.

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

M E Louch

(D.W. Saunders)

Date June 13, 1955 District Superintendent Air Regulations

2462-A
2-54

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒ C1
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5542

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E H	Douglas Aircraft Company Inc., - Douglas DC3(S1C3G)	12440

(4) NAME OF OWNER TRANS-CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE November 30th, 1946.

SEAL

[redacted]
SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

10

2462
2-56

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 1973

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E H	Douglas Aircraft Company Inc. - Douglas DC3(S1C3G)	12440

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE November 30th, 1946.

SEAL

~~SUPERINTENDENT, AIR REGULATIONS~~
Controller, Civil Air Regulations.

SEE REVERSE SIDE

29205

COPY

TRANSPORT RECORDS
FEB 18 P.M.
File 5008-T-8

DEPARTMENT OF TRANSPORT

ORIGINAL ON FILE.....5008-T-4-21.....

COPY FOR FILE.....5008-T-1 5008-T-4
-T-19 -T-25
-T-5 -T-25

Winnipeg 1, Manitoba, February 14, 1957.

Our File
Douglas DC-3 Aircraft 5008-T-4-21
TRANS-CANADA AIRLINES -T-5-1
-T-5-19
-T-5-5
-T-5-4
Director General, Air Services, -T-4-25
Department of Transport, -T-4-25
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. New forms 2462 and 2462A for the aircraft listed below have been issued to replace the old ones:-

Douglas DC-3	CF - TKU	CF - TKH
"	" - TKA	" - TKK
"	" - TKB	" - TKI
"	" - TKC	

2. Enclosed herewith are blue copies of the Certificate of Registration and the Certificate of Airworthiness.

(Sgd)----------?
for District Director, Air Services.

Encls.

noted
LSL

8
3-55

COPY

5008-T5-8
63

ORIGINAL ON FILE 5008-T4-17

COPY FOR FILE 5008-T5-8

21613

LEJG.

CANADIAN NATIONAL TELEGRAPHS

1958 OCT 21 AM 8 36

CNTGA001 26/23 (PHONED MISS GIBSON)

ST WINNIPEG MAN OCT 20 427PM

DIRECTOR GENERAL AIR SERVICES, ATTN CONTROLLER CIVIL AIR OPERATIONS

AND REGULATIONS DOT OTTAWA

ARW221 DOUGLAS DC THREE CF-TDQ AND DOUGLAS DC THREE

CF-TEH SOLD TO FRONTIER AIRLINES DENVER COLORADO CANCEL

REGISTRATION MARKINGS FROM CANADIAN AIRCRAFT REGISTER

BENDALL REGIONAL DIRECTOR AIR SERVICES.

ARW 221 DC CF-TDQ DC CF-TEH.

735AME/21

8
3-55

(381)

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐ 65

NO. 5542

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E H	Douglas Aircraft Company Inc., - Douglas DC3(S1C3G)	1 2 4 4 0

(4) NAME OF OWNER TRANS-CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE November 30th, 1946.

SEAL

E. W. Bendall

Controller, Civil Air Regulations.

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
2-56

384

64

SERIAL NO. 1973

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E H	Douglas Aircraft Company Inc. - Douglas DC3(S1C3G)	1 2 4 4 0

(4) CATEGORY: Commercial

LANDPLANE [x] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE November 30th, 1946.

SEAL

W Bendall
Controller, Civil Air Regulations

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

66 2/1-56

Winnipeg 1, Manitoba, October 22nd, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-4-17 & 5008-T-5-8(ARW)

SUBJECT: DOUGLAS DC3 AIRCRAFT CF - TDQ and CF - TEH

Orig. on 508-T-4-17

2165

TRANSPORT - RECORDS
508-TS-8
File 508 T-4-17

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention:Controller, Civil Air Operations & Regulations.

1. Enclosed herewith you will find the formal Certificates of Registration and Airworthiness covering the above mentioned aircraft in order that they may be cancelled and registration markings deleted from the Canadian Aircraft Register - Aircraft sold to Frontier Airlines, Denver, Colorado.

B Henderson

Regional Director, Air Services.

Encs (4)

COPY ON
508-TS-8

Cert. 1622
27-10-58

GJ/MC

67

~~5008-T4-25~~ (SRL)
~~5008-T4-23~~
~~5008-T4-17~~
5008-T5-8

OTTAWA, Ontario.
March 19th, 1959.

Aircraft & Airman Records Branch,
Federal Aviation Agency,
Washington 25, D.C.,
U.S.A.

Dear Sirs:

This is to confirm that the registrations of the following aircraft were cancelled on the Canadian Aircraft Register on the dates included below:

Douglas DC3(SIC3G) Serial No. 12191, cancelled 6.11.58
Douglas DC3(SIC3G) Serial No. 12139, cancelled 6.11.58
Douglas DC3(SIC3G) Serial No. 12039, cancelled 21.10.58
Douglas DC3(SIC3G) Serial No. 12440, cancelled 21.10.58

Yours truly,

(J.R.K. Main),
Director of Civil Aviation.

cc: Frontier Airlines Inc.
Denver, Colorado,
U.S.A.

cc: Winnipeg

CC; Montreal

cc: Trans-Canada Air Lines
1080 University St.,
Montreal, P.Q.

VOL 1

5008 - T 5 - 9

FILE No. 5008 - T 5 - 9 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM DEC., 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TEI - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 23 1950	34225	SRC			FEB 25 1950

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

1
10-57

FILE No. 5008 - T 5 - 9 VOLUME No. 1

VOL. 1 5008 - T 5 - 9

DEPARTMENT OF TRANSPORT

FROM DECEMBER - 1946
TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
REGISTRATION, INSPECTION AND OPERATION

SUB-SUBJECT

FILE TITLE CF-TEI — (DOUGLAS DC-3.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
DEC 18 1946	61963	S.A.R.		LST	0
FEB 3 1947	69000	C.A.R.	FEB 12 47	HS	FEB 14 1947
FEB 27 1947	BF Feb 28	C.A.R.		HM	APR 3 1947
APR 9 1947	1379	C.A.R.		HM	APR 14 1947
APR - 1947	7845	C.A.R.		HM	5 23 1947
MAY 23 1947		C.R.C.		HM	MAY 27 1947
MAY 27 1947		Insp.		HM	MAY 28 1947
		GAS		R	MAY 23 1947
DEC 15 47	29748	C.A.R.		LST	DEC 17
		A-E		A and	
DEC 21 1949	38387	C.A.R.		LST	DEC 27 1949
		C.A.E.		A and	DEC 27 1949
JUN 14 1950	Ry. Z. Riddell	C.A.R.		L	JUN 14 1950
JUL 3 1950	Roy H. Wilson	C.A.M.		H	JUL 3 - 1950
NOV 22 1950	25806	C.A.R.		LST	NOV 25 1950
NOV 25 1950		C.A.E.		A and	NOV 27 1950
DEC 3 - 1951	47003	C.A.R.		LST	DEC 3 1951
DEC 3 1951		C.A.E.		A and	DEC 4 - 1951
	42667	C.A.R.		LST	DEC 2 1952
NOV 28 1952		C.A.E.		A and	DEC - 2 1952
DEC 2 1952					
NOV 20 1953	51059	C.A.R.		JLST	NOV 25 1953
NOV 25 1953		C.A.E.		A and	NOV 25 1953
NOV 22 1954	19316	C.A.R.		LST	NOV 23 1954
JUN 14 1955	8404	A.R.L.		LST	JUN 14 1955
MAR 26 1957	32978	A.R.L.		AB	MAR 27 1957
		S.A.E.		A L	AUG 22 1957
AUG 15 1958	546	A.R.L.		LST	AUG 15 1958

2

TC/ISC

Ottawa, Ontario, November 28, 1946

File Copy

18-T3-6

Trans-Canada Air Lines,
Douglas DC-3
Registration Markings

~~5006-T3-6~~
" " -9
" " -10
" " -18
" " -19

Re Test

District Inspector, Air Regulations,
910 Confederation Building,
1253 McGill College Avenue,
Montreal 2, P.Q.

1. Reference your letter of November 23, 1946, and copy of letter attached thereto from Trans-Canada Air Lines, dated November 14, 1946. The Registration markings referred to in T.C.A.'s letter namely: CF-TEH; CF-TEI; CF-TEJ; CF-TER and CF-TES were included in a block of markings allotted for use by them on December 6, 1945. No reference was made, however, concerning Manufacturer's Serial Numbers, or T.C.A.'s numbers.

2. We see no objection in assigning the markings to the aircraft specified as requested.

(S. Graham),
Superintendent, Air Regulations

mel on
D.L

TRANS - CANADA AIR

COPY

P.O. Box 2975,
Winnipeg, November 14, 1946.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910, Confederation Bldg.,
Montreal, Quebec.

Subject: Application for Registration and Certificate of Airworthiness - Douglas "DC-3C3G Aircraft

Dear Mr. Blondeau:

Please find appended "Application for Registration" forms, duly completed in triplicate, covering five Douglas DC-3C aircraft presently being converted by Canadair Ltd., Montreal for Trans-Canada Air Lines.

It would be appreciated if registration markings could be assigned to specific aircraft as set out hereunder:

Aircraft	T.C.A. No.	Mfgr's Serial No.	Registration Marking
DC-3C-S1C3G	81	12440	CF-TEH
"	82	12442	CF-TEI
"	85	13337	CF-TEJ
"	90	12283	CF-TER
"	91	11906	CF-TES

Our Accounting Department is arranging to forward a cheque in the amount of Fifty Dollars ($50.00) covering the Registration and Certificate of Airworthiness fees at $10.00 per aircraft.

Yours truly,

(Sgd) J.T. Dyment,
Director of Engineering.

3

5008-T5-9

910 Confederation Building,
Montreal 2, Que., December 14, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

DEC 16 A.M. 1946
5008 T5-9
File

Gentlemen:

Re: Douglas CF-TEI ✓

61963

This letter will constitute your authority not valid after February 13, 1947, for the commercial operation of the subject aircraft on your regular lines.

The maximum all-up weight of this aircraft must not exceed 25,200 pounds for take off and 24,400 pounds for landing. These figures may be increased by 146 pounds when de-icers are installed. The weight empty of this aircraft has been established at 17,991 pounds.

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

Noted
MJ

M

4

5008-T5-9

910 Confederation Building,
Montreal 2, Que., January 30, 1947.

A. M. Sutherland, Esq.,
Director of Ntce. & Service,
Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Manitoba.

Dear Sir:

Re: Douglas CF-TEI

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after April 12, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

c.c. H.Q.
D.I.A.R. Winnipeg

5

5008-T5-9

910 Confederation Building,
Montreal 2, Que., December 14, 1946.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

Gentlemen:

Re: Douglas CF-TRI

This letter will constitute your authority not valid after February 13, 1946, for the commercial operation of the subject aircraft on your regular lines.

The maximum all-up weight of this aircraft must not exceed 25,200 pounds for take off and 24,400 pounds for landing. These figures may be increased by 146 pounds when de-icers are installed. The weight empty of this aircraft has been established at 17,991 pounds.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

AR

ACTUAL WEIGHT & BALANCE

MODEL DC-3

T.C.A. CF-TEI

REPORT RW-O-215

Canadair
Limited

5905

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RW-0-215

TITLE ACTUAL WEIGHT AND BALANCE

MODEL DC-3

PREPARED Doug Paterson

CHECKED Ed. Crosse

APPROVED W. Banas.
L.J. Hebert

DATE 28th of Nov. 1946

PREPARED W. Paterson
CHECKED, Ed Grose
APPROVED

CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 1
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

INTRODUCTION

Airplane model C-47A converted to a DC-3 for commercial use under contract for Trans-Canada Air Lines bearing registration number CF-TEI was weighed at Canadair Limited Montreal, Canada on the 26th of Nov 1946.

Weighing was done in the level flight position (tail up) for the weight empty condition.

Aircraft was weighed in a "dry condition", i.e. it had no fuel or oil in the tanks nor in the system.

PREPARED D. Paterson
CHECKED Ed Crose
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 2
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Commissary	1	Water Thermos (incl. water - 1 Gal)	-	1	17.0	497	8,449
	2	Aluminum Pitcher	-	1	0.4	520	208
	3	Lunch Boxes, less food	-	24	35.3	520	18,356
	4	Thermos - 2 qt. less fluid	-	5	20.3	520	10,556
	5	Silverware - Complete sets	-	24	9.4	530	4,982
	6	Paper Drinking Cups	-	25	0.2	530	106
	7	Lucite Cup Handles	-	30	2.1	530	1,113
	8	Lunch Box Inserts	-	30	3.1	520	1,612
	9	Plastic Cups & Plates, sets	-	24	5.7	530	3,021
	10	Hot & Cold Cups	-	60	1.8	530	954
	11	General Utensils, Allowance	-	-	2.0	530	1,060
	12	Casseroles & Covers (Round)	-	24	24.0	540	12,960
	13	Service Trays - Large	-	6	6.0	540	3,240
	14	Cafatray - small	-	2	0.6	540	324
	15	Snack Kit	-	1	6.8	520	3,536
Stewardess Supplies	1	Pillows (at seats, complete with covers & slips)	-	21	21.4	332	7,105
	2	Sickness Containers (at seats)	-	21	2.5	332	830
	3	Whisk (1) Toy Broom (1) & Dusters (2)	-	-	1.2	530	636
	4	Dust Pan - Long Handle	-	1	0.4	530	212
	5	Cleansing Tissue - Kleenex - 1 box	-	1	0.6	524	314
	6	Stewardess Satchel	-	1	7.9	521	4,116
	7	Linen Hand Towels (12" x 10")	-	12	0.9	502	452
	8	Flyswatter (1) & Atomizer (1)	-	-	1.2	540	648
	9	Blankets (in rear service compt.)	-	12	36.0	553	19,908
	10	Headrest covers (on seats)	-	21	2.1	332	697
	11	Sanitary Napkins	-	12	1.0	540	540
	12	First Aid Kit	-	1	4.1	522	2,140
	13	Shopping Bags	-	3	0.6	545	327
	14	Oxygen Masks (above seats)	-	21	15.8	332	5,246
	15	Spare Sickness Containers	-	10	1.2	554	665
	16	Spare Towels (12) Headrest Covers(10)	-	-	1.9	554	1,053
	17	Spare Oxygen Masks	-	5	3.8	554	2,105
	18	Spare Pillows Complete	-	3	3.1	554	1,717

PREPARED D. Paterson
CHECKED Ed Grace
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 3
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "F" LIST (Removable)

	Item No.	Items	IN A/C	Qty	Weight	Arm	Moment
Misc.	1	Crew Baggage	-	3	60.0	147	8,820
	2	Magazines (in binders)	-	10	17.9	177.5	3,177
	3	Bible	-	1	1.5	177.5	266
	4	Life Belts - Passengers	-	21	54.6	332	18,127
	5	Life Belts - Crew	-	3	7.8	147	1,147
	6	Wash Water (2½ Imp. Gals)	-	-	25.0	492	12,300
	7	Cargo Tie-Down Straps (Cargo Compt.) Sets	*	10	10.0	308	3,080
Cold Weather Equipment	1	Anti-Icer Fluid (Std.Qty. 2½ Imp. Gal)	*	-	19.9	341	6,786
	2	De-Icers - Propellers	☆	6	6.0	117.5	705
	3	" " - Wing, Inner	*	2	12.4	200	2,480
	4	" " - Wing, Outer	*	2	38.1	252	9,601
	5	" " - Stabilizer	*	2	12.0	650	7,800
	6	" " - Fin	*	1	4.3	660	2,838
	7	Cabin & Toilet Frost Shields	-	15	0.9	325	293
	1	Stewardess		1	120.0	521	62,520

* Max. capacity 9.6 Imp. Gal. or 76.2 lbs.

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. EQUIPMENT "E" LIST (Fixed)

	Item No.	Items	C/A Kit	Qty	Weight	Arm	Moment
Cockpit	1	Fire Extinguisher-Cockpit & Fwd.Cargo	*	1	7.2	83.5	601
	2	Flashlight	*	1	1.2	74	89
	3	Log Book	*	1	2.5	71	178
	4	Tools	*	-	2.3	76	175
	5	Standard Oxygen Bottles	*	2	66.0	390	25,740
	6	Safety Belts - Pilots & Observer	*	3	3.0	98	294
	7	Can of Hydraulic Fluid	*	1	9.5	88	836
	8	Web Gates - Cargo Compt.	*	-	54.0	122.7	6,626
Cabin	1	Carpet - Complete	*	1	53.0	343	18,179
	2	Curtains with Tie Back Straps	*	14	7.7	325	2,503
	3	Coat Hangers	*	24	4.0	480	1,920
	4	Coat Strap	*	1	0.2	480	96
	5	Fire Extinguisher	*	1	7.2	493	3,550
	6	Safety Belts - Passenger	*	21	21.0	332	6,972
	7	Safety Belt - Stewardess	*	1	1.0	521	521
	8	Cabin Thermometer	*	1	0.3	492	148
	9	Casserole Carriers	*	2	27.6	540	14,904
	10	Food Box Carriers	*	3	20.1	512	10,291
Toilet	1	Soap - Powdered - in dispenser	*	-	0.2	500	100
	2	Toilet Container	*	1	2.0	530	1,060
	3	Toilet Tissues	*	-	0.3	538	161
	4	Waste Container	*	1	2.0	536	1,072
	5	"Air - Wick" Bottle	*	1	0.8	538	430
Misc.	1	Storage Batteries	*	2	152.0	124	18,848
	2	Janitrol Heater	*	1	105.0	172	18,060
	3	Flares (Landing) Type S-A-8	*	2	36.0	604	21,744

PREPARED D. Paterson
CHECKED Ed Grosa
APPROVED

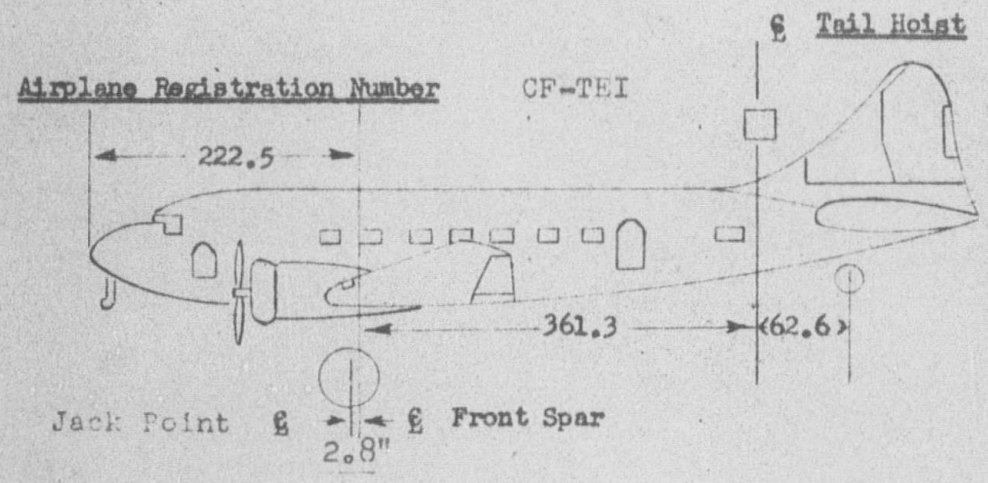
CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 5
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT— Actual Weight and Balance.

Weight Empty Data



Airplane Registration Number CF-TEI

Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	8,105	- 0	-	8,105
Right Wheel	8,100	+ 20	-	8,120
Tail Hoist	1,605	- 5	-	1,600
Total	17,810	+ 15	-	17,825

Less ____ Gals. Oil Sta. 184.5 ____
Corrections

* ____

I.C.A.N. Empty Weight 17,991 lbs.

Remarks: * For details of the corrections made to obtain the weight empty, see the following pages.

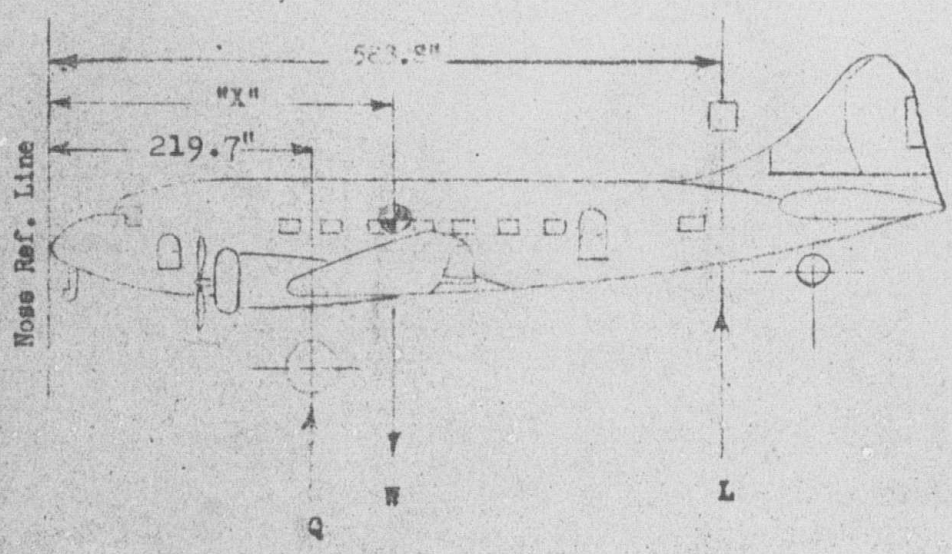
PREPARED W. Paterson
CHECKED Ed Cross
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TAIL-UP WEIGHING



Main Wheel, left, net		8,105
Main Wheel, right, net		8,120
Total Main Wheel	Q =	16,225
Tail Hoist Load Reaction	L =	1,600
Aircraft, as weighed	W =	17,825

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 219.7) + (L \times 583.8) = (W \times X) = 0$$

$$\frac{(Q \times 219.7) + (L \times 583.8)}{W} = X$$

$$\frac{(16{,}225 \times 219.7) + (1{,}600 \times 583.8)}{17{,}825}$$

$$\frac{4{,}498{,}713}{17{,}825} = 252.4"$$

C.G. Location (X) aft of nose ref.: = 252.4 inches.

PREPARED W. Paterson
CHECKED Ed. Grose
APPROVED

CANADAIR
LIMITED
MONTREAL · CANADA

PAGE 7
REPORT RW-0-215
MODEL DC-3

5804

SUBJECT— ACTUAL WEIGHT AND BALANCE

I.C.A.N. WEIGHT EMPTY

	Weight	Arm	Moment
Aircraft as weighed	17,825	252.4	4,499,713
Plus trapped fuel and oil	51	175.0	8,925
Sub-Total	17,876	252.2	4,507,638

	Weight	Arm	Moment
Total from above	17,876	252.2	4,507,638
Fixed equipment to be added:			
1. Mn 26 Compass receiver	37.2	167	6,212
2. Hand fire extinguisher (Pilot's)	7.1	83	589
3. Flashlight	1.2	74	89
4. Log book	2.5	71	178
5. Tools	2.3	76	175
6. Hand fire extinguisher (Cabin)	7.2	493	3,550
7. Soap-in dispenser	0.2	545	109
8. Toilet Tissue	0.3	581	174
9. Flares (Landing)	36.0	604	21,744
10. Transmitter	78	167	13,026
11. Invertor	15.0	605	9,075
12. Bearing Indicator	1.8	65	117
13. Automatic Loop	9.0	100	900
Removable equipment to be deducted	Qty		
1. Cargo tie-down straps	10	10.0	308 3,080
2. De-Icer - Propeller	6	6.0	117.5 705
3. " " - Wing-Inner	2	12.4	200 2,480
4. " " - Wing-Outer	2	38.1	252 9,601
5. " " - Stabilizer	2	12.0	650 7,800
6. " " - Fin	1	4.3	660 2,838
I.C.A.N. Weight Empty		17,991	252.2 4,537,072

C.G. in % M.A.C. = $\frac{252.2 - 224.4}{138.1} \times 100$

" " " = 20.1 % M.A.C.

Note: "Harrington Air Service buffet used".

PREPARED D. Paterson
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 8
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT- ACTUAL WEIGHT AND BALANCE

OPERATIONAL WEIGHT EMPTY

	Weight	Arm	Moment
I.C.A.N. Weight Empty	17,991	252.2	4,537,072
Removable equipment "F"	-631	410.8	- 259,128
Less stewardess	-120	521.0	- 62,520
Plus pilots (2)	+340	70.0	+ 23,800
Plus 24 gals. of oil	+216	184.5	+ 39,852
Full Anti-Icer tank	+ 56	341.0	+ 19,096
Basic Operational Weight Empty	19,164	252.8	4,844,579

Operational Weight empty Arm = $\frac{4,844,579}{19,164}$

= 252.8 inches

C.G. in % M.A.C. = $\frac{(252.8 - 224.4)}{138.1} \times 100$

=20.6 %

- - - - - - - - - - - - - - - -

Disposable Load*:

Aircraft gross weight, equipped with De-Icer = 25,346 lbs.

Basic operational Weight empty (winter oper) = 19,164 lbs.

Disposable Load = 6,182 lbs.

* Disposable for fuel, passengers, stewardess and cargo.

PREPARED D. Paterson
CHECKED Ed Brace
APPROVED

CANADAIR
LIMITED.
MONTREAL - CANADA

PAGE 9
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 400 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

PREPARED D. Paterson
CHECKED Ed Crose
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 10
REPORT RW-0-215
MODEL DC-3

5904

SUBJECT- Actual Weight and Balance

Engineering Information

Dimensional Data for Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum line),

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs:

L.H. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

(h) Trapped Fuel & Oil.

51 lbs. (178.0" aft of horizontal reference line).
(1) Trapped oil = 32#
(2) Trapped fuel = 19#

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)

Aft limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 25,200 lbs. (with dump valves.)
Max. Take-off 24,400 lbs. (without dump valves)
Max. Landing 24,400 Lbs.

SUBJECT- ACTUAL WEIGHT AND BALANCE

Reference:

Aircraft Specification "A-669-4" Douglas Model DC-3 Series, dated 15 Jan. 1946.

Department of Commerce, Civil Aeronautics Administration, Washington, D.C.

(a) Location of Front Spar Center-Line:

222.5 inches aft of horizontal ref. line.

(b) Location of Tail Hoist Center-Line:

583.8 inches aft of horizontal ref. line.

Reference:

Douglas DC-3 Dwg. No.: 5071540

Form ACA 317
(Rev. 3-1-41)

17

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC. (Manufacturer), certify that the aircraft DOUGLAS (Make), C-47A (Model), 12442 (Serial number), has been manufactured, under Production Certificate No. None,* in conformity with the data forming the basis for Type Certificate No. 669 and any revision or modification thereof approved by the Administration as of 2-4-44 (Date), with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-4 dated January 15, 1946.

DATE September 12, 1946

Schuyler Kleinhans
(Signature)
Schuyler Kleinhans
Assistant Chief Engineer
(Title)

* Delete this phrase if not applicable.

16

- AEROPLANE INSPECTION RELEASE CERTIFICATE -

(FOR PRODUCTION AEROPLANE HAVING CANADIAN TYPE APPROVAL)

REGISTRATION CF-TEI

AEROPLANE TYPE Low Wing Monoplane — LANDPLANE ~~SEAPLANE~~ ~~AMPHIBIAN~~ — MODEL DC3C-S1C3G

MANUFACTURER Douglas Aircraft Co. Inc. — SERIAL NO. 12442

CERTIFICATE OF AIRWORTHINESS REQUIRED FOR:
(DELETE CATEGORIES AND SUBDIVISIONS - NOT REQUIRED).

CATEGORY:

NORMAL (A - PUBLIC TRANSPORT PASSENGER
(B - " " MAILS
(~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~
(~~XXXXXXXXXXXX~~
(~~XXXXXXXXXXXXXXX~~

~~XXXXXXXX~~ (~~XXXXXXXXXXXXXXXXXXXXXXXX~~
~~XXXXXXXX~~ (~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

PARTICULARS OF ENGINE(S):-

	LEFT SIDE		RIGHT SIDE	
TYPE	Pratt & Whitney			
MODEL	R 1830-92 (SIC3G)			
SERIAL NO.	351129		19093	
TAKE-OFF POWER	1200 H.P.		1200 H.P.	
TAKE-OFF R.P.M.	2700 R.P.M.		2700 R.P.M.	
TAKE-OFF MANIFOLD PRESSURE	48" Hg.		48" Hg.	
TAKE-OFF OCTANE RATING OF FUEL	91 (C.F.R.)		91 (C.F.R.)	
MAXIMUM POWER (CONTINUOUS OPERATION)	1050 H.P.		1050 H.P.	
MAXIMUM POWER R.P.M.	2550 R.P.M.		2500 R.P.M.	
MAXIMUM POWER MANIFOLD PRESSURE	41.5" Hg.	Sea Level	41.5" Hg.	Sea Level
MAXIMUM POWER OCTANE RATING OF FUEL	91 (C.F.R.)		91 (C.F.R.)	

15

PARTICULARS OF AIRSCREWS:-

	LEFT		RIGHT	
Maker	HAMILTON STANDARD PROPELLORS			
Type	HYDROMATIC QUICK FEATHERING WITH CONSTANT SPEED CONTROL.			
Blade Drawing No.	6571A-0		6571A-0	
Blade Serial No.	516597		516600	
	516598		516601	
	516599		516602	
Hub. Drawing No.	33D50-101		33D50-101	
Hub Serial No.	159244		159245	
Blade Settings	18.5° Low	89.5° High	18.5° Low	89.5° High
Diameter	11'6½"		11'6½"	

PARTICULARS OF ALIGHTING GEAR:

WHEELS: Make Bendix Model B1 (Tail) B3 (Main) Tire Goodyear (Tail) Goodyear (Main)

FLOATS: Installation Assembly Drawing No. N.A.

SKIDS: Installation Assembly Drawing No. N.A.

Tail Skid: N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

FUEL Position	CAPACITY Imp. Gals.	OIL Position	CAPACITY Imp. Gals.
(1) Centre plane left front (Main)	168	(1) Left Nacelle	24
(2) Centre plane right front (Main)	168	(2) Right Nacelle	24.
(3) Centre plane left rear (Aux.)	167	(3)	
(4) Centre plane right rear (Aux.)	167	(4)	
(5)		(5)	
(6)		(6)	

dl.

14

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT

(Essential for C. of A. for any class of operation).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS.	
Airspeed Indicator		Pioneer	1426-1AN-A1	341428	341429
Altimeter		Kollsman	371K-01	3782	3771
Compass	Magnetic	S			
Engine Speed Indicator		Gen. Elec.	8DJ13-AGD		
Oil Pressure Guage		U.S. Gauge	AW-1-7/8-14-CZ2		
[illegible]	Cyl. Temp.	Weston	827T9Y2		
[illegible]	Oil Temp.	Weston	110077		15851
Safety Belt(s)					
Fire Extinguisher(s)	Hand				
	Engine	Kiddie	82511	63633L	512316

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENTS:

(Make extra sheets as required, using following pro forms and classification).

DESCRIPTION		MAKER	MODEL	SERIAL NUMBERS.	
AIRCRAFT INSTRUMENTS:	Direct Gyro	Sperry	649742	1196	
Flying and Navigation E.G.	Turn & Bank	Pioneer	1722-1AU-D1	330850	
Bank & Turn Indicator, etc.,	Turn & Bank (elec.)	Pioneer	15300-2A-A2	313	
	Gyro Horizon	Pioneer	12401-1C-A1	1081	
Aircraft Operating e.g.,	Gyro Horizon	Sperry	6566768	11408	
Cabin Temperature	Rate of Climb	Pioneer	1634-1AF-A1	34350	34352
Outside "					
Flap Indicators	Outside Air Temp.	Weston	728T35Y2		
etc.,	De-Icer Pres.	U.S. Gauge	AW-1-7/8-16-AC2		
POWER PLANT INSTRUMENTS	Hyd. Pres.	U.S. Gauge	AW-1-7/8-17-CN2		
ELECTRICAL EQUIPMENT other than signalling	Fuel Pres.	U.S. Gauge	AW-1-7/8-15-BT2		
	Suction	US. Gauge	AW-1-7/8-21-W		
SIGNALLING EQUIPMENT	Man. Pres.	Pioneer	1919-1V-A1	16039	16031
	Carb. Air.	Weston	727T58Y2		
SAFETY AND EMERGENCY EQUIPMENT	Anti-Icer Quantity	Liquidometer	EA-109039-L2-24		
	Fuel Quantity	" "	EA-134-8-L2-24		
	Radio Compass				
AMENITIES	Radio Azimuth	Pionner	MN-58A	K1-60	
	Ammeter	Gen. Elec.	8DW-13-AGD		
	Volt Ammeter	Gen. Elec.	8DW53-BBC-2 or B120		
Fluxgate	Remote Compass	S			
"	Master Indicator	Pioneer	12010-2E-A1	~~1138~~ x 1145	
"	Repeater	Pioneer	10061-1AB-B1	527751	
	Oxy.Pres. (low)	Heibrink	38-06-020-AC	2008	
Oxygen	Flowmeter	"	22210-A		

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE

AEROPLANE

13

DRAWING AND ISSUE NO.		DESCRIPTION
	1.	6000 hour overhaul and C-47A to DC-3C conversion to Douglas Aircraft Co. Inc. drawings and Canadair Ltd. engineering orders, drawings and specifications (RD-1-106, RD-1-111) with additional requirements as specified in RD-1-108.
	2.	Compliance with all applicable inspection and special notes in C.A.A. Airworthiness Directive AD-355.
	3.	Mandatory Douglas Bulletins for C-47 Aircraft as noted in C.A.A. Spec. A-669-4 are accomplished.
	4.	Units and components serialized to comply with T.C.A. Spec. 19 Issue 2.
	5.	The following Douglas Service Bulletins for DC-3 aircraft were accomplished:
D.S.B. 98 Supp. 2		Floor beam re-work - station 294½.
D.S.B. 207		Control surface balance.
D.S.B. 211		Inspection of spar cap bolts.
D.S.B. 216 S		Re-inforcement of wing flap operating tube support beam attach. angle.
D.S.B. 217 S		Inspection of elevator torque tube.
D.S.B. 218		Replacement of rivets with bolts - rudder lower hinge bracket.
D.S.B. 219		Inspection of engine section throttle rod.
D.S.B. 220 Sect. III Only		Installation of spar cap bolt locking device.
D.S.B. 222		Rudder pedal torque tube support bracket re-work.
D.S.B. 228		Repair to rib - station 42.
D.S.B. 231		Control column canvas boot replace with rubber.
D.S.B. 234		Elevator tab control horn modified.
D.S.B. 238		Inspection of engine mount to firewall fittings.
D.S.B. 241		Drain hole in fuel dump chute.
D.S.B. C47-101		Install additional bolt in rudder pedal attachment to torque tube.
	6.	Parachute flare installation carried out as per Douglas Dwg. 5315811.
	7.	Rudder horn 5118056 modified to clear elevator "up" cables as per Canadair E.O. 020303-204.
	8.	Flying controls cables tensioned for cold weather operating as per E.O. 020601-207. If operating temperatures are consistently above 0°C. cables should be rigged for normal temperatures.

RECORD OF APPROVED MODIFICATIONS INCORPORATED SUBSEQUENT TO APPROVAL OF TYPE

AEROPLANE

12

	DRAWING AND ISSUE NO.		DESCRIPTION
9.			The following T.C.A. modifications have been carried out:
1.	D66-08A-1/1	17053	Drain hole in fuel dump chute assembly.
2.	D78-07D-1	17075	Anti-Icer system modifications. (E.O. 040501-212 to 243. 040501-243 to 250. 040501-255-256-257-258-253)
3.	D66-02B-2/2	17077	Fuel fitting and using instruction plate. (E.O. 030701-205 & 211)
4.	D82-03B-1/1	17078	Guard installation for flare release cables (E.O. 020605-219,220, 221.
5.	D72-04B-1/1	17079	Pressure line - vacuum oil separator (E.O. 030101-239-244-247.)
6.	D31-04G-5/1	17067	Rear cargo compartment door latch standardization.
7.	D31-04G-5/2	17068	Rear cargo compartment door latch warning sign. (E.O. 020003-225)
8.	D31-04G-5/3	17086	Rear cargo compartment door seals (E.O. 020705-208.)
9.	D41-02A-1/1	17081	Flight wheel brakes.
10.	U74-03D	18075	Generator blast tube (E.O. 030101-242.)
11.		17085	Microphone holder (E.O. 020406-206-207).
12.	Oxygen system		Modification to cylinder mounting tubes. (E.O. 040801-303- to 307 040801-321-322-361.)
13.	Oxygen system		Modification to cylinder compartment doors. (E.O. 010004-215.) (E.O. 010004-216.)
14.	Oxygen system		Modification to high pressure plumbing. (E.O. 040801-310 to 320. 040801-324 to 329. 040801-343-358-360-366-367-370-371.)
15.	Oxygen system		Modification to flow meter assembly. (E.O. 040801-353-359.)
16.	Oxygem system		Adel clip anchor nuts on 40801-29-5 line. (Modification deleted by E.O. 040801-340).
17.	Oxygen system		Captains oxygen outlet and mounting. (E.O. 040801-266-272-354.)
18.	Oxygen system		Low pressure lines from regulator to cabin outlets. (E.O. 040801-333-334-338-340-341-342.)
19.	Oxygen system		Passengers outlet assembly. (E.O. 040801-336.)
20.	D77-05C-2/2	17094	Stainless steel lines for Janitrol heater.
21.	D71-02B-1/1	17082	Oil pressure gauge and carburetor heat gauge. (E.O. 040101-314.)
22.	D64-03-2/1	17042	Propellor feathering switch guards (Drawing 40304-201).
23.	D71-06A-1/1	17083	Fluxgate compass (Drawing 40404-35).
24.	D74-10E-2/1	17064	Wing navigation lights (E.O. 040306-223).
25.	Fire extinguisher		Rear cabin fire extinguisher (E.O. 040904-200).
26.		17087	Fuel tank Selector indicators (E.O. 030701-204).
27.	D82-04A-1	17056 17057	Safety wire installation, fire extinguisher switch.

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38)

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346 lbs.	XXX lbs.	XXX lbs.
	Landing :	24,546 lbs.	XXX lbs.	XXX lbs.
~~Tare weight as determined~~ Basic Operational Weight Empty:		19,164 lbs.	XXX lbs.	XXX lbs.
Disposable Load		lbs.	lbs.	lbs.

Centre of Gravity of Aeroplane at above tare weight is 252.8 inches behind/ ~~in front of~~ Nose reference Line or 20.6 % M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft.)

List of fixed/ standard/ ~~alternative~~/ equipment included in empty weight:

DESCRIPTION	Lbs.	D ESCRIPTION	Lbs.
Ref.: Wt. and Balance Report #RW-0-215.			

List of moveable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Ref.: Wt. and Balance Report #RW-0-215.			

RECORD OF WEIGHT AND C. of G. POSITION:

(See Information Circulars M-8/37 and M-1/38).

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	25,346 lbs.	XXX lbs.	XXX lbs.
	Landing :	24,546 lbs.	XXX lbs.	XXX lbs.
I.C.A.N. Weight Empty:		17,991 lbs.	XXX lbs.	XXX lbs.
Disposable load :		lbs.	lbs.	lbs.

Centre of Gravity of Aeroplane at above tare weight is . . 252.2 . inches behind/

XXXXXXXXXXXX . . Nose reference Line or 20.1 % M.A.C. . . . . .

used as a reference datum point with Aeroplane in flying position.
(The C. of G. position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed equipment included in I.C.A.N. weight:

DESCRIPTION	LBS.	DESCRIPTION	LBS.

Ref.: Wt. and Balance Report #RW-0-215.

List of moveable equipment included in I.C.A.N. weights

DESCRIPTION	LBS.	DESCRIPTION	LBS.

Ref;-Wt. and Balance Report #XXXXX #RW-0-215.

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origine that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed . . . . . date DEC 6 1946 .
Chief Inspector.

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log Book to this effect has been made.

Signed . . . . . Air Engineer . . . . . Chief Inspector.

DEC 6 1946

CERTIFICATE OF FACTOR Y TEST PILOT.

I hereby certify th at I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of type Aeroplane.

Signed. . . . . date . . . . . DEC 1 1 1946
Test Pilot

CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category . . . . . Subdivision . . . . . is recommended.

Signed . . . . . Dec 14 '46
Resident Inspector, A. I. D.,
Department of Transport.

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) . . . . . .

Signed 16/12/46
Distric Inspector, Civil Aviation

8

Canadair Ltd. Dec.13th,'46.

D.C.3. CF-TEI. Carbon Monoxide Test.

Mr. J.L. Blondeau.
D.I.A.R.
Montreal.

Enclosed are two copies of the report, R.H.0-121, issued by Canadair's Engineering Dept on the flight test, which was carried out on the above noted aircraft for the presence of carbon monoxide, due to the operation of the Janitrol heater.

This flight test was made on Dec. 11th, and the cabin temperature was raised, during flight, by means of the heater to 78°, but no indications were found of carbon monoxide in the cabin, cockpit, or heater compartment.

The heater was complete with blower, and was operable both on the ground and in flight, but the automatic control was not operating efficiently.

George S. Lace.
Supervising Inspector.

590.

1A

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RE-0-121

TITLE FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TEI.

MODEL C47-DC3/P.

PREPARED H. H. Whiteman. December 13, 1946.

CHECKED December 13, 1946.

APPROVED December 13, 1946. H H Whiteman

DATE December 13, 1946.

PREP. H. H. Whiteman.
CHECKED Dec. 13, 1946.
APPROVED H H Whiteman

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 1.
REPORT RH-0-121.
MODEL C47-DC3/P.

5904

SUBJECT— FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TEI.

AIRCRAFT LICENSE.....CF-TEI

SERIAL NO. (DOUGLAS).....12442

JOB NO. (CANADAIR).....44342

DATE TESTED.....Dec. 11, 1946.

1.0 INTRODUCTION:

This report is to be attached as an appendix to Report RH-0-103, the equipment and procedure being the same.

2.0 RESULTS:

No indication of carbon monoxide was obtained in the forward cabin, in the vicinity of the heater or in the flight compartment during operation of the heater.

3.0 CONCLUSION:

The carbon monoxide concentration due to heater operation is less than .005 to .007 of one percent by volume in living quarters.

WITNESS: Mr. M. Clements,
Department of Transport.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Douglas Aircraft Co.
Conversion by: Canadair Ltd.,
Type DC-3C-S1C3G (converted C-47A) Maker's No. 12442 Montreal, P.Q.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95' 0"	-
Length o/a in feet	64' 5"	-
Height o/a in feet	16' 11"	-

Cubic Capacity (of Airship or Balloon) N.A.

Weight equipped, but without load, fuel, or oil ~~17,300 lbs.~~ See weight report

Total weight authorized (fully loaded) in lbs 25346 Air speed 257 miles per hour Indicated

EQUIPMENT—(Give number and type).

1. Instruments See List No. 1 attached
2. Gauges See List No. 2 attached
3. Lights See List No. 3 attached
4. Signals See List No. 4 attached
5. Fire Extinguishers 2 CO_2 (9½ lbs.) - Engines & Heater Comp. & Rear Baggage
2-2lb.CO_2 - Pilots Comp.; 1-2lb.CO_2 - Cabin
6. Parachutes None
7. Tools Pilot's Tool Kit Only
8. Other Equipment See List No. 5 attached.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt & Whitney R-1830-92	Pratt & Whitney R-1830-92		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R.H.	R.H.		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on Dec 14/46

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet No unapproved mods.

Registration recommended with the following special conditions

Registration recommended

Date 14/12/46 Signature J. L. Blondeau

Registration approved and Registration Mark C.F. FE I allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

2413

23

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....John T. Wyman for Trans-Canada Air Lines

Date of Application.....November 13, 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	360 McGill Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. Symington	Chairman & President	Montreal	Canadian
Hon. Wilfred Gagnon	Director	"	"
J. A. Northey	"	Toronto	"
R. C. Vaughan	"	Montreal	"
Hon. C. P. Edwards	"	Ottawa	"
Geo. Herring	"	"	"
J. A. Wilson	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....Commercial

Usual Station.....Montreal, Toronto, Winnipeg - other Canadian & U.S. Airports

Date of ~~manufacture~~ reconstruction.....November, 1946

Crew required.....Minimum Crew: Pilot & Co-Pilot

Accommodation for what number of passengers.....21 pass., plus 2 pilots, 1 observer, 1 attendant

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

noted

22

LIST NO. 1 - INSTRUMENTS

Item	No.	Make and Type
Ind. Airspeed	2	Pioneer 1426-1AD2
Pitot Static Head	2	Kollsman 372C-02
Altimeter	2	Kollsman 371K-05
Turn and Bank	1	Pioneer 1722-1AT
Turn and Bank (Elect)	1	Pioneer 15300-2A-A2
Rate of Climb	2	Pioneer 1634-1AA-A1
Gyro Horizon	1	Sperry 656768
Gyro Horizon	1	Pioneer 12401-1C-A1
Gyro Direction	1	Sperry 649742
Magnetic Compass	1	Pioneer 1821-6-A
Flux Gate Compass		
Master Indicator	1	Pioneer 12010-2E-A1
Repeater Indicator	1	Pioneer 10061-1AR-B1
Clock	2	Pioneer 3315-2D-3

LIST NO. 2 - GAUGES

Item	No.	Make and Type
Oil Temperature	2	Weston 727 T 59Y2
Outside Air Temp.	1	Weston 728 T 35Y2
Carburetor Air Temp.	2	Weston 727 T 68Y2
Cylinder Temperature	2	Weston 827 T 9
Manifold Pressure	2	Pioneer 1919-1B-A1
Fuel Pressure	2	U.S. Gauge AW-1 7/8-15-BT2
Tachometer	2	G.E. 8DJ-13-AGD
Oil Pressure	2	U.S. Gauge AW-1 7/8-14-CZ2
De-Icer Pressure	1	U.S. Gauge AW-1 7/8-16-AC2
Oxygen Pressure	1	U.S. Gauge AW-1 7/8-AD8287
Suction	2	Kollsman 97-02
Hydraulic Pressure	2	U.S. Gauge AW-1 7/8-17-CN2
Fuel Quantity	1	Liquidometer EA-134-8-24
Anti-Icer Fluid Quantity	1	Liquidometer EA-102-39-24

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. Regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture. - G.E. 4560

5. Passing Light - red bulb in L.H. landing light fixture. - G.E. 310

LIST NO. 4 - RADIO EQUIPMENT

Item	No.	Make and Type
Communication Unit (H.F.)	1	Bendix RTA-1B
Compass Receiver	1	Bendix MN-26L
Automatic Control Unit	2	Bendix MN-31C
Loop (Compass)	2	Bendix MN-36C
Compass Receiver	1	Bendix MN-26T
Indicator	1	Bendix MN-58A
Localizer Receiver	1	Airnco BC-733D
Glide Path Receiver	1	Airnco R89 B/ARN-5A
Antenna System	1	Airnco AS-27A/ARN-5
Indicator	2	Airnco ID-48AR/ARN
Communication Unit (VHF)	1	Airnco RT-18/ARC-1
Antenna	1	Airnco AN-104 AX
Marker Receiver	1	Bendix MN-53A

18

LIST NO. 5 - OTHER EQUIPMENT

1	Flashlight
1	Verey Pistol
26	Oxygen Masks
1	Emergency First Aid Kit
2	Mechanically Operated Flares
24	Life Belts
24	Safety Belts

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

24 2 6-46

910 Confederation Building,
Montreal 2, Que., January 31, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-9	Douglas DC3 CF-TEI	5008-T5-9

69000

TRANSPORT - RECORDS
FEB 5 A.M.
FILE 5008-T5-9

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans-Canada Air Lines

(b) Fees $10.00 (Department Receipt No. 84410) forwarded under Cash Book Folio No. 3328

(c) Statement of Conformity

(d) Inspection Release Certificate

(e) Copy of Canadair's Report re Carbon Monoxide Test

(f) Copy of weight report

(g) Copies of our letters of authority

2. We understand that Proof of Ownership for this aircraft in the name of Trans-Canada Air Lines exists at Headquarters.

3. The radio equipment in this machine has been inspected by our Radio Division and found satisfactory.

4. This application appears in order and issue of certificates is recommended.

J. L. Blondeau

J. L. Blondeau,
District Inspector, Air Regulations

JLB:AR

lb

26

L.P. / CAR.

ORIGINAL
ON FILE 7150-6

DEPARTMENT OF TRANSPORT

910 Confederation Building,
Montreal 2, Que., March 20, 1947.

Trans Canada Air Lines
Certs. of A. for Douglas Aircraft

TRANSPORT - RECORDS
MAR 24 A.M.
File 5008-T0-9

76734

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of letter from Trans-Canada Air Lines, which will be found self-explanatory.

2. This is submitted for your necessary action, please.

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

25

TRANS-CANADA AIR LINES
Serves the Nation.

P.O. Box 2973,
Winnipeg, Manitoba,
February 28, 1947.

File #2445-3.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
Department of Transport,
Room 910 Confederation Building,
Montreal, Quebec.

Subject: Certificate of Airworthiness - DC-3C-SIC3G Aircraft.

Dear Mr. Blondeau:

Your records will show that Trans-Canada Airlines is presently operating the following DC-3C-SIC3G aircraft under temporary Certificates of Airworthiness.:

Aircraft	Registration Letters	Aircraft	Registration Letters
60	CF-TDM	73	CF/TDZ
61	CF-TDN	74	CF-THA
62	CF-TDO	75	CF-THB
63	CF-TDP	77	CF-THD
64	CF-TDQ	78	CF-THE
66	CF-TDS	79	CF-THD
67	CF-TDT	81	CF-THH
68	CF-TDU	82	CF-THI
70	CF-TDW	83	CF-THJ
71	CF-TDX	91	CF-THS
72	CF-TDY		CF-

Would you please advise why the formal Certificates of Airworthiness have not been issued, also if there are any requirements which Trans-Canada Airlines must comply with before issuance of the formal document.

Temporary Certificates of Airworthiness require constant vigilance on the part of our staff and a great deal of correspondence with your Department to insure that the temporary Certificate is validated by renewal. You can be assured that if the issuance of the formal Certificates is held up due to lack of compliance on our part, we will take immediate steps to rectify the matter.

Yours truly,

J.T. Dyment,
Director of Engineering.

5008-T4-15-T5-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
ON FILE V150-6
LEJC.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

0323

TRANSPORT - RECORDS
APR 1 P.M.
File 5008-15-9

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11906	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED ON CARDS

27

~~5008-T5-10~~
5008-T5-9
~~5008-T5-8~~

RDS/YB Ottawa, April 2nd,1947.

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sirs:-

In order to complete the issue of the Certificates of Registration and Airworthiness for Douglas D.C.3.(SICSG) aircraft, it will be necessary to submit copies of Bills of Sale for the noted aircraft in order to establish proof of ownership.

Aircraft requiring Bills of Sale:-

Registration Markings CF-TEH - Constructors No.12440

Registration Markings CF-TEI - Constructors No.12442

Registration Markings CF-TES - Constructors No. 11906

Yours truly,

(J.G. Graham)
Superintendent, Air Regulations

c.c. DIAR MONTREAL

28

5008-T4-26

910 Confederation Building,
Montreal 2, Que., April 5, 1947.

1379

TRANSPORT - RECORDS
APR 8 P.M.
5008-T5-9
File

A.M. Sutherland, Esq.,
Director of Mtce. & Overhaul,
Trans Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

Dear Sir:

Re: Douglas CF-TEI

The previous authority granted for the operation of the subject aircraft is hereby extended not valid after June 15, 1947, subject to this machine being in airworthy condition.

This authority is also subject to the conditions outlined in the original letter of authority.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

dg

D

29

CANADAIR LIMITED

BILL OF SALE

SALES ORDER #44542

KNOW ALL MEN BY THESE PRESENTS: That CANADAIR LIMITED, a corporation formed under the laws of Canada, having its principal place of business in Montreal, Canada, releases:

1 - only - Douglas C-47 Aircraft
Manufacturer's Serial No. 12442 - TE1
Army Serial No. KG407

For and in consideration of the monies received, which are hereby acknowledged, Seller does hereby sell, assign, transfer and deliver all right, title and interest in and to the above described aircraft together with all appurtenances attached to or installed therein, unto: **Trans-Canada Air Lines,**
Winnipeg, Manitoba.
its (or his) successors and assigns, to have and to hold, all and singular, the said aircraft forever.

IN WITNESS WHEREOFF, the Seller has duly executed this instrument this **14th day of December, 1946**

CANADAIR LIMITED.

D. H. Macfarlane
V.P.

WITNESS:

Thrasher

TGH/ZD

7B50-6
5008-T4-15
" " -14
-15
-16
-17
-19
-20-
-21
-23
-24
-25
" " -26

5008-T2-1
" " [illegible]
-4
-5
-6
-8
-9
-10
" " -19

Ottawa, April 22, 1947.

Trans-Canada Air Lines,
P. O. Box 2973,
Winnipeg, Man.

ATTENTION: Mr. J. T. Dyment.

Dear Sirs:-

Every effort is being made to expedite the issue of aircraft Certificates of Registration and Airworthiness.

Owing to the unprecedented volume of applications being received, the issue of Certificates has been somewhat delayed.

Please be assured, however, that we are doing our utmost to hasten the preparation of Certificates and you may expect to receive Certificates for your Douglas aircraft in the near future.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. WINNIPEG MONTREAL

COPY

INCOMING CORRESPONDENCE

30

ORIGINAL ON FILE 5008-T~~4~~-8 COPY FOR FILE 7150-6
~~5008-T5-9~~
-8
-10
-18
-19
-20

LEJG TRANS--CANADA AIR LINES

P.O. Box 2973,
Winnipeg, Manitoba,
April 22nd, ~~1947.~~
File: VP-133~~1~~-196

TRANSPORT - RECORDS
APR 24 P.M.
5008-T5-9

Mr. A.D. McLean,
Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

7845

Dear Mr. McLean:

With a view to establishing proof of ownership, I am sending you attached the duplicates of Bills of Sale covering six Douglas type C-47 aircraft which we purchased from Canadair Limited.

It will be appreciated if you will advise your Superintendent, Air Regulations, at Ottawa and your District Inspector, Air Regulations, at Montreal that these documents are on file with the Department to ensure that there is no hold-up in the issuance of Certificates of Registration and Airworthiness for these aircraft because of this feature.

Very truly yours,

ENTERED ON CARDS

W.F. English,
Vice President.

Attach.

5543(R)
1974(A)

8
11-46

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

I

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

2462A
8-41

35

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5543

NATIONALITY AND REGISTRATION MARKS CF-TEI

1. Type and description	Douglas DC5(SIC3G)
2. Name and address of constructor	Douglas Aircraft Company Inc., Santa Monica, California, U.S.A.
3. Constructor's serial number	18442
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill Street, Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 14th, day of December, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TEI and is of Canadian nationality.

Given at Ottawa this 30th, day of April, 1947.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

ENGINES

18. Number installed: Two

19. Makes: Pratt and Whitney

20. Types: SIC3G

21. International power of the engine or engines at

Take-off (a) Sea Level: 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

M.E.T.O. (b) Rated Altitude: 1050 H.P. at 2550 revolutions per minute. (International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) (b)

23. Oil: (a) Hamilton (b)

24. Airscrews: Number fitted: Two Types: Standard No.

Pitch: Constant Speed Full Feathering Diameter

18286 (10.12.47)

25. Weight of aircraft empty (including water in the radiators): (a) Landplane: ~~10,552~~ lbs. (b) Seaplane: lbs. (c) Skiplane: lbs.

WEIGHT OF FUEL AND OIL

26. Fuel: ~~4224~~ lbs. (at 7·2 lbs. per gallon)
(a) Number of tanks: Four
(b) Capacity of tanks: 670 Imp. gals.

27. Oil: 432 lbs. (at 9·0 lbs. per gallon)
(a) Number of tanks: Two
(b) Capacity of tanks: 48 Imp. gals.

28. Weight allowed for crew: 340 lbs.

29. Weight allowed for equipment, excluding wireless apparatus: lbs.

30. Weight of wireless apparatus: lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full: L.P. 1318 (10.12.47) lbs.

32. Maximum total weight authorized: lbs.
Landplane: Landing 24,400 (excepting in case of emergency) Take-off 25,200 lbs.
Seaplane: lbs.
Skiplane: lbs.

DELETED (20.11.50)

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane: (Take-Off) Twenty-five thousand two hundred pounds.
~~Seaplane~~
~~Skiplane~~ (Landing) Twenty-four thousand four hundred pounds. (excepting in case of emergency)

34. Minimum crew necessary: Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) m.p.h. and (b) m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated December 14, 1945, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 30th day of April, 19 47.

Superintendent, Air Regulations.

2462
7-45

34

/28

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1974

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines.
2. Christian name
3. Address 360 McGill Street, Montreal, P.Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Company Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TKI

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3(SIC3G) Constructor's No. 12442
8. Place and year of construction of aircraft Santa Monica, California, U.S.A.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) Twenty-five

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a., b., c., d & e
15. Maximum span (in flying position) 95'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

/MIM
/ZC
/MM

33

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

32

DC3C (SIC3G) Weight and Speed Limitations.

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level) Dump Valves
Take-off - 26,200 lbs. at sea level) not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		December 14,1947. Dec. 9/48 2.12.50 5.12.51	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

31

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Landing Lights
Navigation Lights
2 Engine Revolution Counters
2 Oil Pressure Gauges
2 Oil Temperature Gauges
Emergency Flares

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit.

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

The Aircraft Operating Manual with amendment. Approved Loading Chart (DC3 SIC3G). Weight + Speed Limitations form part of the Certificate of Airworthiness + must be carried on board the aircraft during flight (2.12.49)

Maximum Take-off + Landing Weights DC3 aircraft - revised 28.9.53 - inserted in C of A (13.6.55)

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

17991
631
120-

18502*

/RH

36

5008-T5-9

Ottawa, Ontario.
May 12th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill Street,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5543 and Certificate of Airworthiness No. 1974, together with Engine and Journey and Aircraft Log Books, for your Douglas aircraft, CF- TRI. DC3(S1C3G)

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.) (1)	17.0 lbs.
Aluminum Pitcher (1)	0.4 "
Lunch Boxes, less food (24)	35.3 "
Thermos, 2 qt. less fluid (5)	20.3 "
Silverware - complete sets (24)	3.4 "
Paper Drinking Cups (25)	0.2 "
Lucite Cup Handles (30)	2.1 "
Lunch Box Inserts (30)	3.1 "
Plastic Cups & Plates, sets (24)	5.7 "
Hot & Cold Cups (60)	1.8 "
General Utensils, allowance	2.0 "
Casseroles & Covers (Round) (24)	13.0 "
Service Trays, large, (6)	6.0 "
Cafatray, small, (2)	0.6 "
Snack Kit (1)	6.8 "
Pillows (at seats, complete with covers & slips) (21)	21.4 "
Sickness Containers (at seats) (21)	2.5 "
Whisk, Toy Broom and 2 Dusters	1.2 "
Dust Pan - long handle (1)	0.4 "
Cleansing Tissue, Kleenex, 1 box	0.6 "
Stewardess Satchel (1)	7.9 "
Linen Hand Towels (12"x 10") (12)	0.9 "
Flyswatter (1) & Atomizer (1)	1.2 "
Blankets (in rear service compartment) (12)	36.0 "
Headrest covers (on seats) (21)	2.1 "
Sanitary Napkins (12)	1.0 "
First Aid Kit (1)	4.1 "
Shopping Bags (3)	0.6 "
Oxygen Masks (above seats) (21)	15.8 "
Spare Sickness Containers (10)	1.2 "
Spare Hand Towels (12) Headrest Covers (10)	1.9 "
Spare Oxygen Masks (5)	3.8 "
Spare Pillows complete (3)	3.1 "
Crew Baggage (3)	60.0 "
Magazines (in binders) (10)	17.9 "
Bible (1)	1.5 "
Life Belts - Passengers (21)	54.6 "
Life Belts - Crew (3)	7.8 "
Wash Water (2½ Imp. gals.)	25.0 "
Cargo Tie-down straps (cargo compts.) 10 sets	10.0 "
Anti-Icer Fluid (2½ Imp. gals.)	19.9 "
Propeller De-Icers (6)	6.0 "
Wing, inner, De-Icers (2)	12.4 "
Wing, outer, De-Icers (2)	38.1 "
Stabilizer De-Icers (2)	12.0 "
Fin De-Icers (1)	4.3 "
Cabin & Toilet Frost Shield - (15)	0.9 "
Stewardess	120.0 "
	619.8 lbs.

Amendments to C. of A. No. 1974 dated December 10, 1947:

Item 25 - "18552" deleted. "18286" inserted. ✓
Item 31 - "1052" deleted. "1318" inserted. ✓

F. W. Bone,
District Inspector, Air Regulations.

FWB/MC

AIRCRAFT INSPECTION REPORT

Date of Inspection December 10,1947 Owner Trans-Canada Air Lines Registration Markings CF-TE

Type DC-3C-S1C3G-92 Serial No. 12442 Purpose Commercial

C. of R. 5543 C. of A. 1974 Date of Last Inspection Dec. 15, 1946.
Previous C. of R. & A. Expires December 14, 1947 Present C. of R. & C. of A. Expires Dec. 9, 1948.

AIRFRAME

Crew 2 Passengers 21 No. of Fuel Tanks 4

Capacity 670 Imp. gals. No. of Oil Tanks 2 Capacity 48 Imp. gals.
Total Hours Since New 4697:41 Since Conversion 6/12/46 3342:46 Since Reconditioned --

WEIGHTS

	Gross	Tare	Empty A29748	Carrying Capacity
Landplane Passenger	25,200	(1) 18936	(2) 18,286	1318
Landplane Freighter				
Seaplane Passenger				
Seaplane Freighter				
Skiplane Passenger				
Skiplane Freighter				

(1) Includes Item "F" I.C.A.N. Equipment.
(2) Includes weight of de-icing equipment.

TRANSPORT-RECORDS DEC 15 A.M. File 5008-T5-9

ENGINE(S)

LEFT	RIGHT
Make P. & W.	Make P. & W.
Model Twin Wasp S1C3G	Model Twin Wasp S1C3G
Serial No. 20637	Serial No. 75524
H.P. 1050 @ 2550 RPM	H.P. 1050 @ 2550 RPM
Total Hrs. Since New 4324:49	Total Hrs. Since New 3862:17
Since Complete Overhaul 563:19	Since Complete Overhaul 535:53

PROPELLER(S)

LEFT	RIGHT
Make Hamilton Standard	Make Hamilton Standard
Model Hydromatic Full Feathering	Model Hydromatic Full Feathering
Diameter 11'6"	Diameter 11'6"
Pitch 18.5° to 89.5°	Pitch 18.5° to 89.5°
Blade Design 6571A-0	Blade Design 6571A-0
Mfg.No.1 516588 2 516589 3 516590	Mfg. No.1 513790 2 513791 3 513792
Total Hrs.1 1930:33 2 1930:33 3 1930:33	Total Hrs.1 4212:19 2 4212:19 3 4212:19
Hub Design 33D50-101	Hub Design 33D50-233
Mfg. No. 159241	Mfg. No. 158365
Total Hours 1930:33	Total Hours 4212:19
Since Last Overhaul 779:34	Since Last Overhaul 1515:02
Date of Last Overhaul 18-8-47	Date of Last Overhaul 24-6-47
Date of Last Inspection 10/12/47	Date of Last Inspection 10/12/47
Date Purchased 24/3/47	Date Purchase 18/5/46

UNDERGEAR

Skis --
Floats
Wheels Bendix B3

~~Pedestals~~ -- 1947-48 Radio Licence applied for
Chassis ---
Chassis Standard Retractable.

Mrs Jones to Victoria P.O.

Noted

OVER

38787

TRANSPORT - RECORDS
DEC 21 P.M.
5008-T5-9

38

AIRCRAFT INSPECTION REPORT

Date of Inspection Dec. 3/49 Owner Trans Canada Air Lines Reg. Marks File CF-TEI

Type Douglas DC3 (S1C3G) Serial No 12442 Purpose Commercial

C. of R. No 5543 C. of A. No 1974 Present C. of R. & A. Expires Dec. 2 1950.

AIRFRAME

Crew Two Passengers 25 No. of Fuel Tanks 4

Fuel Capacity 4824 Imp.Gals. No. of Oil Tanks two Oil Capacity 48 Imp.Gals.

Total Hours Since New 9922 Date Last Overhaul N/A Hours Since Overhaul N/A

ENGINES

LEFT		RIGHT	
Make P & W	Model S1C3G	Make P & W	Model S1C3G
Serial No 359571	H.P 1200	Serial No A81347	H.P 1200
Total Hours Since New 7753	Since c/Overhaul 351	Total Hours Since New 8445	Since c/Overhaul 878

PROPELLORS

LEFT		RIGHT	
Make Hamilton Std	Model 33D50	Make Hamilton Std.	Model 33D50

UNDERGEAR

Main Ski Base Main Ski Pedestals

Floats Float Chassis

Wheels Standard Wheel Chassis Standard

WEIGHTS

	EMPTY	GROSS	COMMERCIAL LOAD
Landplane	18286	25200	6914
Seaplane		Take off being 24,200 (Excepting in a case of emergency)	
Skiplane			

AMENDMENTS TO CERTIFICATES & REMARKS

The Certificate of Airworthiness has been endorsed dated December 2nd, 1949, as follows:
Page 3 inserted:
"The aircraft operating Manual with amendment, approved loading chart (DC3 S1C3G) Weight and Speed limitations forms part of the Certificate of Airworthiness and must be carried on board the aircraft during flight".

noted
GSJ

Aircraft inspected, considered airworthy and recommended for renewal of the Certificate of Airworthiness for 12 months.

B F Burbridge

C. of A. renewed by B.F. Burbridge
Date December 3rd, 1949.
BFB/AB

Signed N/A
District Aircraft Inspector.

Fred W Bone

F. W. Bone,
District Inspector, Air Regulations.

Trans-Canada Air Lines

2444
4-50

39

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TEI SERIAL No. 12442

1. C. of A. No. 1974 Expires Dec. 5, 1950 C. of R. No. 5543 Expires Dec. 5, 1950

AIRCRAFT DATA—Manufacturer Douglas A/C Corp Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 21483 Left		
(2) 22166 Right		
(3)		
(4)		

Signature of Applicant E. Gee

Date Nov. 20, 1950

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E. Gee
"B" ENGINEER

Date Nov. 20, 1950

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5543 and C. of A. No. 1974, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING A.I.D. CANADA

Signed H Ball
DISTRICT AIRCRAFT INSPECTOR

Date 30 Nov 50

7. C. of A. and C. of R. renewed, not valid after (Date) December 5th, 1951.

Permissible Gross Weights— Wheels (Take-off) 25,200 lbs. (Landing) 24,400 lbs.
Skis
Floats

Signed W Saunderson
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 20th, 1950.

NOTED

Other Action:— Items 26 to 32 inclusive on the Certificate of Airworthiness have been deleted.

8. H.Q. Action— C.A.R.

C.A.E.

2586 40

TRANSPORT - RECORDS
NOV 22 1950
File 5008-T5-9

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W....November.20th,.1950.

Your File 5008-T5-9 | SUBJECT Renewal of Certificates of Registration and Airworthiness **CF-TEI** | Our File 5008-T5-9

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for **Douglas DC3 (SIC3G) aircraft, CF-TEI.**

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

(7) AIRCRAFT TIME DATA	(8) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION Y 2 DATE Nov 28/51			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)			
TOTAL AIRCRAFT TIME			

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE

INSPECTION RELEASE CERTIFICATE A. I. - 12

~~Complete Aircraft~~ After Overhaul Major Repair and/or Alterations

A/C Registration - CF - Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and ~~adjustments to this aircraft~~ have been completed satisfactorily: that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by ~~Technical~~ Instructions and Procedures Regarding Civil Aircraft have been properly ~~completed~~.

Date: Nov 28/51 Signed: [signature]
Air Engineer "B"

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1)

AIRCRAFT No. 382 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	J A · WEBSTER	DESIGNATOR	DATE
FIRST OFFICER	W.P. DAVIES	251	27-11-51
STEWARDESS	M. MORTON	252	27-11-51
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
YZ	INR	10.09	12·10	2	01
INR	QT	12 32	14·30	1	58
QT	INR	15·30	17·17	1	47
INR	YZ	17.40	19·34	1	54

OIL ADDED — INDICATE QUARTS

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

TOTAL TIME 7 40

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED J A Webster Per D.H.a CAPTAIN

Copy of log sheet

42 2444 4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF—TEI SERIAL No. 12442

1. C. of A. No. 1974 Expires Dec. 5/51. C. of R. No. 5543 Expires Dec. 5/51.

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt & Whitney Model SIE 3 G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	61A36E		
(2)	61A23E		
(3)			
(4)			

Signature of Applicant B Gee

Date Nov. 28/51

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed B Gee
"B" ENGINEER

Date Nov. 28/51.

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☒

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5543 and C. of A. No. 1974., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed S Bell
DISTRICT AIRCRAFT INSPECTOR.

Date Nov 30/51

DEPARTMENT OF TRANSPORT AERONAUTICAL CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) November 28, 1952

Permissible Gross Weights— Wheels - 25, 200 lbs.
Skis
Floats

Signed .....
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date November 30th 1951

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

43

47003

TRANSPORT - RECORDS
DEC 1 A.M. 1951
File 5008-T5-9

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W.. November 30th. 1951.

Your File 5008-T5-9

SUBJECT Renewal of Certificates of Registration and Airworthiness

Our File 5008-T5-9

CF - T E I

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E I

D.W. Saunders

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.
2.

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations
DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
NOV 29 A.M. 45 1952
File 2008-T5-9

42667

Application for Renewal of Certificate of Airworthiness

Registration CF-TEI Serial No. ~~1242~~

1. C. of A. No 1974 Expires 28/11/52 C. of R. No 5543 Expires 28/11/52
Aircraft Data Manufacturer Douglas Aircraft Corps. Model DC-3C-S1C3G-92
Hours flown Since New 17891:58 Since Overhaul 7829:47
Engine Data Manufacturer Pratt & Whitney Model R1830-92-S1C3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)			
(2)	P134252 (Left)	9109:17	318:19
(3)	CP352426 (Right)	14487:41	300:10
(4)			

Date November 21, 1952 Signature of Applicant for G. W. Sutherland

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Date November 21, 1952 Signed for G. W. Sutherland
"B" Engineer WGM-43

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date Signed
Test Pilot

4. The following documents are attached:
Certificate of Airworthiness Certificate of Registration Weight & Balance Report (when applicable)

5. When sections 1,2,3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No and C. of A. No , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Date 21 - 11 - 52 Signed
District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after (Date) 27-11-1953
Permissible Gross Weights — Wheels 25,200 Take-off (Landing 24,200 except in case of emergency)
Skis
Floats

Date 21-11-1952

Other Action:

Signed
District Superintendent, Air Regulations

8. H.Q.Action C.A.R.
C.A.E.

Noted AP 27

TCA-620
6-49

(1)

AIRCRAFT No. 382 TRANS-CANADA AIR LINES FLIGHT REPORT

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	A. J. Clarke	DESIGNATOR	DATE
FIRST OFFICER	F. K. Henry	151-21	21-11-52
STEWARDESS	J. F. Skelton	150-21	
STEWARD			

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(4) FLIGHT TIME DATA

LEGS OR FLIGHT		FLIGHT TIMES			
FROM	TO	OFF	ON	HOURS	MIN
WG	QV	0708	0858	1	50
QV	QR	0918	0904		46
QR	QV	0937	1121		44
QV	BR	1134	1233		59
BR	WG	1254	1339		45
			TOTAL TIME	5	03

OIL ADDED (INDICATE QUARTS)

LEFT	RIGHT	STA	BY

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED "A. J. Clarke" CAPTAIN

(7) **AIRCRAFT TIME DATA**

STATION WG DATE 21/11/52

TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 318:19

TOTAL AIRCRAFT TIME 17891:58

(8) **WORK TO BE DONE NEXT CHECK STATION**

STA.	BY

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	C of A and C of R renewed this date.	WG	"H.F.R."

INSPECTION RELEASE CERTIFICATE A. I. - 12

Complete Aircraft — After Overhaul Major Repair and/or Alterations

~~A/C Registration - CF -~~ TEI Work Done By - Trans-Canada Airlines

~~I hereby certify that under my supervisory inspection, the repairs and adjustments~~ to this aircraft have been completed satisfactorily: that all ~~work has been done with certified material according to accepted practice; that all Airworthiness~~ Directives (or equivalent) and Manufacturer's Service ~~Bulletins affecting safety~~ have been complied with to date; that no unapproved ~~modifications~~ have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: Feb 21/52 Signed: H F Johnson WGM176
Air Engineer "B"

for D. W. Sutherland WGM143

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED..... AIR ENGINEER. DATE..... STATION.....

44

51059

TRANSPORT - RECORDS
NOV 20 P.M. 1953
File 5008-T5-9

48

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. November 19, 1953....

Your File	SUBJECT	Our File
5008-T5-9	Renewal of Certificates of Registration and Airworthiness Douglas DC3(SIC3G) CF-T E I	5008-T5-9

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Douglas DC3(SIC3G) CF-T E I

for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

LKA

382

2444
8-52

47

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF - TEI SERIAL NO. 12442

1. C. of A. No. 1974 Expires Nov. 28/53 C. of R. No. 5543 Expires ----------
Aircraft Data—Manufacturer Douglas A/C Corp Model DO-3
Hours flown—Since New Since Overhaul
Engine Data—Manufacturer Pratt & Whitney Model S1C3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A 3E		
(2) 61A 25E		
(3)		
(4)		

Signature of Applicant [signature]
Date Nov 16/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature]
"M" Licence No. Y2M-S2
Date Nov 16/53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed
Pilot
Date

4. The following documents are attached:

Certificate of Airworthiness	x
Certificate of Registration	x
Weight and Balance Report (when applicable)	x

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5543 and C. of A. No. 1974, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
District Aircraft Inspector
Date Nov 19/53.

7. C. of A. and C. of R. renewed, not valid after.

Date November 27th, 1954

Permissible Gross Weights—Wheels 26,200 Lbs.
—Skis
—Floats

Signed [signature]
District Superintendent, Air Regulations
Date November 19, 1953

Other Action:—

8. H.Q. Action C.A.R.
C.A.E.

(7) **AIRCRAFT TIME DATA**

STATION YZ DATE 17-11-53

TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 274 26

TOTAL AIRCRAFT TIME 21097.39

(8) **WORK TO BE DONE NEXT CHECK STATION**

STA.	BY

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	PREFLIGHT CHECKED	YZ	17.11 J.G. Boak

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1)

AIRCRAFT No. 582 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	A W PAVEY	DESIGNATOR	DATE
FIRST OFFICER	P J DALEY	347-16	16-11-53
STEWARDESS	L GUILLAUME		
STEWARD SUPER	A WOOLLEY		

(4) FLIGHT TIME DATA

LEGS OR FLIGHT FROM	TO	FLIGHT TIMES OFF	ON	HOURS	MIN
WL	OW	2212	2362		50
OW	YZ	2321	0102	1	41

OIL ADDED (INDICATE QUARTS)

LEFT	RIGHT	STA	BY

(5) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION			INDICAT. AIR SPEED		
PRESSURE ALTITUDE			OUTSIDE AIR TEMP.		

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

TOTAL TIME 2 31

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.		DEF. NO.	

SIGNED A W Pavey CAPTAIN

Copy log sheet

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T5-9

DUPLICATE - DIST. FILE NO. T5-9

TRANSPORT RECORDS
NOV 22 P.M.
File 5008-T5-9

TO: Director of Air Services, Ottawa, Ont. Attn: S.A.R.

AIRCRAFT LICENSING RECORDS

019316

1. Registration mark CF- TEI 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1954 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐; Commercial ☐ to State ☐ to Private ☐; Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....

otherwise covered .....

.....

.....

13. C of A valid from November 27th, 1954, to November 27th, 1955.

Temporary authority from ..... to .....

Date November 19th, 1954.

B H Bruhmuller
District Superintendent Air Regulations

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T5-9

DUPLICATE - DIST. FILE NO.

TRANSPORT - RECORDS
JUN 14 A.M.
File 5008-T5-9

AIRCRAFT LICENSING RECORDS

8404

1. Registration mark CF- T E I 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1974 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines, ... Citizen of .....

Christian name ....

8. Address of owner 360 McGill St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not C. of A. Page 3- "Maximum Take-off and Landing Weights- DC3 Aircraft." Revised Sept. 28, 1953. - inserted. ✓

otherwise covered Endorsed re validity of C. of A. as per Instructions H.Q. letter file No. 7150-6, dated May 13, 1955.

.....

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

M E Lamb for

~~(D.W. Saunders)~~
District Superintendent Air Regulations

Date June 13, 1955

2462-A
2-5

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

52

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 5543

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E I	Douglas Aircraft Company Inc. - Douglas DC3(S1C3G)	12442

(4) NAME OF OWNER TRANS- CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE December 14th, 1946.

SEAL

B. Hunderks
for Controller, Civil Air Regulations.

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

51

2462
2-56

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 1974

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E I	Douglas Aircraft Company Inc. @ Douglas DC3(S1C3G)	12442

(4) CATEGORY: Commercial

LANDPLANE [x] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE December 14th, 1946.

SEAL

B. Hunderks
SUPERINTENDENT, AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

32978

53

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2

Winnipeg 1, Manitoba, March 21st, 1957.
PLACE DATE

YOUR FILE 5008-T-4-13 SUBJECT

CERTIFICATES OF REGISTRATION AND AIRWORTHINESS

OUR FILE
5008-T-4-13
5008-T-5-6
5008-T-5-7
5008-T-5-9
5008-T-7-20
5008-T-7-21

TRANSPORT - RECORDS
MAR P.M.
File 5008-T5-9

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations.

1. New forms 2462 and 2462A have been issued to replace the old ones for the aircraft listed below-

Douglas DC3, CF - TDM
Douglas DC3, CF - TEF
Douglas DC3, CF - TEG
Douglas DC3, CF - TEI
Viscount 724, CF - TGT
Viscount 724, CF - TGU

2. Enclosed herewith are blue copies of the Certificate of Registration and Certificate of Airworthiness.

COPY ON
5008-T-5-6

B. Hinderks -T5-7
-T5-9
-T7-20
-T7-21

District Director, Air Services.

Encs.

Soo8-T4-14
Soo8-T5-9
54

CANADIAN PACIFIC TELEGRAPHS

1958 AUG 14 AM 9 11

ARW 25
EOR
546

CPT/WA1 34/31 NL

WINNIPEG MAN AUG 13

DIRECTOR GENERAL AIR SVCS ATTN CONTROLLER CIVIL AIR OPERATIONS
AND REGULATIONS DOT OTTAWA

ARW160 DOUGLAS DC THREE CF TANGO DELTA NOVEMBER AND CF TANGO ECHO INDIA PURCHASED BY FRONTIER AIRLINES INC DENVER COLORADO PLEASE CANCEL REGISTRATION MARKINGS FROM AIRCRAFT REGISTER AS OF THIS DATE

REGIONAL DIRECTOR AIR SERVICES

~~CFM.. ARW160 DC CF~~

CF-TDN T4-14
CF-TEI T5-9

755A(GC)..CLR

Coded

(382)

2462-A9
2-46

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

NO. 5543

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E I	Douglas Aircraft Company Inc. - Douglas DC3(S1C3G)	1 2 4 4 2

(4) NAME OF OWNER TRANS- CANADA AIR LINES

(5) ADDRESS OF OWNER 1080 University Street, Montreal, P. Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE December 11th, 1946.

SEAL

SEE REVERSE SIDE

Controller, Civil Air Regulations.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

387

2462
2-56

55

SERIAL NO. 1974

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E I	Douglas Aircraft Company Inc. ● Douglas DC3(S1C3G)	1 2 4 4 2

(4) CATEGORY: Commercial — LANDPLANE [x] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER Not Applicable.

DATE OF ISSUE December 14th, 1946.

SEAL

Controller, Civil Air Regulations.

SEE REVERSE SIDE

57

TRANS-CANADA AIR LINES

P. O. Box 768
Winnipeg, Manitoba
August 13, 1958

Our file: 2845-1

Department of Transport
Air Services Branch
Civil Aviation Division
266 Graham Avenue
Winnipeg, Manitoba

Dear Sirs:

Due to recent sale of DC-3 aircraft CF-TEI, Serial Number 12442 to Frontier Airlines, we request cancellation of "Certificate of Registration of Aircraft" Number 5543 (commercial), date of issue of certificate December 14, 1946.

At the same time, we believe "Certificate of Airworthiness" Number 1974 (commercial), date of issue December 14, 1946 should also be cancelled.

Yours very truly,

W E Dairborn

per F. E. Pink
Superintendent of Overhaul Base

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
1-56

Winnipeg 1, Manitoba, August 14th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-4-14 & 5008-T-5-9(ARW)

SUBJECT

DOUGLAS DC3 AIRCRAFT - CF - T D N and CF - T E I

Orig. on 5008-T4-14

TRANSPORT - RECORDS
5008-T5-9
AUG 18 A.M.
File 5008-T4-14

15084

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Controller, Civil Air Operations and Regulations.

1. Enclosed herewith you will find the formal Certificate of Registration No. 5543 and Certificate of Airworthiness No. 1974 covering aircraft CF - T E I, together with the Certificate of Registration No. 5352 and Certificate of Airworthiness No. 1834 covering aircraft CF - T D N.

2. Also enclosed are copies of letter dated August 13th, 1958 from Trans-Canada Air Lines requesting that the formal Certificates be cancelled.

for D. Grafton
Regional Director, Air Services.

Encs.

COPY ON
5008-T5-9

Noted

59

5008-T-4-14

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE 602 Wpg. Gen. Post Off. Bldg.
266 Graham Ave., Wpg. 1, Man., Feb. 18/59.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE 5008-T-4-14 (ARW) 5008-T-5-5 5008-T-4-21 5008-T-5-9

SUBJECT

Registration Cancellations - Frontier Airlines

TRANSPORT - RECORDS
FEB 20 P.M.
5008 T5-9.
File 5008 T4-14

34225

Director General, Air Services,
Department of Transport,
OTTAWA, Ont.

Attention: Controller, Civil Air Operations and Regulations.

1. This office has been advised by Frontier Airlines, Director of Flight Operations, that the Federal Aviation Agency, Washington, D.C., have never received final notification from this Department that the Canadian registry for the following aircraft have been cancelled:

CF-TDN (TCA 361) - Serial No. 12007
CF-TDU (TCA 368) - Serial No. 12106
CF-TEI (TCA 382) - Serial No. 12442
CF-TEE (TCA 378) - Serial No. 13559

He advises that they are holding the certificates of registration for these aeroplanes until they get the cancellations from the Department and have issued temporary operating permits until April 5, 1959.

2. It is requested, please, that Headquarters advise Robert E. Forbes, Chief, Aircraft & Airman Records Branch, Federal Aviation Agency, Washington 25, D.C., cancelling the Canadian registry for the above aircraft as soon as possible.

COPY ON
5008-T4-21

— T5-9,
— T5-5

for Regional Director, Air Services.

GJ/NG

60

5008-T4-14 (SRL)
5008-T4-21
5008-T5-5
OTTAWA, Ontario. 5008-T5-9
February 24, 1959. 5008-T4-24

Mr. Robert E. Forbes,
Chief, Aircraft & Airman Records Branch,
Federal Aviation Agency,
Washington 25, D.C.,
U.S.A.

Dear Sir:

This is to confirm that the registrations of the following aircraft were cancelled on the Canadian Aircraft Register on the dates included below:

Douglas DC3(SIC3G) Serial No. 12007, cancelled 14.8.58
Douglas DC3(SIC3G) Serial No. 12106, cancelled 18.9.58
Douglas DC3(SIC3G) Serial No. 13559, cancelled 5.8.58
Douglas DC3(SIC3G) Serial No. 12442, cancelled 14.8.58
Douglas DC3(SIC3G) Serial No. 12141, cancelled 18.9.58

Yours truly,

(J.R.K. Main),
Director of Civil Aviation.

cc: Frontier Airlines Inc.
Denver, Colorado.
U.S.A.

cc: Winnipeg

cc: Montreal

FILE No. 5008- T 5- 14 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JULY 1946

TO

5008- T 5- 14 VOL. 1

SUBJECT AIRCRAFT-INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION - INSPECTION & OPERATION

FILE TITLE CF -TEN-X - DOUGLAS DC-4M-4.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
OCT 31 1949	Reg M Fink	CAR			NOV 7 - 1949
JAN 24 1950	43020	MAR			JAN 24 1950
MAR 9 - 1950	49646	MAR			
		MAE			MAR 10 1950
MAR 24 1950	Reg Miss Jones	CAR			MAR 23 1950
JUN 20 1950	Reg Miss Jones	CAR			JUN 20 1950
	Reg. J.C. Fink	CAR.	9		
		SRL.	25-3-59		FEB 25 1959
MAR 23 1959	TF 26/3/57	SRL	4.4.59		MAR 24 1959
APR - 1 1959	84	SRL			APR 2 1959
APR 2 1959		SAE. A			
APR 10 1959	CBR 1/4/60	SRL			APR - 6 1959

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER BRANCH

1
9-47

FILE No. 5008 - T5 - 14 VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM JULY 1946

TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - T EN DOUGLAS

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

5008 - T5 - 14 VOL. 1

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUL 16 1946	13878	S.A.R.		GJ	JUL 22 19
OCT 10 1946	15163	SAR.		GJ	
JUL 25 1946	15163	CAE		M	
		C.C.A. 1.		Chem	
SEP 17 AM		DNSO			
		CAE		M.	
OCT 12 1946	26740	SAR	18.12.46	GJ	DEC 5 19
	BF Dec 18	SAR		Mem.	
		CAE.		M	DEC 30 1946
JAN 2 19	Requested	SAR.		GJ	AUG 13 1947
JAN 26 1948	33364	CAE.		Mem	JAN 27 19
APR 23 48	3341	CAE		M	MAY 13 48
JUL 46	16933	CAE		GJ	AUG 18 48
AUG 18 48		Trans A			SEP -2 48
SEP 2 48		CAJ			SEP -2 48
SEP 48		CRI			SEP -2 48
NOV 26 48	33897	CAE			DEC JAN 19

5008-T5-13

910 Confederation Building,
Montreal 2, Que., July 12, 1946.

A13878

TRANSPORT-RECORDS
JUL 13 A.M.
File 580 & 7 5-14

Canadair Limited,
St. Laurent, P. Q.

Attention: Mr. D.H. MacFarlane.

Gentlemen:

Permission is hereby granted for Pilot Robert P. Brush, Chief Pilot of the Douglas Aircraft Company, Santa Monica, to carry out the necessary flight tests of the first Douglas DC4M aircraft manufactured at your plant, and bearing Canadian registration markings CF-TEN-X, it being understood that the hiring of a Douglas Factory Pilot for this work has been done at the request of Trans-Canada Air Lines and the R.C.A.F.

This permission is given subject to the concurrence of the Canadian Immigration and Labour Departments in respect to the employ of Mr. Brush.

It is considered satisfactory for Pilot A. Lilly to act as First Officer, with Pilot Brush doing the tests of this aircraft.

It is understood that steps are being taken by your company for the use of a full Canadian crew for the tests of the second and subsequent DC4 aircraft coming out of your factory, at which time such crew will have had the opportunity of becoming sufficiently familiar with this type of aircraft.

Noted
MSJ

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations.

HDO

JLB:R

2

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., July 24, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Inspection - Douglas DC4 CF-TEN-X	5008-T5-24

A15163

TRANSPORT-RECORDS
JUL 25 A.M.
File 5008-T5-14

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer.

1. The matter of Departmental inspection of the subject aircraft is drawn to your attention since the aeroplane has actually been flown by the manufacturer.

2. In accordance with the Agreement covering the inspection of DC4 aircraft generally, dated October 18, 1945, in which it is stated that detailed inspection will be carried out wholly by the R.C.A.F. Inspection Detachment, and that this Department will not enter into the inspection picture until the particular aircraft has been designated for civil use and has been released specifically by the R.C.A.F. Aircraft Inspection Detachment to this Department's Inspectors for final inspection, it is desired to advise that the subject aircraft has not yet been dealt with in accordance with the terms of this agreement, nor have this Department's Inspectors been notified by either the R.C.A.F. or Canadair that the aircraft is ready for inspection.

Noted 16/9/46

3. It is understood that the Officer-in-Charge of the A.I.D. Detachment at Canadair has refused to complete inspection of this particular aircraft because of the abnormal amount of snags found.

4. Mr. Lace, the Department's Supervisory Inspector located at Canadair, has carried out as much inspection as is possible while the aircraft has been located in the Flight Hangar, irrespective of the fact that the aircraft has never been offered to him for inspection purposes.

5. Submitted for your information, please.

Note. See 5010-10-97 for situation regarding this aircraft. Expected to be experimental for some time. JB 26.7.46.

D. T. Jackson, A.R.

D. T. Jackson,
Resident Inspector, A.I.D.,
for District Inspector, Air Regulations.

DTJ:R

2585
2-46

FLIGHT PLAN

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

ADDRESS A23929

5W8-175-14

(APREQ) CF-THH-X (Aircraft Identification) DC-4 (Type of Aircraft) Lily (Pilot) 2A

Vancouver (Point of Departure) 11,000 Green 1 Lethbridge 9,000 to Kenora, 9,000 Great Circle Route to (Destination) Montreal

270 (True Airspeed) 3105, 6210 (Transmitting Frequencies) 3106, 4330, 5642 RONLY NORDO P (Proposed Time of Departure)

D 0935 Eastern (Actual Time of Departure) 6hrs.40mins. (Estimated Time en Route) 5,000 gals (Hours Fuel) (Pilot's Rating) Winnipeg (Alternate Airport/s)

REMARKS

DEPARTURE INFORMATION

A		B		C		D	
1		4		7			
2		5		8			
3		6		9			

Signature

ARRIVAL INFORMATION

A		B		C		D	
1		4		7			
2		5		8			
3		6		9			

RCVD FROM Ottawa Tower BY A.T.C. (TIME RECEIVED) 1143 Daylight Saving ARVD AT TIME

CTT/M

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 C

2
8-45

Ottawa, Ontario, July 29th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	DC4 - CF-TEN-X	5008-T5-14

MEMORANDUM TO C.C.A.:

1. — With reference to your inquiry regarding the DC4, the following is a summary of the limited information at present available to the undersigned:

(a) Following a report of unsatisfactory conditions by the Resident Inspector, A.I.D., a conference was held between Messrs. W. M. Keddie, Technical Assistant to the President, Canadair; D. W. Goooh, Chief Engineer, Canadair and J. L. Smith, Department of Transport, on July 24th, 1946.

(b) The minutes of the above conference include the following ~~statements~~: *information C.T.*

(i) CF-TEN-X is not structurally the prototype aircraft for which a type Certificate of Airworthiness is desired. It is being used, at present, solely for the purpose of proving performance characteristics in accordance with CAR-04.

(ii) The prototype DC4M-1, factory serial No. 102, will be ready for flight test in approximately six to eight weeks' time.

(iii) Full and harmonious agreement appears to have been reached between the technical officers concerned regarding the procedure which is being adopted by Canadair for approval of the design and for inspection of the second (prototype) aircraft.

(iv) All A.I.D. Inspectors of the Department are being warned of the importance of carrying out their inspection procedure in the proper manner so that there will be no delay when inspection certification is desired.

(v) The original aircraft, CF-TEN-X, is expected to be used as an experimental aircraft for the next twelve months and no Certificate of Airworthiness will be requested in the meantime for this particular aircraft. However, it is

2B

clearly understood by all that if and when a Certificate of Airworthiness is desired, this aircraft must be re-inspected by all inspection staffs concerned and a resident in the firm to ensure that the requirements of the Department of Transport have been met.

C. T. Travers

for (S. Graham),
Superintendent, Air Regulations.

AEROPLANE INSPECTION RELEASE CERTIFICATE

[redacted]

Registration CF - TEN

Aeroplane Type Landplane [redacted] Model DC4M (XC54GM1)

Manufacturer Canadair Serial No. 101

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY: "A"

Normal (a - Public transport passenger
([redacted]
([redacted]
([redacted]
([redacted].

[redacted]
Special (f - Racing or record
(g - Research or experimental

PARTICULARS OF ENGINE(S):-

	#1 Left Side	#2	#3 Right Side	#4
Type	Merlin	Merlin	Merlin	Merlin
Model	620	620	620	620
Serial No.	304401	304405	304407	304403
Take-off Power	1725	1725	1725	1725
Take-off R.P.M.	3000	3000	3000	3000
Take-off Manifold Pressure	70" Hg.	70" Hg.	70" Hg.	70" Hg.
Take-off Octane Rating of Fuel	100	100	100	100
Maximum Power (Continuous Operation)	1405	1405	1405	1405
Maximum Power R.P.M.	2850	2850	2850	2850
Maximum Power Manifold Pressure	54" Hg.	54" Hg.	54" Hg.	54" Hg.
Maximum Power Octane Rating of Fuel	100	100	100	100

14

PARTICULARS OF AIRSCREWS:

	#1	#2 - LEFT -		#3	#4 - RIGHT -	
Maker	Hamilton Standard Full Feather	Hamilton Standard Full Feather		Hamilton Standard Full Feather	Hamilton Standard Full Feather	
Type	Hydromatic	Hydromatic		Hydromatic	Hydromatic	
Blade Drawing No.	6813a-0	6813A-0		6813A-0	6813A-0	
Blade Serial Nos.	514647	514650		514653	514656	
	514648	514651		514654	514657	
	514649	514652		514655	514658	
Hub Drawing No.	Type 43D50-1	Type 43D50-1		Type 43D50-1	Type 43D50-1	
Hub Serial No.	158627	158628		158629	158630	
Blade Settings	25.5° 94.5°	25.5° 94.5°		25.5° 94.5°	25.5° 94.5°	
Diameter	13'1"	13'1"		13'1"	13'1"	

PARTICULARS OF ALIGHTING GEAR: Tricycle

WHEELS: Make Goodyear Main Nose - 530339 M (530402 M - Wheel 511064 M - Brake - 2/wheel) Tires Main Goodyear Goodrich 15.50 x 20 Nose Goodyear Goodrich 44"

FLOATS: Installation Assembly Drawing No. _____

SKIIS: Installation Assembly Drawing No. _____

Tail Ski _____

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

	FUEL Position	Capacity Imp. Gals.		OIL Position	OIL Capacity Imp. Gals.	Total Cap.
(1)	#1 Main (outer wing)	417	(1)	#1 Nacelle	28	(32)
(2)	#1 Aux. (outer wing)	359	(2)	#2 Nacelle	28	(32)
(3)	#2 Main (outer wing)	423	(3)	#3 Nacelle	28	(32)
(4)	#2 Aux. (outer wing	302	(4)	#4 Nacelle	28	(32)
(5)	#3 Main (outer wing)	423	(5)			
(6)	#3 Aux. (outer wing)	302	(6)			
(7)	#4 Main (outer wing)	417				
(8)	#4 Aux. (outer wing)	359				

13

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.	DESCRIPTION

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT:
(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	REMARKS
Airspeed Indicator	Kollsman	657K-0126	2 per aircraft
Altimeter	Kollsman	371K-03	
Compass	Kollsman	816 B	
Magnetic	Sperry	661182	Indicator
Flux Gate	Sperry	656520	Flux Valve
Engine Speed Indicator	Kollsman		Indicator
		8116-01	Tach. Gen. (Master)
		9256-01	Tach. Gen. (Slave)
	Gen. Elec.	89J19AAW	Type E.14 Tachometers
Oil Pressure Gauge	Pioneer	10082-8B-A1	Indicator
		10094-1-A1	Transmitter
Liquid Thermometer (for liquid cooled engines only).	Weston	727	Type 59 Y
Safety Belt(s)	Air Associates	M264	Passenger Seat
	USAAF	36B3914	Pilot Seat
Fire Extinguisher(s)	see list		

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT:
(Make extra sheets as required, using following pro forma and classification).

DESCRIPTION	MAKER	MODEL	REMARKS
1. AIRCRAFT INSTRUMENTS:			See attached list
Flying and Navigation, e.g. Bank and Turn Indicator, etc.,			
Aircraft Operating e.g., Cabin Temperature Outside " Flap Indicators, etc.,			
2. POWER PLANT INSTRUMENTS			See attached list
3. ELECTRICAL EQUIPMENT other than signalling			See attached list
4. SIGNALLING EQUIPMENT			See attached list (radio)
5. SAFETY AND EMERGENCY EQUIPMENT			See attached list
6. AMENITIES			See attached list

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

1- **AIRCRAFT INSTRUMENTS**

Name	Maker	Model	Remarks
Pitot Pressure Tube	Kollsman	781-02	
Pitot Static Tube	Canadair	751014	
Turn and Bank Indicator	Pioneer	12422-1D-A1	
Rate of Climb Indicator	Pioneer	1634-1AA-A1	
Gyro Horizon Control and Indicator	Pioneer	12400-1A-A1	
Voltammeter	General Electric	DW-53	
Pitot Heat Indicator	General Electric	DN-4	
Milliammeter	Weston	606 Type 277Y	
Anti-Ice Fluid Quantity Indicator	Pioneer	5950	
Transmitter	Pioneer	1350	
Fuel Pressure Indicator	Pioneer	10082-7D-A1	
Transmitter	Pioneer	10093-1-A	
Hydraulic Pressure Gauge	U. S. Gauge	AW1 7/8-17-CZ	
Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	
Drift Meter	Pioneer	2949-2E-53.	
Steering Accumulator Pressure Gauge	U. S. Gauge	AW 1 7/8-14-D1	
Emergency Air Pressure Gauge	U. S. Gauge	AW-1 7/8-17-CH	
Brake Accumulator Gauge	U. S. Gauge	AW-1 7/8-17-CZ	
Fuel Consumption Meter	Kent	MK I Dwg. 31100 x 8/3	
Cabin Temperature Gauge	Weston	827-T4	
Outside Air Temperature Gauge	Weston	727 Type 58Y	
Fuel Quantity Indicators	Liquidometer	Type EA-100AN	
Clock	Pioneer	3315-2D-B	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

10

2- POWERPLANT INSTRUMENTS

Name	Maker	Model	Remarks
Oil Temperature Indicator	Weston	727 Type 59Y	
Charge Temperature Indicator	Weston	727 Type 59Y	
Carb. Air Temperature Indicator	Weston	727 Type 58Y	
Manifold Pressure Indicator	Pioneer	10082-11B-A1	
Transmitter	Pioneer	10095-1-A	
Oil Pressure Indicator	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Rad. Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENTS LISTS

3- ELECTRICAL EQUIPMENT

Name	Maker	Model	Remarks
Generator	General Electric	2GM70C2	
Voltage Regulator	General Electric	3GED2B1	
Reverse Current Relay	General Electric	3GTR76A1	
Reverse Current Circuit Breaker	General Electric	12XRP12A1	
Shunt	General Electric	258X9	
Voltammeter	General Electric	257X91	
Push Button Switch			
Feathering and Unfeathering	Hamilton Standard	67372-1	
Feathering Relay	Hamilton Standard	60464-1	
Ignition Switch	Square "D"	B5A	
Battery	Willard	KNS-13-6	
Autotransformer	General Electric	70G63	
Inverter	Eclipse	1518-1	
Electronic Timer (Deicing)	Eclipse	1503-1	
Flasher-Position Light	Bendix	LM-90B24	
Light-Wing Position Red	Grimes	A1281-1524	
Light-Wing Position Green	Grimes	A1280-1524	
Light-Rear Position Red	Grimes	A1943R-3	
Light-Rear Position Clear	Grimes	A1943-3	
Landing Light	Grimes	G 3001	
Fire Detector	Edison	33786-4	
Sensitive Relay	Edison	117-12 Dwg. 33959	
Sensitive Relay	Edison	117-11 Dwg. 33961	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

AMENITIES

Name	Maker	Model	Remarks
Seats-Passenger	Douglas	5241200	
Seats-Pilot	Warren-MacArthur	168	
Lavatory	Sierra	1384	
Heaters-Main	Janitrol	ADS-100N-P41	
Heater-Nose	Janitrol	AAS-40N-P41-A	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

POWERPLANT

Name	Maker	Model	Remarks
Methyl Bromide Bottles (30#)	Kidde	870024	
Double Check Tee	Kidde	82566	
Direction Valve	Prenco	31-924-24	
Bottle Assembly - Methyl Bromide 7#	Kidde	82047	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

FUSELAGE

Name	Maker	Model	Remarks
Bottle CO_2, 12.6#	Kidde	870002	
Bottle CO_2, 3.62#	Kidde	870005	
Solenoid Control	Kidde	66129	
Direction Valve	Kidde	82499	
Overboard Discharge Ind.	Kidde	22315	
Smoke Detector	Kidde	800023	
Hand Fire Extinguisher	Kidde	2TA	

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

BASIC INSTRUMENTS

Name	Maker	Model	Remarks
Airspeed Indicator	Kollsman	657K-0126	
Altimeter	Kollsman	371K-03	
Magnetic Compass	Kollsman	814B	
Flux Gate Compass	Sperry	661182	
Flux Valve	Sperry	656520	
Tachometer Indicator	General Elec.	8DJ19 AAW Type E14	
Tachometer Generator	Kollsman	811G-01	Master
Tachometer Generator	Kollsman	925G-01	Slave
Oil Pressure Gauge	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Coolant Temp. Ind.	Weston	727 Type 59Y	
Safety			

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

SIGNALING EQUIPMENT

Name	Maker	Model	Remarks
Marker Beacon Receiver	Bendix	MN53A	75MC.
H. F. Transmitter Receiver	Bendix	RTA-1B	(1) 5642.5kc (2) 4330kc (4) 3212.5kc (5) 5390kc (6) 3222.5kc (9) 347.5kc (10) 3105kc.
Radio Compass	Bendix	MN-31	MN-26L Receiver (1) 200-410kc. (2) 550-1200kc (3) 2900-6000kc. MN26T Receiver (1) 200-410kc (2) 550-1200kc (3) 278kc.
Simultaneous Audio Filters	United Transformer Co.	FL-8-A	One each at pilot, co-pilot, and auxiliary position.
Interphone Dynamotor	Westinghouse	PE-86	
Interphone Amplifier	Molded Insulation Co.	BC-366	
Interphone Jack Boxes	Molded Insulation Co.	BC-347	Pilot-Co-Pilot, Station 517 and 680
V.H.F. Transmitter Receiver	Bendix	SCR-522	116Mc. and 126Mc (Command Equipment.)
Control Panels	Canadair	552003	
Antennas:			
Communication	Canadair	5229252-830	
Loop Antennas	Bendix	MN-36C	
Sense Antenna	Canadair	5147749-830	
Marker Antenna	Canadair	552010	
V.H.F. Mast		AN-104-AX	
Static Dischargers		AN/ASA-3	

RECORD OF WEIGHT AND C. G. POSITION

(See information Circulars M/8/37 and M/1/38)

	Landplane	Skiplane	Seaplane
MAXIMUM PERMISSIBLE GROSS WEIGHT	73,000 lbs.	lbs.	lbs.
Tare weight as determined	43,156 lbs.	lbs.	lbs.
Disposable Load	29,844 lbs.	lbs.	lbs.

Centre of gravity of aeroplane at above tare weight 377.2 inches behind in front of

....Nose Reference Plane ca 13.4% M.A.C. (Landing Gear Extended)

used as a reference datum point with aeroplane in flying position.
(The C.G. position may be calculated from the approved loading diagram of the Type Aeroplane).

LIST OF STANDARD OF ALTERNATIVE EQUIPMENT INCLUDED IN EMPTY WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.

LIST OF MOVEABLE EQUIPMENT INCLUDED IN ABOVE TARE WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.

CERTIFICATES OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been constructed under my supervisory inspection, that it conforms to the drawings and specifications approved by the Chief Engineer of Canadair Limited, that the materials entering into its construction conform to those specifications, that all workmanship is sound and in accordance with accepted aircraft practice and that the complete aircraft has been inspected by me in accordance with the requirements of the U.S. Aeronautics Authority and is, in my opinion, airworthy.

Signed: Chas. Knowles ..... Date Aug. 30/46.
Chief Inspector
CANADAIR LIMITED

(The following certificate to be executed on the day of the test flight.)

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and that the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed: W. H. McAleer ..... Air Engineer
Chas. Knowles ..... Chief Inspector
Aug. 30/46 ..... Date

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed: A. J. Lilly ..... Date Aug. 30/46.
Test Pilot
CANADAIR LIMITED

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. TRANSPORT

The aeroplane described herein has been properly inspected, weighed and tested and the issue of a Certificate of Airworthiness in Category .....Subdivision ..... is recommended.

Signed: George S. Race .....
Resident Inspector, A.I.D.,
Department of Transport.
Aug. 30 46

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION.

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date .....

Signed: .....
District Inspector,
Civil Aviation.

17

Minutes of Conference held between:

Messrs. W.M. Keddie, Technical Assistant to the President,

P.W. Gooch, Chief Engineer,

J.L. Smith, Department of Transport.

on July 24th, 1946.

1- DC4M-1, Factory Serial No. 101, (CF-TEN-X), is not structurally the Prototype Aircraft of which a Type Certificate of Airworthiness is desired. It is being used, at present, solely for the purpose of approving performance characteristics in accordance with CAR04.

2- The Prototype DC4M-1, Factory Serial No. 102, is the second aircraft coming off the line of production, and will be ready for flight test in approximately six to eight weeks time.

3- The procedure which is being adopted by Canadair Limited for the approval of the design is contained in the attached memorandum; with the exception that no C.A.A. Approval will be forthcoming for any design features which are not contained in the DC4 and DC6 Type Aircraft, the reason being that the C.A.A. are not willing to undertake the approval of engineering on an aircraft type for which they will not be called upon to issue an A.T.C. All engineering will meet the requirements of the C.A.A.

Any doubtful points regarding the interpretation of C.A.A. Requirements will be referred back to Douglas, and, if necessary, to the C.A.A.

4- Before Type Approval is requested from the Department of Transport the Chief Engineer of Canadair Limited will submit:

(a) Applicant's Design Certificate
(b) Applicant's Inspection Certificate
(c) Applicant's Pilot Report, as compiled from the Flight Test Results done on CF-TEN-X, in conjunction with Flight Test Reports prepared by Douglas for the Certification of the DC4.

5- The Chief Engineer of Canadair Limited will submit to the Department the minimum number of Engineering Reports necessary to substantiate Airworthiness, together with the Main Assembly Drawings (structural and non-structural), and duplicate copies of a complete schedule of drawings used in the construction of the Type Aircraft.

6- As far as can be ascertained from personal interviews, inspection procedure on the second aircraft, now in the course of construction, is strictly adhering to the agreement jointly made by the R.C.A.F. and the Department of Transport.

All A.I.D. Inspectors of the Department are being warned of the importance of carrying out their inspection procedure in the proper manner, so that there will be no delay when inspection certification is desired.

16

7- The aircraft CF-TEN-X is expected to be used as purely an experimental aircraft for the next twelve months, and that no C. of A. will be requested in the meantime for this particular aircraft. However, it is clearly understood by all that if, and when, a C. of A. is desired, this aircraft must be re-inspected by all Inspection Staffs concerned and resident in the firm, to insure that the requirements of the Department of Transport have been complied with.

(Sgd.) P.W. Gooch

Chief Engineer,
Canadair Ltd.

JLS:eb

18

ORIGINAL
ON FILE 5010-10-97
LEJG.

FOR FILE 5008-T5 14

C.A.E.

DEPARTMENT OF NATIONAL DEFENCE
AIR SERVICE

1038DO-1-18
(AMSO DAI)
Ref. Your 5010-10-97
Dated August 22, 1946.

ENTERED ON CARDS

OTTAWA, CANADA, August 29, 1946

TRANSPORT-RECORDS
AUG 30 A.M.
File 5008-T5-14

Mr. J. L. Smith,
Acting Chief Aeronautical Engineer,
Air Services Civil Aviation Division,
Department of Transport,
Ottawa, Ontario.

A20245

Douglas CF-TEN-X

1. This will confirm remarks passed on the telephone by me yesterday.

2. I have studied the summary of the telephone conversation between Mr. Lace and yourself of August 21st, and am rather surprised at some of the statements by Mr. Lace as many of them are contradictory within themselves. However, knowing the situation, there is no ambiguity in my mind.

3. In itspresent condition, TEN-X cannot be accepted as an airworthy aircraft by the RCAF AID. I have known for a long time that the intgegral tank situation was unsatisfactory. The company were notified immediately on the discovery of this defect as they have been of all other defects on the aircraft. The RCAF did, however, agree that there would be no objection to the aircraft being used as a guinea pig at Canadair. The company appeared to be very pleased with this agreement and stated verbally that there would never be any question of offering it to the RCAF or to civilian operators as an airworthy aircraft.

4. With the understanding I now have of the circumstances demanding its more or less immediate use, I see no objection to its flying with passengers provided adequate precautions are taken. These precautions should consist of a between-flight examination for the discovery of the presence or otherwise of fuel fumes or liquid fuel to a dangerous extent in the wing structure, say for the first 100 hours of flying. Assuming that the first 100 hours flight under these conditions are trouble-free, then the aircraft could continue in service with normal inspection paying particular attention to the possibility of fuel leakage or seepage to a dangerous extent,

5. As discussed with you, there are other features involved, oil tanks and propeller operating mechanism which have not yet been cleared up to the satisfaction of S/L Lortie. I am very surprised to hear that the trouble with the propeller has been solved for some time, yet this information has not been passed over to the original objector-S/L Lortie. With reference to the oil tanks, Lortie obviously cannot accept these until the design for them has received the approval of the RCAF, Department of Transport or Douglas, and before saying that the tanks now fitted are satisfactory for extended temporary use, this should be referred to one of the authorities mentioned. I think W/C Hill, our R.O at Canadair should be referred to. It may be that the five-pound pressure test demanded by Douglas is an arbitrary requirement.

6. I am of the opinion that your suggestion to give a certification permitting the aircraft to fly within time limits would constitute a reasonable assurance of sagety to any passengers which may be carried.

(A.C. F. Luke),
Group Captain,
Director of Aeronautical Inspection,
for Chief of the Air Staff.

OFFICE & WORKS:
CARTIERVILLE, P. Q.

TELEPHONE:
*ATLANTIC 9431

P.A.

5008-T5-14

Canadair Limited

POST OFFICE BOX 6087
Montreal

August 30th., 1946.

TO WHOM IT MAY CONCERN:

A22146

This is to certify that I have signed the Factory Release Certificate on Aircraft "CF-TEH", with the following systems installed but not completely checked:

1. Oxygen System

   Installation complete.
   Ground check complete.
   Altitude test incomplete.

2. Heating System

   Installation complete.
   Ground test incomplete.
   Flight test to be carried out.

3. Fuel System

   Bladder tanks installed but not checked to main system.

S. Dawe-Knowles

CB

S. Dawe-Knowles
Chief Inspector

Noted
Sgd

DHH/4

~~5010-10-07~~
5008-T5-14

Ottawa, Ontario,
September 4th, 1946.

Canadair Limited,
P. O. Box 6087,
Montreal, Quebec.

Dear Sir:

We are in receipt of your letter of August 27th, 1946, with the Design Certificate, Factory Inspection and Release Certificate, Application for Certificate of Airworthiness enclosed, also cheque for $25.00 in respect to the application for type certificate of airworthiness.

$25.00 Cheque Sent Fees 9.46 BD

Before an individual certificate of airworthiness may be issued for CF-TEH DC4M "North Star" aircraft, will you kindly complete the enclosed application forms for registration and return them to the District Inspector, Air Regulations, in Montreal, together with your cheque for $5.00.

Your letter has been referred to the Aeronautical Engineering Section for further comment.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encs.

cc DIAR MONTREAL

GEW/ELR

19

~~5010-10-97~~
5008-T5-14

OTTAWA, September 9th, 1946.

Air Vice Marshal A. James,
Director of Research & Development
for Chief of the Air Staff,
Lisgar Building,
OTTAWA, Ont.

Dear Sir: Subject:- Douglas DC4-M (CF-TEN-X)

As promised in telephone conversation of a few days ago, we are forwarding herewith a copy of the applicants Design Certificate covering the Douglas DC4M "North Star" Aircraft.

It is expected that within a few days a restricted temporary Certificate of Airworthiness would be recommended for the subject aircraft for a period of one month at a maximum take-off weight of 73,000 lbs. and a landing weight of 63,500 lbs.

Yours truly,

(J.L. Smith),
Acting Chief Aeronautical Engineer.

Encl.

GEW/ELR

20

5010-10-97
5008-T5-14

OTTAWA, September 9th, 1946.

Group Captain A.C.F. Luke,
for Chief of the Air Staff,
Director of Aeronautical Inspection,
Lisgar Building,
OTTAWA, Ont.

Dear Sir: SUBJECT: Douglas DC4-M (CF-TEN-X)

This is to acknowledge and thank you for the very useful information supplied in your letter of August 29th with respect to the subject aircraft.

The precaution which you advise should be taken in the operation of CF-TEN-X has been made part of our recommendation in our airworthiness report of the DC4-M aircraft.

Yours truly,

(J.L. Smith),
Acting Chief Aeronautical Engineer.

PA

ORIGINAL ON FILE 5010-10-97

COPY

FOR FILE 5888-95-14

8
6-44

TRANSPORT-RECORDS
SEP 12 P.M.
File 5888-95-14

K.A.E

ROYAL CANADIAN AIR FORCE,

Ottawa, Ont.,

September 10, 1946.

A22089

The Acting Chief Aeronautical Engineer,
Air Services,
Civil Aviation Division,
Dept. of Transport,
Ottawa, Ontario.

Subject:- Douglas DC4-M (CF-TEN-X)

Dear Sir:-

his is to acknowledge, with thanks, receipt of your letter of the 9th of September and the attachments relative to the Douglas DC4M "North Star" air craft.

Yours very truly

ENTERED ON CARDS

(Sgd.) A.L.James,
Air Vice Marshal,
for Chief of the Air Staff.

robd 9 Sep

5008-T5-

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

21

2
8-45

Canadair Limited (PLACE) Aug. 30th., 1946. (DATE)

YOUR FILE	SUBJECT	OUR FILE
	DC4M (XC54GM1) CF-TEN	

Mr. J.L. Smith,
Chief Aeronautical Engineer,
Department of Transport,
Bryson Building,
Ottawa, Ontario.

Dear Sir:

As requested by you, I am herewith forwarding direct, a copy of the Release Certificate for the above-noted aircraft, together with copies of Engineering Reports and temporary approvals for the various controversial items.

There are three (3) additional items which are not yet completely cleared up, namely:-

Oxygen System - not yet pperating satisfactorily at altitude.

Heating System- still to be checked for operation and carbon monoxide.

Fuel System - auxiliary bladder gas tanks installed but not yet checked to main system.

Very truly yours,

Note sent

CB H.O.

DAS
To note
reports please
16/9/46

George S. Lace

G.S. Lace,
Supervising Inspector, A.I.D.

SG/M

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

23 2 6-44

Ottawa, Ontario, September 24th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Status Douglas DC4M Aircraft, Application for Certificate of Airworthiness, Sept. 24/46.	5008-T5-14 ✓ 5010-10-97

MEMORANDUM TO D.A.S.:

1. DC4M-1, Factory Serial No. 101 (CF-TEN-X) is not structurally the prototype aircraft for which a type Certificate of Airworthiness is desired. It is being used for the purpose of proving performance characteristics in accordance with CAR-04 and general operating features.

2. DC4M-1, Factory Serial No. 102, the second aircraft coming off the production line will be the prototype.

3. On the completion of preliminary flight trials, temporary Certificates of Registration and Airworthiness were issued on September 11th, 1946, for aircraft CF-TEN. The weight authorized was as applied for - 75,000 lbs. take-off and 65,500 lbs. for landing. In the absence of complete information concerning level flight speed, this aircraft was limited to 250 miles per hour which is the maximum V.L. speed for the DC4.

4. The following important considerations are still outstanding:

(a) Operation of the Rolls Royce Merlin No. 620 Engines is limited to 150 hours total pending type approval by the Air Registration Board in the United Kingdom.

(b) Oil tanks are approved for 50 hours'total flying time at which time they must be replaced by tanks of improved design.

(c) Approval for the operation of the Hamilton Standard type 43D60 propellers and associated equipment is tentative pending final approval by the C.A.A.

5. The following paragraph appears in the Department of Transport airworthiness and flight test report:

"According to the official flight test report, there is nothing vicious whatsoever in the behaviour of this aircraft in any manoeuvre. Controllability and handling qualities are exceptionally light and easy for such a heavy aircraft. Trim controls are adequate, nicely geared and sensitive. The aircraft is exceptionally stable about the three axes. Furthermore, it will

22

be noted from the flight test report that the aircraft also satisfactorily meets the other flight requirements of CAR-04. Finally, our test pilot concludes his report by stating that he is of the opinion that the Douglas DC4M has better performance than the DC4. It is pointed out, however, that there appear to be some discrepancies in the flight test results obtained when the aircraft was tested for take-off determination of CAR-04.7532-T and the requirements of CAR-04.75320-T."

6. The discrepancies noted in the last sentence above are not considered sufficient to withhold approval for operation of CF-TEN but complete take-off tests will be observed on the prototype aircraft.

(S. Graham),
Superintendent, Air Regulations.

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENTS LISTS

BASIC INSTRUMENTS

Name	Maker	Model	Remarks
Airspeed Indicator	Kollsman	657K-0126	
Altimeter	Kollsman	371K-03	
Magnetic Compass	Kollsman	814B	
Flux Gate Compass	Sperry	661182	
Flux Valve	Sperry	656520	
Tachometer Indicator	General Electric	8DJ19 AAW Type E14	
Tachometer Generator	Kollsman	811G-01	Master
Tachometer Generator	Kollsman	925G-01	Slave
Oil Pressure Gauge	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Coolant Temp. Ind.	Weston	727 Type 59Y	

04

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

1- AIRCRAFT INSTRUMENTS

Name	Maker	Model	Remarks
Pitot Pressure Tube	Kollsman	781-02	
Pitot Static Tube	Canadair	751014	
Turn and Bank Indicator	Pioneer	12422-1D-A1	
Rate of Climb Indicator	Pioneer	1634-1AA-A1	
Gyro Horizon Control and Indicator	Pioneer	12400-1A-A1	
Voltammeter	General Electric	DW-53	
Pitot Heat Indicator	General Electric	DN-4	
Milliammeter	Weston	606 Type 277Y	
Anti-Ice Fluid Quantity Indicator	Pioneer	5950	
Transmitter	Pioneer	1350	
Fuel Pressure Indicator	Pioneer	10082-7D-A1	
Transmitter	Pioneer	10093-1-A	
Hydraulic Pressure Gauge	U. S. Gauge	AW1 7/8-17-CZ	
Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	
Drift Meter	Pioneer	2949-2E-53	
Steering Accumulator Pressure Gauge	U. S. Gauge	AW 1 7/8-14-D1	
Emergency Air Pressure Gauge	U. S. Gauge	AW-1 7/8-17-CN	
Brake Accumulator Gauge	U. S. Gauge	AW-1 7/8-17-CZ	
Fuel Consumption Meter	Kent	MK 1 Dwg. 31100 x 8/3	
Cabin Temperature Gauge	Weston	827-T4	
Outside Air Temperature Gauge	Weston	727 Type 58Y	
Fuel Quantity Indicators	Liquidometer	Type EA-100AN	
Clock	Pioneer	3315-2D-B	

39

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

2- POWERPLANT INSTRUMENTS

Name	Maker	Model	Remarks
Oil Temperature Indicator	Weston	727 Type 59Y	
Charge Temperature Indicator	Weston	727 Type 59Y	
Carb. Air Temperature Indicator	Weston	727 Type 58Y	
Manifold Pressure Indicator	Pioneer	10082-11B-A1	
Transmitter	Pioneer	10095-1-A	
Oil Pressure Indicator	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Rad. Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENTS LISTS

3- ELECTRICAL EQUIPMENT

Name	Maker	Model	Remarks
Generator	General Electric	2CM70C2	
Voltage Regulator	General Electric	3GED2B1	
Reverse Current Relay	General Electric	3GTR76A1	
Reverse Current Circuit Breaker	General Electric	12XRP12A1	
Shunt	General Electric	258X9	
Voltammeter	General Electric	257X91	
Push Button Switch			
Feathering and Unfeathering	Hamilton Standard	67372-1	
Feathering Relay	Hamilton Standard	60464-1	
Ignition Switch	Square "D"	B5A	
Battery	Willard	KWS-13-6	
Autotransformer	General Electric	70G63	
Inverter	Eclipse	1518-1	
Electronic Timer (Deicing)	Eclipse	1503-1	
Flasher-Position Light	Bendix	LM-90B24	
Light-Wing Position Red	Grimes	A1281-1524	
Light-Wing Position Green	Grimes	A1280-1524	
Light-Rear Position Red	Grimes	A1943R-3	
Light-Rear Position Clear	Grimes	A1943-3	
Landing Light	Grimes	G 3001	
Fire Detector	Edison	33786-4	
Sensitive Relay	Edison	117-12 Dwg. 33959	
Sensitive Relay	Edison	117-11 Dwg. 33961	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

FUSELAGE

Name	Maker	Model	Remarks
Bottle CO_2, 12.6#	Kidde	870002	
Bottle CO_2, 3.62#	Kidde	870005	
Solenoid Control	Kidde	66129	
Direction Valve	Kidde	82499	
Overboard Discharge Ind.	Kidde	22315	
Smoke Detector	Kidde	800023	
Hand Fire Extinguisher	Kidde	2TA	

36

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

SIGNALING EQUIPMENT

Name	Maker	Model	Remarks
Marker Beacon Receiver	Bendix	MN53A	75MC
H. F. Transmitter Receiver	Bendix	RTA-1B	(1) 5642.5kc (2) 4330kc (4) 3212.5kc (5) 5390kc (6) 3222.5kc (9) 347.5kc (10) 3105kc
Radio Compass	Bendix	MN-31	MN-26L Receiver (1) 200-410kc. (2) 550-1200kc (3) 2900-6000kc. MN26T Receiver (1) 200-410kc (2) 550-1200kc (3) 278Kc
Simultaneous Audio Filters	United Transformer Co.	FL-8-A	One each at pilot, co-pilot, and auxiliary position
Interphone Dynamotor	Westinghouse	PE-86	
Interphone Amplifier	Molded Insulation Co.	BC-366	
Interphone Jack Boxes	Molded Insulation Co.	BC-347	Pilot-Co-Pilot, Station 517 and 680
V.H.F. Transmitter Receiver	Bendix	SCR-522	116MC. and 126Mc (Command Equipment)
Control Panels	Canadair	552003	
Antennas:			
Communication	Canadair	5229252-830	
Loop Antennas	Bendix	MN-36C	
Sense Antennas	Canadair	5147749-830	
Marker Antennas	Canadair	552010	
V.H.F. Mast		AN-104-AX	
Static Dischargers		AN/ASA-3	

37

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

POWERPLANT

Name	Maker	Model	Remarks
Methyl Bromide Bottles (30#)	Kidde	870024	
Double Check Tee	Kidde	82566	
Direction Valve	Prenco	S1-924-24	
Bottle Assembly - Methyl Bromide 7#	Kidde	82047	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

AMENITIES

Name	Maker	Model	Remarks
Seats-Passenger	Douglas	5241200	
Seats-Pilot	Warren-McArthur	168	
Lavatory	Sierra	1384	
Heaters-Main	Janitrol	ADS-100N-P41	
Heater-Nose	Janitrol	AAS-40N-P41-A	

33

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER THAN AIR made by CANADIAR LIMITED

Type DC-4M Maker's No. SERIAL 101

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	117 Ft. 6 In.	
Length o/a in feet	93 Ft. 5 In.	
Height o/a in feet	27 Ft. 6-5/16 In.	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 43,378 Lbs.

Total weight authorized (fully loaded) in lbs 73,000 Air speed 250 miles per hour INDICATED

EQUIPMENT—(Give number and type). SEE ATTACHED LISTS

1. Instruments
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	ROLLS ROYCE MERLIN MK 620	ROLLS ROYCE MERLIN MK 620	ROLLS ROYCE MERLIN MK 620	ROLLS ROYCE MERLIN MK 620
Pusher or Tractor	TRACTOR	TRACTOR	TRACTOR	TRACTOR
Right or Left Hand	R.H.	R.H.	R.H.	R.H.
No. of Cylinders	12	12	12	12
H.P.	1770 T.O.	1770 T.O.	1770 T.O.	1770 T.O.
Bore	5.4 In.	5.4 In.	5.4 In.	5.4 In.
Stroke	6 In.	6 In.	6 In.	6 In.

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
8-39

32

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~) TRIPLICATE

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect. For: CANADAIR LIMITED

Signature of Applicant D.H. MacFarlane

D.H. MacFarlane, Vice President

Date of Application September 10th, 1946.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
CANADAIR LIMITED	P.O.BOX 6087, MONTREAL	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
B.W. Franklin	President	Montreal	Canadian
D.H. MacFarlane	Vice President	Montreal	Canadian
J.E.L. Duquet	Director	Montreal	Canadian
J.J. Hopkins	Director	New York, N.Y.	American
O.P. Robinson, Jr.	Director	Groton, Conn.	American

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

PASSENGER

Usual Station MONTREAL, QUEBEC

Date of manufacture or reconstruction JULY 15th, 1946

Crew required SIX (6)

Accommodation for what number of passengers THIRTY-SIX (36)

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENTS LISTS

BASIC INSTRUMENTS

Name	Maker	Model	Remarks
Airspeed Indicator	Kollsman	657K-0126	
Altimeter	Kollsman	371K-03	
Magnetic Compass	Kollsman	814B	
Flux Gate Compass	Sperry	661182	
Flux Valve	Sperry	656520	
Tachometer Indicator	General Electric	8DJ19 AAW Type E14	
Tachometer Generator	Kollsman	811G-01	Master
Tachometer Generator	Kollsman	925G-01	Slave
Oil Pressure Gauge	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Coolant Temp. Ind.	Weston	727 Type 59Y	

12

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

1- AIRCRAFT INSTRUMENTS

Name	Maker	Model	Remarks
Pitot Pressure Tube	Kollsman	781-02	
Pitot Static Tube	Canadair	751014	
Turn and Bank Indicator	Pioneer	12422-1D-A1	
Rate of Climb Indicator	Pioneer	1634-1AA-A1	
Gyro Horizon Control and Indicator	Pioneer	12400-1A-A1	
Voltammeter	General Electric	DW-53	
Pitot Heat Indicator	General Electric	DN-4	
Milliammeter	Weston	606 Type 277Y	
Anti-Ice Fluid Quantity Indicator	Pioneer	5950	
Transmitter	Pioneer	1350	
Fuel Pressure Indicator	Pioneer	10082-7D-A1	
Transmitter	Pioneer	10093-1-A	
Hydraulic Pressure Gauge	U. S. Gauge	AW1 7/8-17-CZ	
Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	
Drift Meter	Pioneer	2949-2E-53	
Steering Accumulator Pressure Gauge	U. S. Gauge	AW 1 7/8-14-D1	
Emergency Air Pressure Gauge	U. S. Gauge	AW-1 7/8-17-CN	
Brake Accumulator Gauge	U. S. Gauge	AW-1 7/8-17-CZ	
Fuel Consumption Meter	Kent	MK 1 Dwg. 31100 x 8/3	
Cabin Temperature Gauge	Weston	827-T4	
Outside Air Temperature Gauge	Weston	727 Type 58Y	
Fuel Quantity Indicators	Liquidometer	Type EA-100AN	
Clock	Pioneer	3315-2D-B	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

2- POWERPLANT INSTRUMENTS

Name	Maker	Model	Remarks
Oil Temperature Indicator	Weston	727 Type 59Y	
Charge Temperature Indicator	Weston	727 Type 59Y	
Carb. Air Temperature Indicator	Weston	727 Type 58Y	
Manifold Pressure Indicator	Pioneer	10082-11B-A1	
Transmitter	Pioneer	10095-1-A	
Oil Pressure Indicator	Pioneer	10082-8B-A1	
Transmitter	Pioneer	10094-1-A1	
Rad. Flap Position Indicator	Pioneer	10082-13B-A1	
Transmitter	Pioneer	10090-3-A	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENTS LISTS

3- ELECTRICAL EQUIPMENT

Name	Maker	Model	Remarks
Generator	General Electric	2CM70C2	
Voltage Regulator	General Electric	3GED2B1	
Reverse Current Relay	General Electric	3GTR76A1	
Reverse Current Circuit Breaker	General Electric	12XRP12A1	
Shunt	General Electric	258X9	
Voltammeter	General Electric	257X91	
Push Button Switch			
Feathering and Unfeathering	Hamilton Standard	67372-1	
Feathering Relay	Hamilton Standard	60464-1	
Ignition Switch	Square "D"	B5A	
Battery	Willard	KWS-13-6	
Autotransformer	General Electric	70G63	
Inverter	Eclipse	1518-1	
Electronic Timer (Deicing)	Eclipse	1503-1	
Flasher-Position Light	Bendix	LM-90B24	
Light-Wing Position Red	Grimes	A1281-1524	
Light-Wing Position Green	Grimes	A1280-1524	
Light-Rear Position Red	Grimes	A1943R-3	
Light-Rear Position Clear	Grimes	A1943-3	
Landing Light	Grimes	G 3001	
Fire Detector	Edison	33786-4	
Sensitive Relay	Edison	117-12 Dwg. 33959	
Sensitive Relay	Edison	117-11 Dwg. 33961	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

FUSELAGE

Name	Maker	Model	Remarks
Bottle CO_2, 12.6#	Kidde	870002	
Bottle CO_2, 3.62#	Kidde	870005	
Solenoid Control	Kidde	66129	
Direction Valve	Kidde	82499	
Overboard Discharge Ind.	Kidde	22315	
Smoke Detector	Kidde	800023	
Hand Fire Extinguisher	Kidde	2TA	

27

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

FIRE EXTINGUISHING EQUIPMENT

POWERPLANT

Name	Maker	Model	Remarks
Methyl Bromide Bottles (30#)	Kidde	870024	
Double Check Tee	Kidde	82566	
Direction Valve	Prenco	S1-924-24	
Bottle Assembly - Methyl Bromide 7#	Kidde	82047	

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

SIGNALING EQUIPMENT

Name	Maker	Model	Remarks
Marker Beacon Receiver	Bendix	MN53A	75MC
H. F. Transmitter Receiver	Bendix	RTA-1B	(1) 5642.5kc (2) 4330kc (4) 3212.5kc (5) 5390kc (6) 3222.5kc (9) 347.5kc (10) 3105kc
Radio Compass	Bendix	MN-31	MN-26L Receiver (1) 200-410kc. (2) 550-1200kc (3) 2900-6000kc. MN26T Receiver (1) 200-410kc (2) 550-1200kc (3) 278Kc
Simultaneous Audio Filters	United Transformer Co.	FL-8-A	One each at pilot, co-pilot, and auxiliary position
Interphone Dynamotor	Westinghouse	PE-86	
Interphone Amplifier	Molded Insulation Co.	BC-366	
Interphone Jack Boxes	Molded Insulation Co.	BE-347	Pilot-Co-Pilot, Station 517 and 680
V.H.F. Transmitter Receiver	Bendix	SCR-522	116MC. and 126Mc (Command Equipment)
Control Panels	Canadair	552003	

Antennas:

Communication	Canadair	5229252-830
Loop Antennas	Bendix	MN-36C
Sense Antennas	Canadair	5147749-830
Marker Antennas	Canadair	552010
V.H.F. Mast		AN-104-AX
Static Dischargers		AN/ASA-3

25

APPLICATION FOR AIRCRAFT REGISTRATION

INSPECTION CERTIFICATE

EQUIPMENT AND INSTRUMENT LISTS

AMENITIES

Name	Maker	Model	Remarks
Seats-Passenger	Douglas	5241200	
Seats-Pilot	Warren-McArthur	168	
Lavatory	Sierra	1384	
Heaters-Main	Janitrol	ADS-100N-P41	
Heater-Nose	Janitrol	AAS-40N-P41-A	

ORIGINAL ON FILE 5010-10-97 HSC

COPY

FOR FILE 5008-T5-14

TRANSPORT-RECORDS
SEP 11 A.M.
File

DEPARTMENT OF TRANSPORT
Intra-departmental Correspondence

Canadair Ltd. Sept. 10th, 1946.

Subject:
D.C.4.M. (XC.54.GM.1.) CF-TEN.

A21914

Mr. J. L. Smith,
Chief Aeronautical Engineer,
Dept. of Transport,
Bryson Building,
Ottawa, Ont.

Dear Sir,

Enclosed herewith are reports, received to-day, from Canadair Ltd., on the three (3) outstanding items, not previously covered, namely :-

Oxygen System. Report by R. M. Crookes.

Heating System. " " "

Fuel System. " " S. Dawes-Knowles.

The Heating System was checked for both operation, and the presence of carbon monoxide, and during the test flight Mr. Slade, and Inspector of this Department, personally operated the carbon monoxide detector. (Mines Safety Appliance, Type # 14670.)

Yours truly,

(Sgd.) George S. Lace.
Supervising Inspector. A.I.D.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

41 2 8-45

910 Confederation Building,
Montreal 2, Que., September 11, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC4 CF-TEN	5008-T5-14

TRANSPORT-RECORDS
SEP 12P.M
File 5008-T5-14

SAR.

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

A21987

1. Enclosed herewith is application form for Certificate of Registration and Airworthiness, in duplicate, for the subject aircraft, submitted by Canadair Limited. $5.00 Fee (Department Receipt #66987) will be forwarded under Cash Book Folio No. 3316.

2. As the Release Note for this aircraft has been forwarded direct to Headquarters, at the request of the Chief Aeronautical Engineer, the section entitled "Registration" on the back of the application form has not been completed by the writer.

J. L. Blondeau

J. L. Blondeau,
District Inspector, Air Regulations.

R.

Noted.
JLB
10.10.46.

6

43

GEN/GEN

5008-T5-14
~~5010-10-97~~

Ottawa, Ontario,
28th September, 1946.

Canadair Limited,
P.O. Box 6087,
Montreal, P.Q.

Attn: Mr. P.W. Gosch, Chief Engineer

Subject: Douglas DC4M - CF-TEN - Oil Tanks

Dear Sirs:-

We have just received a letter from our Supervising Inspector A.I.D., Mr. George S. Lace, informing the Department that he had personally inspected each of the four oil tanks of the subject aircraft and that there is no indication of any leak or distortion and he considers these tanks serviceable for an additional fifty hours.

On the basis of this report and recommendation, we are pleased to grant an extension of an additional fifty hours to the temporary approval of the existing oil tanks.

Yours very truly,

DY

(J. L. Smith),
Acting Chief Aeronautical Engineer.

CC:DIAR MONTREAL (ATTN: RES. INSP. A.I.D.)

6

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

42 2 8-45

Canadair Ltd. Sept. 26th '46.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
C.A.E.	D.C.4.M.(XC.54.GM.1.) CF-TEN.	

Mr.J.L. Smith.
Chief Aeronautical Engineer.
Dept of Transport.
Bryson Building.
Ottawa. Ont.

TRANSPORT-RECORDS
SEP 27 A.M.
File 588-75-14

A-4494

Dear Sir,

I understand that Canadair Ltd. are applying for an extension, of an additional fifty (50) hours, on the temporary approval of the oil tanks which are at present installed in the above noted aircraft.

I have today, personally inspected each of the four tanks, and found no indication of any leaking or distortion, and would consider these tanks quite servicable for an additional fifty hours.

Yours truly,

CEW: Please confirm to Mr. Good that we will grant extension for another 50 hrs. 28.9.46

George S. Lace.

George S. Lace.
Supervising Inspector.A.I.D.

97

44

5008-T5-14

A26740

910 Confederation Building,
Montreal 2, Que., October 11, 1946.

TRANSPORT-RECORDS
OCT 12 A.M.
File 5008-T

5-14

Canadair Limited,
Cartierville, Que.

Gentlemen:

Re: Douglas DC4M CF-TEH

The previous temporary authority granted by our Headquarters on September 11, 1946, permitting operation of the subject aircraft for research and demonstration purposes, is hereby extended not valid after November 11, 1946, subject to all the conditions outlined in that letter.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

PREPARED
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 55-1
REPORT RA-2-123
MODEL XC-54GM

5904

SUBJECT–

FLIGHT PLAN NO.

Prepared By R.B. CAIRNS

DATE OCT 15/46

Flight No. 55

Mfg. Personnel

Pilot	A.J. LILLY		
Co-Pilot	D.D. MURPHY		
Flight Engineer	W. HARRIS		
	J. HOOD		

Airplane Model XC-54GM

Serial No.

Registration No. CF-TEN

Date of Test OCT. 15/46

Wt. @ T.O. (Lbs) 65000

Time of T.O. 9.35

C.G. @ T.O. (G.D.) 14%
(G.U.)

Wt. @ Land. (Lbs.)

CAA Personnel

Time of Landing 9.40

Insp. In Charge	D.D. MURPHY	
Flt. Eng. Insp.		
Flight Analyst		

C.G. @ Ld. (G.D.)
(G.U.)

Fuel Used (Gal.)

Approved
CAA Insp. In Charge
CAA Flight Analyst

Loading for this Flight
Take-off weight = 65000 lb.

C.G. 14%

PURPOSE OF TEST

D.O.T. TAKE-OFF DISTANCE

ACC. TO V_2 ONE ENGINE CUT AT V_1

PREPARED
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 55-2
REPORT RA-2-123
MODEL XC-54GM

5904

SUBJECT—

WEIGHT SHEET

WEIGHT EMPTY	42936	lb
OIL	810	lb
FUEL 2400 IMP. GALS	17280	lb
CREW 4 X 170	680	lb
PARACHUTES		lb
BALLAST	2294	lb
MISCELLANEOUS		lb
CORRECTIONS		lb
C.G. POSITION (U/C UP)	14%A	%

TOTAL @ T.O. 65000 LB

PREPARED
CHECKED
APPROVED

5904

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 56-1
REPORT RA-2-123
MODEL XC-54GM

SUBJECT—

FLIGHT PLAN NO.

Prepared By R.B.CAIRNS

DATE Oct. 15/46

Flight No. 56

Mfg. Personnel

Pilot A. LILLY

Co-Pilot D.D.MURPHY

Flight Engineer W. HARRIS

J. HOOD

Airplane Model XC-54GM

Serial No.

Registration No. CF-TEN

Date of Test OCT. 15/46

Wt. @ T.O. (Lbs) 65000

Time of T.O. 9.50

C.G. @ T.O. (G.D.) 14%
(G.U.)

Wt. @ Land. (Lbs.)

CAA Personnel

Insp. In Charge D.D. MURPHY

Flt. Eng. Insp.

Flight Analyst

Time of Landing 9.55

C.G. @ Ld. (G.D.)
(G.U.)

Fuel Used (Gal.)

Approved
CAA Insp. In Charge
CAA Flight Analyst

Loading for this Flight
Take-off weight = 65000 lb.

C.G. 14%

PURPOSE OF TEST

D.O.T. TAKE-OFF DISTANCE

ACC. TO V_2, ONE ENGINE CUT AT V_1

SUBJECT—

Take Off Performance.

Flights 55 & 56 take off tests were performed with the XC-54GM aircraft at a desired gross weight of 65000 lbs, at 930 am, Oct 15th., 1946. from Cartierville Airport.

The range grid, through which these tests were photographed, using a Bell and Howell 16 mm camera was placed 1300 ft. from runway No. 10 and normal to it at approximately 2500 ft. from the starting point of theruns. Attached to the camera mounting base (so as to follow the camera sweep) was an adjustable arm supporting a watch and blinker lamp, which was flashed, on the second at 2 second intervals. A 32 volt Aldis lamp was used in the aircraft and pointed at the camera to photographically record the time of take off power application, and also the exact point of cutting one engine.

The wind during test was approximately N.N.E. at 4 mph. Since the aircraft heading was 100°, the effect of this wind on take off was extremely small and has been disregarded.

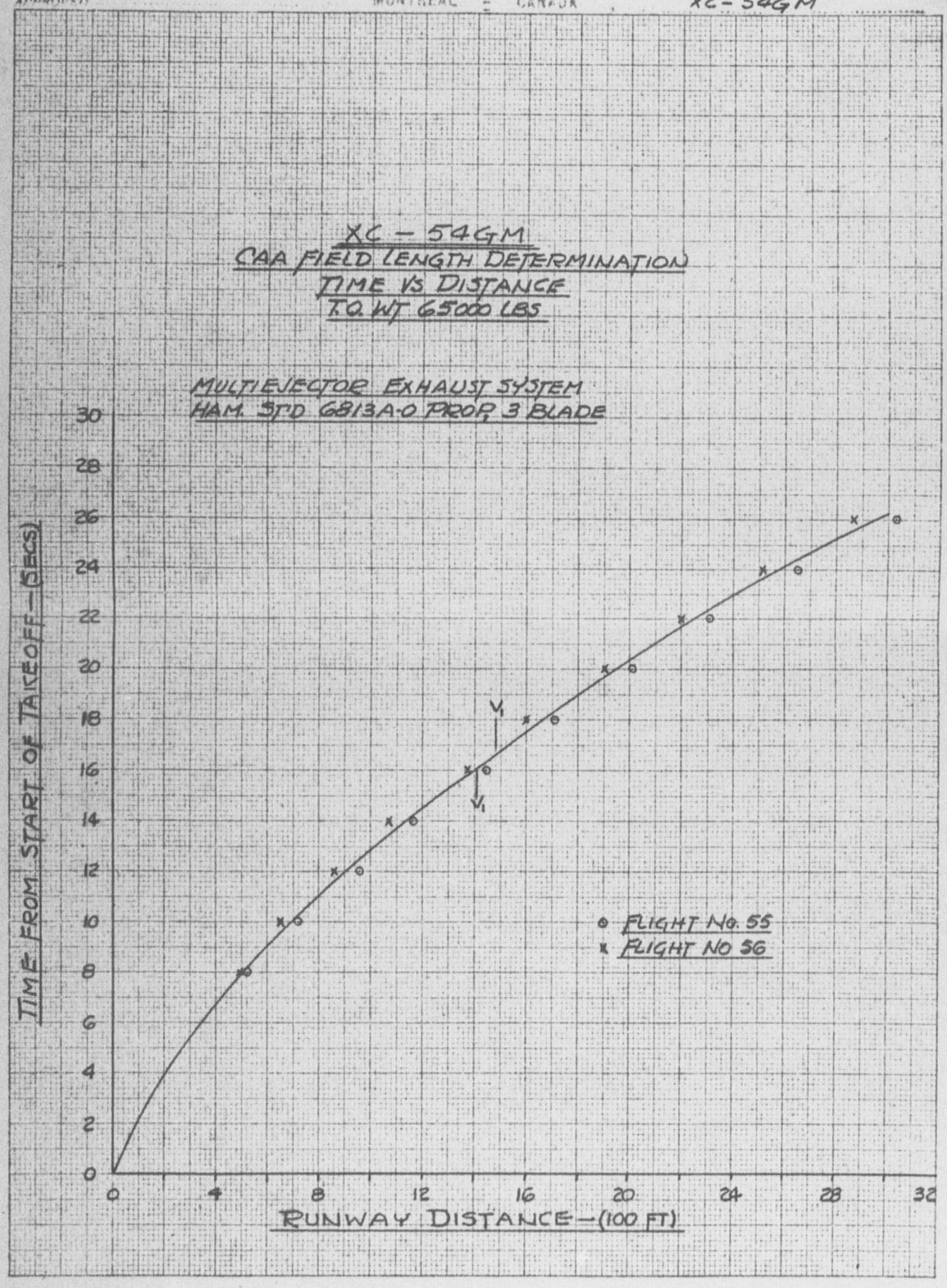
The test figures were reduced to standard conditions for a weight of 63000 lbs. from which the take off flight path was constructed for comparison with Douglas tests of the DC-4 (ref. Douglas rep't E-168). page 6-50)

The reduction methods were based upon those presented in Douglas Report SM11840, page 21, which for the most part were obtained from CAA Flight Engineering Report No. 7.

PREPARED AERODYNAMICS CANADAIR LIMITED MONTREAL - CANADA PAGE 56-3
CHECKED
APPROVED
REPORT RA-2-123
XC-54GM

XC - 54GM
CAA FIELD LENGTH DETERMINATION
TIME VS DISTANCE
T.O. WT 65000 LBS

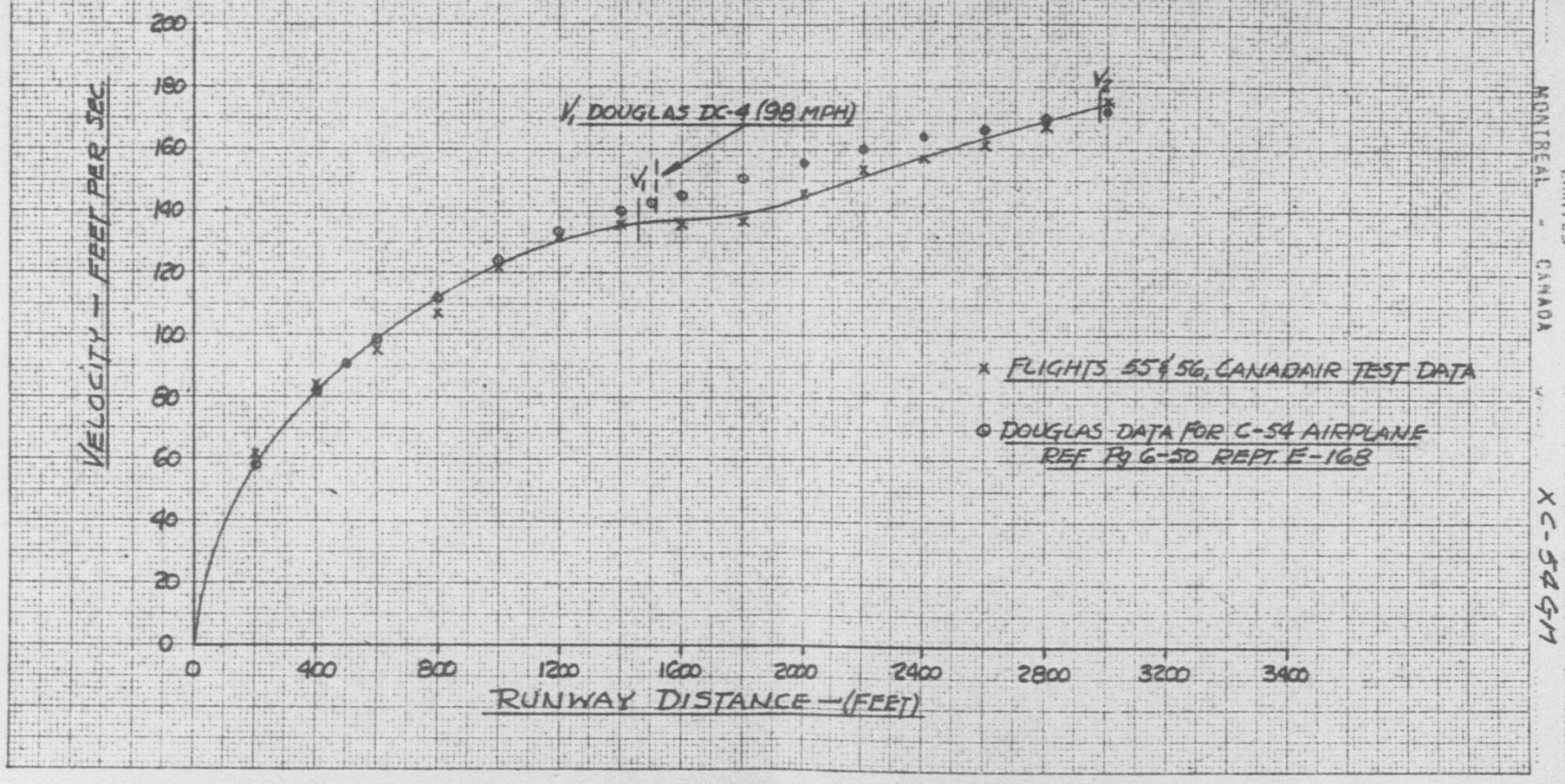
MULTIEJECTOR EXHAUST SYSTEM
HAM. STD 6813A-0 PROP, 3 BLADE



KEUFFEL & ESSER CO., N. Y. NO. 359-140
Millimeters, 5 mm. lines accented, cm. lines heavy
MADE IN U. S. A.

XC-54GM
VELOCITY DISTANCE RELATIONSHIP
T.O. WT. 65000 LBS

MULTIEJECTOR EXHAUST SYSTEM
HAM. STD. 6813A-0,3 BLADE PROP



* FLIGHTS 55 & 56, CANADAIR TEST DATA

○ DOUGLAS DATA FOR C-54 AIRPLANE
REF. PG 6-50 REPT. E-168

PREPARED
CHECKED
APPROVED
AERODYNAMICS
CANADAIR
LIMITED
MONTREAL - CANADA
SG-4
RA-2-123
XC-54GM

SUBJECT—

Take off Performance (Cont'd)

Correction for Slope

$$F_{slope} = \frac{1}{1 + \frac{2gd\ test\ Sin\Phi\ test}{V_1^2}}$$

Ref. Pg.I-3 SM11840 Douglas Report

To V_1 speed, d = 1440, $Sin\Phi$ = -.00406, V_1 = 136 f.p.s.

$$F_{slope(V_1)} = \frac{1}{1 + \frac{64.4 \times 1440 \times (-00406)}{(136)^2}} = \frac{1}{.9796}$$

To V_2 speed d = 2980-1440 =1540, V_2 = 175 f.p.s. V_1=136 f.p.s.

$$F_{slope(V_1\ V_2)} = \frac{1}{1 + \frac{64.4 \times 1540 \times (-.00406)}{(175)^2 - (136)^2}} = \frac{1}{.9667}$$

Correction for Density

$$F_{density} = \frac{1}{C_p\left(1 - \left(\frac{\rho\ std}{\rho\ test}\right)\right) + 1}$$

Pg 21 SM11840 Douglas Rept.

$$\text{Where } C_\rho = \frac{\frac{\rho}{2}\ test\ \frac{V_A^2\ test}{2}(C_D\ total - \mu\ C_L\ taxi)S}{\frac{W}{g}\ test\ \frac{V_G^2\ test}{2d\ test}}$$

$$C_{Dp} = \frac{1}{1462}(C_{D_o}\ 28.8 + Gear\ 32.0 + Flaps\ 13.9 + Rad\ flaps\ 3.65) = .0535$$

Pg.V-1, RA-2-107 Canadair Rep't.

$$C_{D_1} = \frac{(C_L)^2}{\pi\ e\ R} = \frac{(.90)^2}{\pi \times .68 \times 9.44} = \frac{.04}{.0935}$$

C_D total

* SYMBOLS: Φ, Slope of run way, positive for uphill slope
V_1, Velocity at cutting one engine, fps.
V_2, Velocity at takeoff, fps.
V_A, Air velocity, fps.
V_G, Ground velocity, fps.
μ, Coefficient of rolling friction, .015

SUBJECT—

Correction for Density (Cont'd)

C_L taxi = .90, $V_A = V_G$ = 136 ft./ sec, μ = .015, d total = 2980 ft.

Test Temp. = 46°F, Press = 30.37 ρ = .00247

$$C_{P_{av.}} = \frac{.001235 \times (.0935 - .015 \times .9)\ 1462}{\frac{65000}{32.2}\ \frac{1}{2980}} = .213$$

$$F_{density} = \frac{1}{.213(1-\frac{.00238}{.00247}) + 1} = \frac{1}{1.008}$$

Correction for Weight

(To 63000 lbs. from 65000 lbs, for XC-54GM)

$$F_{weight} = \frac{1}{(\frac{W.test}{W\ std} - 1)(1 + C_w) + 1}$$

Where $C_w = \frac{\mu\ g}{\frac{(V_2^2 - V_1^2)}{2d}}$

To V_1 speed = 136, d = 1440 ft.

$$C_w = \frac{.015 \times 32.2}{\frac{(136)^2}{2 \times 1440}} = .0752$$

$$\therefore F_{V_1}\ weight = \frac{1}{(.032)(1.0752) + 1} = \frac{1}{1.0344}$$

To V_2 = 175 V_1 = 136 fps. d = 2980-1440 = 1540 ft.

$$C_{W(V_2)} = \frac{.015 \times 32.2}{\frac{(175)^2 - (136)^2}{2 \times 1540}} = .123$$

$$\therefore F_{V_2}\ weight = \frac{1}{(.032)(1.123) + 1} = \frac{1}{1.0359}$$

SUBJECT—

Corrected Distance to V_1

$$= 1440 \times \frac{1}{.9796} \times \frac{1}{1.008} \times \frac{1}{1.0344} = 1410 \text{ ft.}$$

Corrected Distance to V_2

$$= 1410 + \left(1540 \times \frac{1}{.9667} \times \frac{1}{1.008} \times \frac{1}{1.0359}\right) = 2933 \text{ ft.}$$

Correction to Time

From the relationship $V = at$

$$t_{corr} = \frac{a_{test} \times t_{test}}{a_{corr.}}$$

but from $V^2 = 2ad.$

$$\frac{a_{corr}}{a_{test}} = \frac{d_{test}}{d_{corr.}}$$

$$\therefore t_{corr.} = \frac{d_{corrt} \; test}{d_{test}}$$

To V_1 $\Delta d_{test} = 1440 \; \Delta d_{corr} = 1410 \; \Delta t_{test} = 16.3$ secs.

$$\therefore \Delta t_{corr} = 1410 \times \frac{16.3}{1440} = 16.0 \text{ secs.}$$

To V_2 from V_1, Δd_{test} $1503 = 1540$ $\Delta d_{corr} = 1503$ $\Delta t_{test} = 10.2$ secs.

$$\therefore \Delta t_{corr} = \frac{1503}{1540} \times 10.2 = 10.1 \text{ secs.}$$

Total corrected take off time, standard conditions for $V_1 = 136$ fps, $V_2 = 175$ fps $= 26.1$ secs.

SUBJECT–

XC - 54GM Flight Path (63000 Lbs.)

Merlin 620 engines (Sea level atmosphere)

Distance to engine failure (9?.5) = 1410 ft.

Distance required to accelerate to 118 mph. = 1523 ft.

T.O. time required to attain 118 mph. = 26.1 secs.

Initial Flight Segment (6.7 seconds to retract undercarriage)

Vertical height

$= \frac{645 \times 6.7}{60} = 72$ ft.

Horizontal distance

$= 6.7 \times 118 \times 1.467 = 1160$ ft.

Horizontal distance to 50 ft.

$= \frac{50}{72} \times 6.7\ 118 \times 1.467 = 806$ ft.

XC-54GM distance to 50 feet = 3740 ft.

Second Segment (3 Seconds to feather propeller)

Vertical height

$= 3 \times \frac{770}{60} = 39$ ft.

Horizontal distance

$= 3 \times 118 \times 1.467 = 520$ ft.

Vertical height at end of segment = 111 ft.
Horizontal distance at end of segment = 4613 ft.
Time elapsed at end of segment = - 35.8 secs.

Final segment(to 1 min. from beginning of take off = ?4.? secs)

Vertical height

$= ?4.? \times \frac{901}{60} = 363$ ft.

SUBJECT--

Final Segment(To 1 min from beginning of take off= 24.2 secs)
Vertical height (Cont'd)

Horizontal distance

= 24.2 x 118 x 1.467 = 4192 ft.

Vertical height at end of 1 min. = 474 ft.

Horizontal distance at end of 1 min.= 8805 ft.

Rates of Climb

Initial Segment	645 ft. 1 min. (P_g 24.0)
Second Segment	770 ft. 1 min. RA-2-123
Final Segment	901 ft. 1 min.

DC-4 Flight Path (63000)

R-2000 P & W Engines (Sea level atmosphere)

Distance to engine failure(98.2) = 1520 ft.(Pg.6-50
Distance required to accelerate to 115 mph. (Douglas Rep't. E-168)
= 1480 ft.

Initial Flight Segment(6.7 secs. to retract undercarriage)

Vertical height.

= 365 x $\frac{6.7}{60}$ = 41 ft.

Horizontal distance

= 6.7 x 118 x 1.467 = 1160 ft.

Second Segment (7 seconds to feather propeller)

Vertical height

= 600 x $\frac{7}{60}$ = 70 ft.

SUBJECT-

Second Segment (7 seconds to feather propeller) Cont'd)

Horizontal distance

= 70 x 118 x 1.467 = 1210 ft.

Horizontal distance to 50 ft.

$= \frac{9}{70} \times 1210$ 173 ft.

DC-4 distance to 50 ft. = 4333 feet.
Vertical height at end of segment = 111 ft.
Horizontal distance at end of segment = 5370 ft.

Final Segment

Rate of climb = 700 ft. min.

Slope of path = $\frac{700}{118 \times 1.467 \times 60}$ = 67.5/1000.

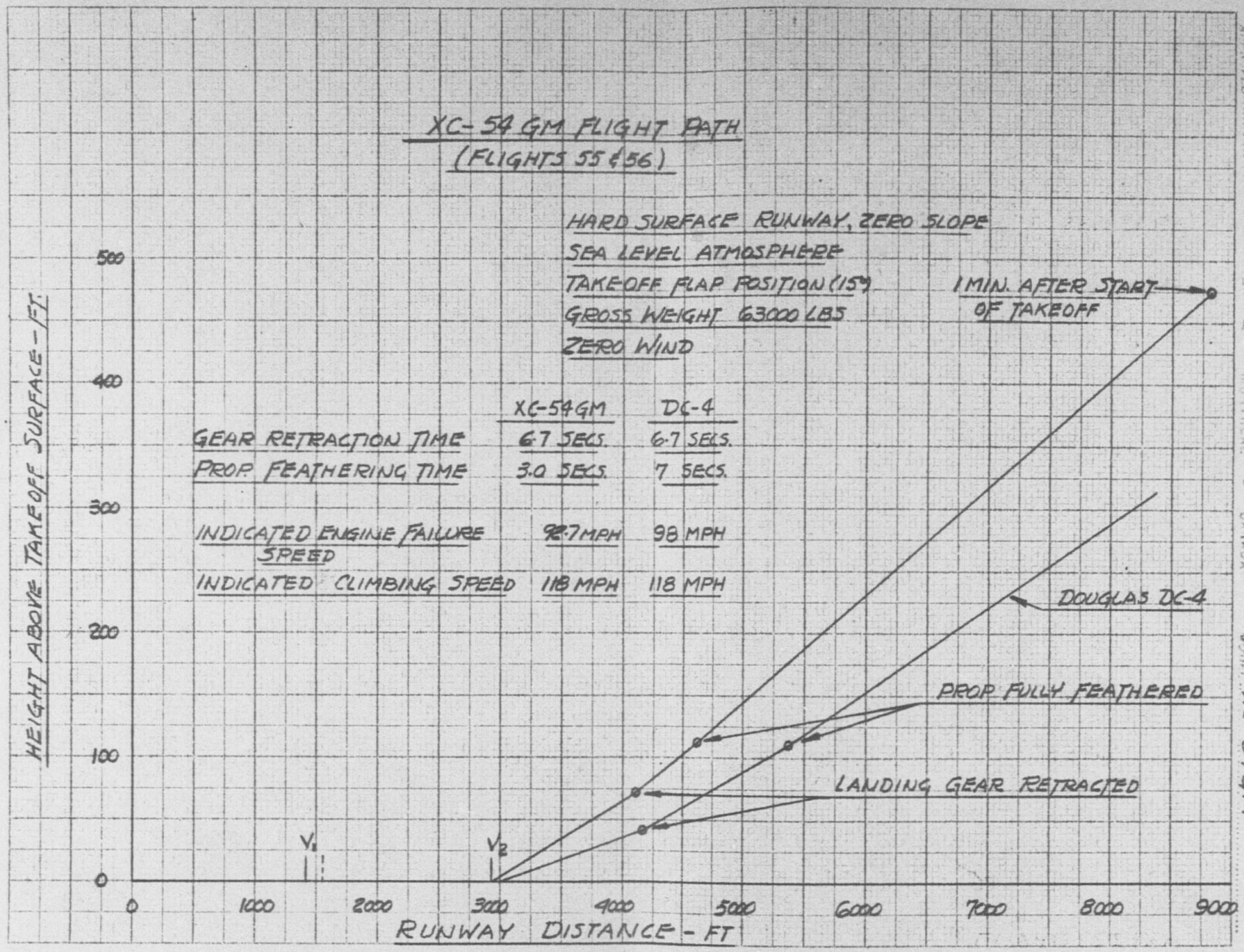
Rates of Climb.

Initial Segment	365	(Pg 6-15
Second Segment	600	Douglas E-168
Final Segment	700	

XC-54 GM FLIGHT PATH
(FLIGHTS 55 & 56)

HARD SURFACE RUNWAY, ZERO SLOPE
SEA LEVEL ATMOSPHERE
TAKE-OFF FLAP POSITION (15°)
GROSS WEIGHT 63000 LBS
ZERO WIND

	XC-54GM	DC-4
GEAR RETRACTION TIME	6.7 SECS.	6.7 SECS.
PROP. FEATHERING TIME	3.0 SECS.	7 SECS.
INDICATED ENGINE FAILURE SPEED	92.7 MPH	98 MPH
INDICATED CLIMBING SPEED	118 MPH	118 MPH



AERODYNAMICS
CANADAIR
LIMITED
MONTREAL - CANADA

XC-54GM
RA-2-123
56-11

C.I-607

DEPARTMENT OF TRANSPORT

FLIGHT REPORT

Ref. No. .....

Aircraft Type Douglas DC4M Registration Mark CF-TEN

Pilots A.J. Lilly

B. D. Murphy

Base Cartierville,

Date 15-10-46

Object of Flight Type Test Critical Engine Failure T.O.

Crew W. Harris & J. Hood

Passengers .....

.....

Dep. or Arr.	Place	Time	Time in Air	Distance	Details of Flight
	Cartierville Local	09:30			Wind light and across runway from critical side. See results computed from photo recorder.
		09:50	.20		

Pilot .....H. Murphy.....

(Test Pilot).

PREPARED
CHECKED
APPROVED

5904

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 55-1
REPORT RA-2-123
MODEL XC-54GM

SUBJECT-

FLIGHT PLAN NO.

Prepared By R.B. CAIRNS

DATE OCT 15/46

Flight No. 55

Mfg. Personnel

Pilot	A.J. LILLY		
Co-Pilot	D.D. MURPHY		
Flight Engineer	W. HARRIS		
	J. HOOD		

Airplane Model XC-54GM

Serial No.

Registration No. CF-TEN

Date of Test OCT. 15/46

Wt. @ T.O. (Lbs) 65000

Time of T.O. 9.35

C.G. @ T.O. (G.D.) 14%
(G.U.)

Wt. @ Land. (Lbs.)

CAA Personnel

Insp. In Charge	D.D. MURPHY	
Flt. Eng. Insp.		
Flight Analyst		

Time of Landing 9.40

C.G. @ Ld. (G.D.)
(G.U.)

Fuel Used (Gal.)

Approved
CAA Insp. In Charge
CAA Flight Analyst

Loading for this Flight
Take-off weight = 65000 lb.

C.G. 14%

PURPOSE OF TEST

D.O.T. TAKE-OFF DISTANCE

ACC. TO V_2 ONE ENGINE CUT AT V_1

PREPARED
CHECKED
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 55-2
REPORT RA-2-123
MODEL XC-54GM

5904

SUBJECT—

WEIGHT SHEET

WEIGHT EMPTY		42936	lb
OIL		810	lb
FUEL	2400 IMP. GALS	17280	lb
CREW	4 x 170	680	lb
PARACHUTES			lb
BALLAST		2294	lb
MISCELLANEOUS			lb
CORRECTIONS			lb
C.G. POSITION (U/C UP)		14%a	%

TOTAL @ T.O. 65000 LB

PREPARED
CHECKED
APPROVED

5904

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 56-1
REPORT RA-2-123
MODEL XC-54GM

SUBJECT—

FLIGHT PLAN NO.

Prepared By R.B.CAIRNS

DATE Oct. 15/46

Flight No. 56

Mfg. Personnel

Pilot A. LILLY

Co-Pilot D.D.MURPHY

Flight Engineer W. HARRIS

J. HOOD

Airplane Model XC-54GM

Serial No.

Registration No. CF-TEN

Date of Test OCT. 15/46

Wt. @ T.O. (Lbs) 65000

Time of T.O. 9.50

C.G. @ T.O. (G.D.) 14%
(G.U.)

Wt. @ Land. (Lbs.)

CAA Personnel

Insp. In Charge D.D. MURPHY

Flt. Eng. Insp.

Flight Analyst

Time of Landing 9.55

C.G. @ Ld. (G.D.)
(G.U.)

Fuel Used (Gal.)

Approved
CAA Insp. In Charge

CAA Flight Analyst

Loading for this Flight
Take-off weight = 65000 lb.

C.G. 14%

PURPOSE OF TEST

D.O.T. TAKE-OFF DISTANCE

ACC. TO V_2, ONE ENGINE CUT AT V_1

SUBJECT-

Take Off Performance.

Flights 55 & 56 take off tests were performed with the XC-54GM aircraft at a desired gross weight of 65000 lbs, at 930 am, Oct 15th., 1946. from Cartierville Airport.

The range grid, through which these tests were photographed, using a Bell and Howell 16 mm camera was placed 1300 ft. from runway No. 10 and normal to it at approximately 2500 ft. from the starting point of theruns. Attached to the camera mounting base (so as to follow the camera sweep) was an adjustable arm supporting a watch and blinker lamp, which was flashed, on the second at 2 second intervals. A 32 volt Aldis lamp was used in the aircraft and pointed at the camera to photographically record the time of take off power application, and also the exact point of cutting one engine.

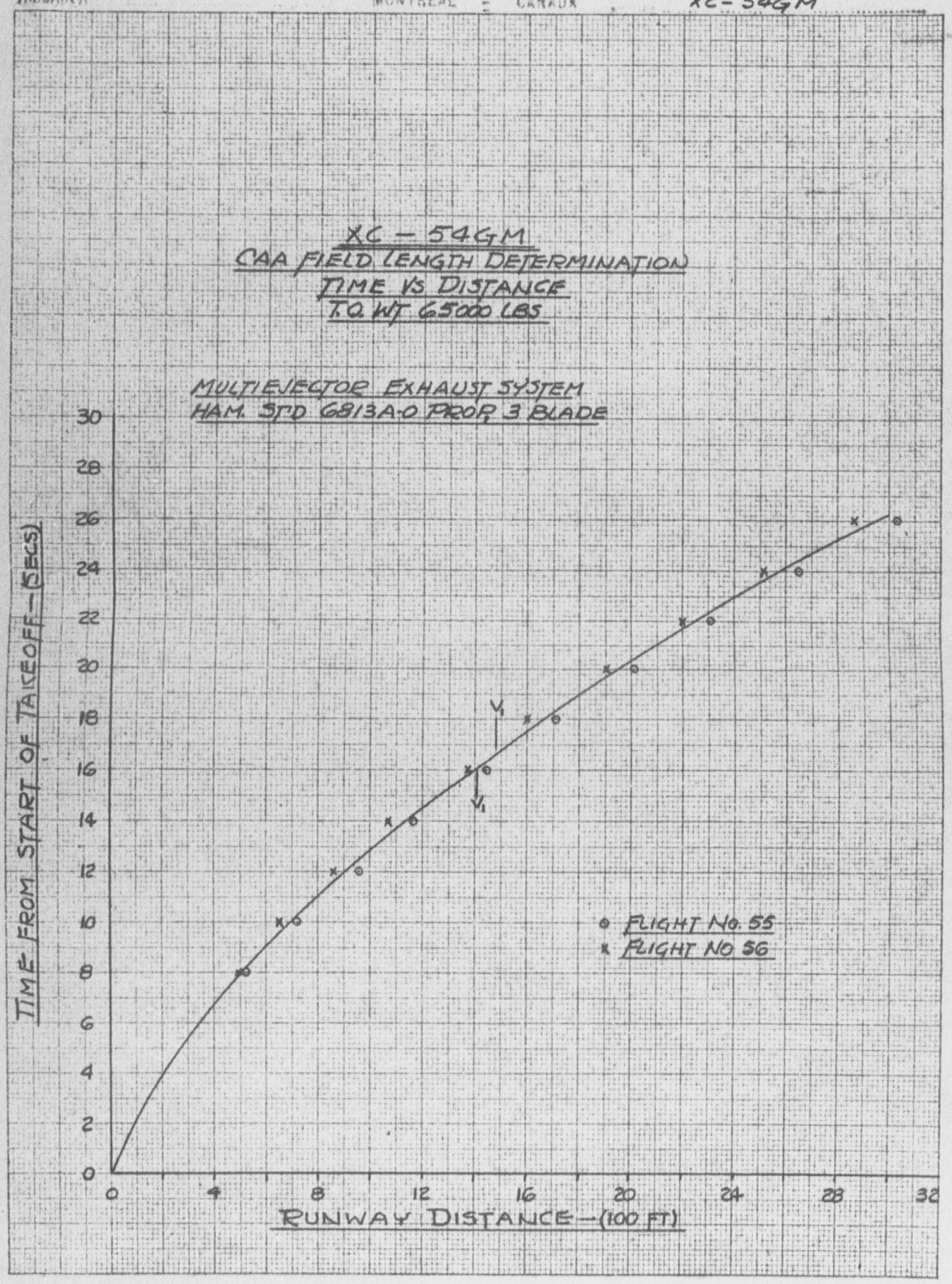
The wind during test was approximately N.N.E. at 4 mph. Since the aircraft heading was 100°, the effect of this wind on take off was extremely small and has been disregarded.

The test figures were reduced to standard conditions for a weight of 63000 lbs. from which the take off flight path was constructed for comparison with Douglas tests of the DC-4 (ref. Douglas rep't E-168). page 6-50)

The reduction methods were based upon those presented in Douglas Report SM11840, page 21, which for the most part were obtained from CAA Flight Engineering Report No. 7.

XC-54GM
CAA FIELD LENGTH DETERMINATION
TIME VS DISTANCE
T.O. WT 65000 LBS

MULTIEJECTOR EXHAUST SYSTEM
HAM. STD 6813A-0 PROP. 3 BLADE

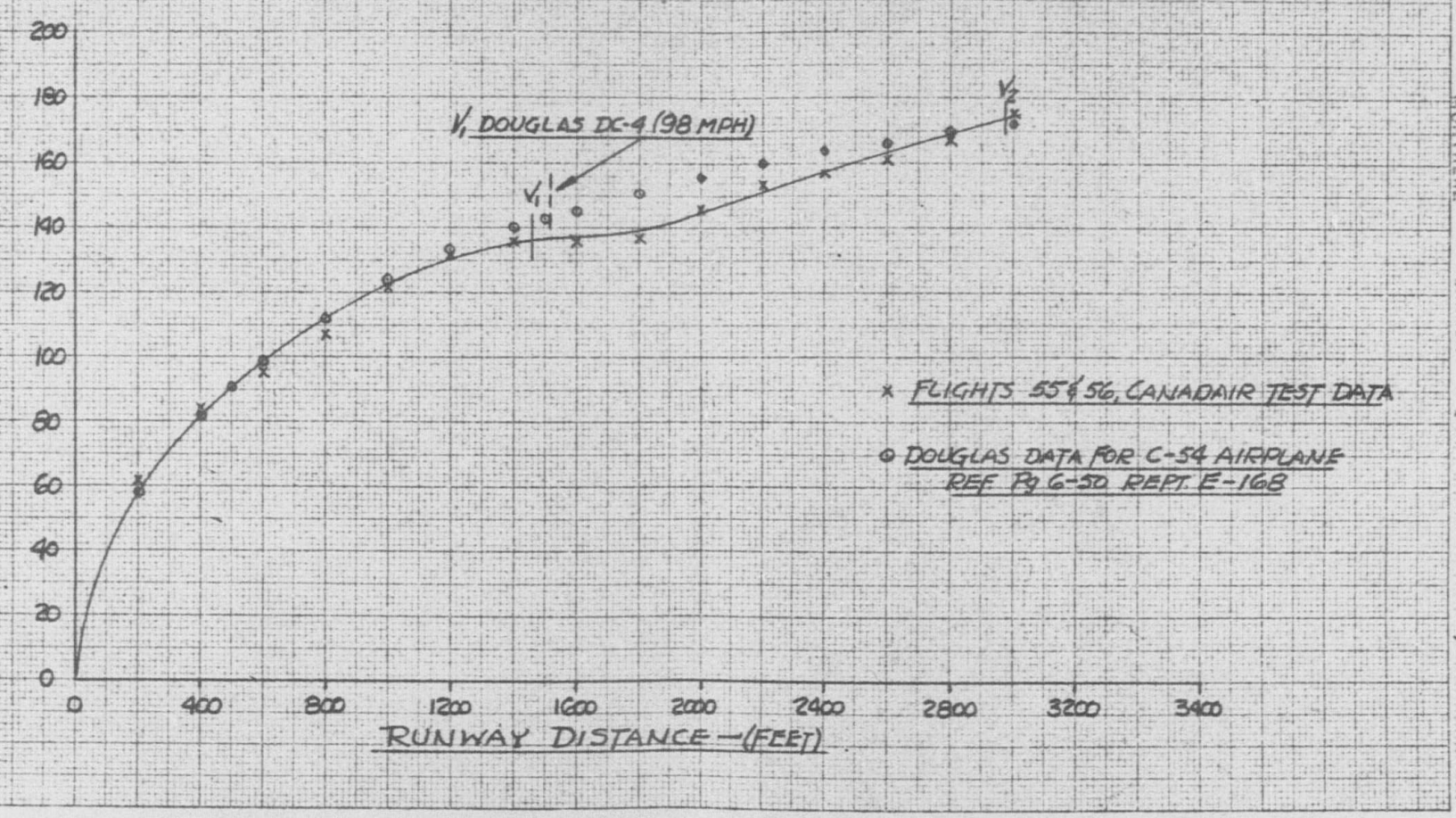


KEUFFEL & ESSER CO., N.Y. NO. 359-140
Millimeters, 5 mm lines accented, cm. lines deep
MADE IN U.S.A.

KEUFFEL & ESSER CO., N.Y. NO. 359-140
Millimeters, 5 mm lines accented, cm. lines heavy
MADE IN U.S.A.

XC-54GM
VELOCITY DISTANCE RELATIONSHIP
TO WT. 65000 LBS

MULTIEJECTOR EXHAUST SYSTEM
HAM. ST'D. 6813A-0, 3 BLADE PROP



× FLIGHTS 55 & 56, CANADAIR TEST DATA

⊙ DOUGLAS DATA FOR C-54 AIRPLANE
REF PG 6-50 REPT. E-168

5904

SUBJECT—

Take off Performance (Cont'd)

Correction for Slope

$$F_{slope} = \frac{1}{1 + \frac{2gd\ test\ Sin\varphi\ test}{V_1^2}}$$

Ref. Pg.I-3 SM11840 Douglas Report

To V_1 speed, d = 1440, $Sin\varphi$ =-.00406, V_1 = 136 f.p.s.

$$F_{slope(V_1)} = \frac{1}{1 + \frac{64.4 \times 1440 \times (-00406)}{(136)^2}} = \frac{1}{.9795}$$

To V_2 speed d = 2980-1440 =1540, V_2 = 175 f.p.s. V_1=136 f.p.s.

$$F_{slope(V_1\ V_2)} = \frac{1}{1 + \frac{64.4 \times 1540 \times (-.00406)}{(175)^2 - (136)^2}} = \frac{1}{.9667}$$

Correction for Density

$$F_{density} = \frac{1}{C_p\left(1 - \left(\frac{\rho\ std}{\rho\ test}\right)\right) + 1}$$

Pg 21 SM11840 Douglas Rept.

Where $C_\varphi = \frac{\rho}{2}\ test\ \frac{V_A^2\ test}{2}(C_D\ total - \mu\ C_L\ taxi)S$

$$\frac{\frac{W}{g}\ test\ \frac{V_G^2\ test}{2d\ test}}$$

$C_{Dp} = \frac{1}{1462}$ (C_{D_o} 28.8 + Gear 32.0 + Flaps 13.9 + Rad flaps 3.65)= .0535 Pg.V-1, RA-2-107 Canadair Rep't.

$$C_{D_i} = \frac{(C_L)^2}{\pi\ e\ R} = \frac{(.90)^2}{\pi \times .68 \times 9.44} = \frac{.04}{}$$

C_D total = .0935

* SYMBOLS:
- α, Slope of run way, positive for uphill slope
- V_1, Velocity at cutting one engine, fps.
- V_2, Velocity at takeoff, fps.
- V_A, Air velocity, fps.
- V_G, Ground velocity, fps.
- μ, Coefficient of rolling friction, .015

SUBJECT—

Correction for Density (Cont'd)

C_L taxi = .90, $V_A = V_G$ = 136 ft./ sec, μ = .015, d total = 2980 ft.

Test Temp. = 46°F, Press = 30.37 ρ = .00247

$$C_{P_{av.}} = \frac{.001235 \times (.0935 - .015 \times .9)\ 1462}{\frac{65000}{32.2}\ \frac{1}{2980}} = .213$$

$$F_{density} = \frac{1}{.213(1-\frac{.00378}{.00247})+1} = \frac{1}{1.008}$$

Correction for Weight

(To 63000 lbs. from 65000 lbs, for XC-54GM)

$$F_{weight} = \frac{1}{(\frac{W.test}{W_{std}} - 1)(1 + C_w) + 1}$$

Where $C_w = \frac{\mu\ s}{\frac{(V_2^2 - V_1^2)}{2d}}$

To V_1 speed = 136, d = 1440 ft.

$$C_w = \frac{.015 \times 32.2}{\frac{(136)^2}{2 \times 1440}} = .0752$$

$$\therefore F_{V_1} \text{ weight} = \frac{1}{(.032)(1.0752) + 1} = \frac{1}{1.0344}$$

To V_2 = 175, V_1 = 136 fps. d = 2980-1440 = 1540 ft.

$$C_{W(V_2)} = \frac{.015 \times 32.2}{\frac{(175)^2 - (136)^2}{2 \times 1540}} = .123$$

$$\therefore F_{V_2} \text{ weight} = \frac{1}{(.032)(1.123) + 1} = \frac{1}{1.0359}$$

SUBJECT-

Corrected Distance to V_1

$$= 1440 \times \frac{1}{.9796} \times \frac{1}{1.008} \times \frac{1}{1.0344} = 1410 \text{ ft.}$$

Corrected Distance to V_2

$$= 1410 + \left(1540 \times \frac{1}{.9667} \times \frac{1}{1.008} \times \frac{1}{1.0359}\right) = 2933 \text{ ft.}$$

Correction to Time

From the relationship $V = at$

$$t_{corr} = \frac{a_{test} \times t_{test}}{a_{corr.}}$$

but from $V^2 = 2ad.$

$$\frac{a_{corr}}{a_{test}} = \frac{d_{test}}{d_{corr.}}$$

$$\therefore t_{corr.} = \frac{d_{corrt} \, t_{est}}{d_{test}}$$

To V_1 $\Delta d_{test} = 1440 \Delta d_{corr} = 1410 \Delta t_{test} = 16.3$ secs.

$$\therefore \Delta t_{corr} = 1410 \times \frac{16.3}{1440} = 16.0 \text{ secs.}$$

To V_2 from V_1, $\Delta d_{test} + = 1540$ $\Delta d_{corr} = 1503$ $\Delta t_{test} = 10.2$ secs.

$$\therefore \Delta t_{corr} = \frac{1503}{1540} \times 10.2 = 10.1 \text{ secs.}$$

Total corrected take off time, standard conditions for $V_1 = 136$ fps, $V_2 = 175$ fps = 26.1 secs.

SUBJECT–

XC - 54GM Flight Path (63000 Lbs.)

Merlin 620 engines (Sea level atmosphere)

Distance to engine failure (99.5) = 1410 ft.

Distance required to accelerate to 118 mph. = 1523 ft.

T.O. time required to attain 118 mph. = 26.1 secs.

Initial Flight Segment (6.7 seconds to retract undercarriage)

Vertical height

$$= \frac{645 \times 6.7}{60} = 72 \text{ ft.}$$

Horizontal distance

$$= 6.7 \times 118 \times 1.467 = 1160 \text{ ft.}$$

Horizontal distance to 50 ft.

$$= \frac{50}{72} \times 6.7\ 118 \times 1.467 = 806 \text{ ft.}$$

XC-54GM distance to 50 feet = 3740 ft.

Second Segment (3 Seconds to feather propeller)

Vertical height

$$= 3 \times \frac{770}{60} = 39 \text{ ft.}$$

Horizontal distance

$$= 3 \times 118 \times 1.467 = 520 \text{ ft.}$$

Vertical height at end of segment = 111 ft.
Horizontal distance at end of segment = 4613 ft.
Time elapsed at end of segment = - 35.8 secs.

Final segment(to 1 min. from beginning of take off = 24.2 secs)

Vertical height

$$= 24.2 \times \frac{901}{60} = 363 \text{ ft.}$$

SUBJECT--

Final Segment(To 1 min from beginning of take off= 24.2 secs)
Vertical height (Cont'd)

Horizontal distance

= 24.2 x 118 x 1.467 = 4192 ft.

Vertical height at end of 1 min. = 474 ft.

Horizontal distance at end of 1 min.= 8805 ft.

Rates of Climb

Initial Segment	645 ft. 1 min. (P_g 24.0)
Second Segment	770 ft. 1 min. RA-2-103
Final Segment	901 ft. 1 min.

DC-4 Flight Path (63000)

R-2000 P & W Engines (Sea level atmosphere)

Distance to engine failure(98.2) = 1520 ft.(Pg.6-50
Distance required to accelerate to 115 mph. (Douglas Rep't. E-168)
= 1480 ft.

Initial Flight Segment(6.7 secs. to retract undercarriage)

Vertical height.

= $365 \times \frac{6.7}{60}$ = 41 ft.

Horizontal distance

= 6.7 x 118 x 1.467 = 1160 ft.

Second Segment (7 seconds to feather propeller)

Vertical height

= $600 \times \frac{7}{60}$ = 70 ft.

SUBJECT-

Second Segment (7 seconds to feather propeller) Cont'd)

Horizontal distance

= 70 x 118 x 1.467 = 1210 ft.

Horizontal distance to 50 ft.

$= \frac{9}{70}$ x 1210 173 ft.

DC-4 distance to 50 ft. = 4333 feet.
Vertical height at end of segment = 111 ft.
Horizontal distance at end of segment = 5370 ft.

Final Segment

Rate of climb = 700 ft. min.

Slope of path = $\frac{700}{118 \times 1.467 \times 60}$ = 67.5/1000.

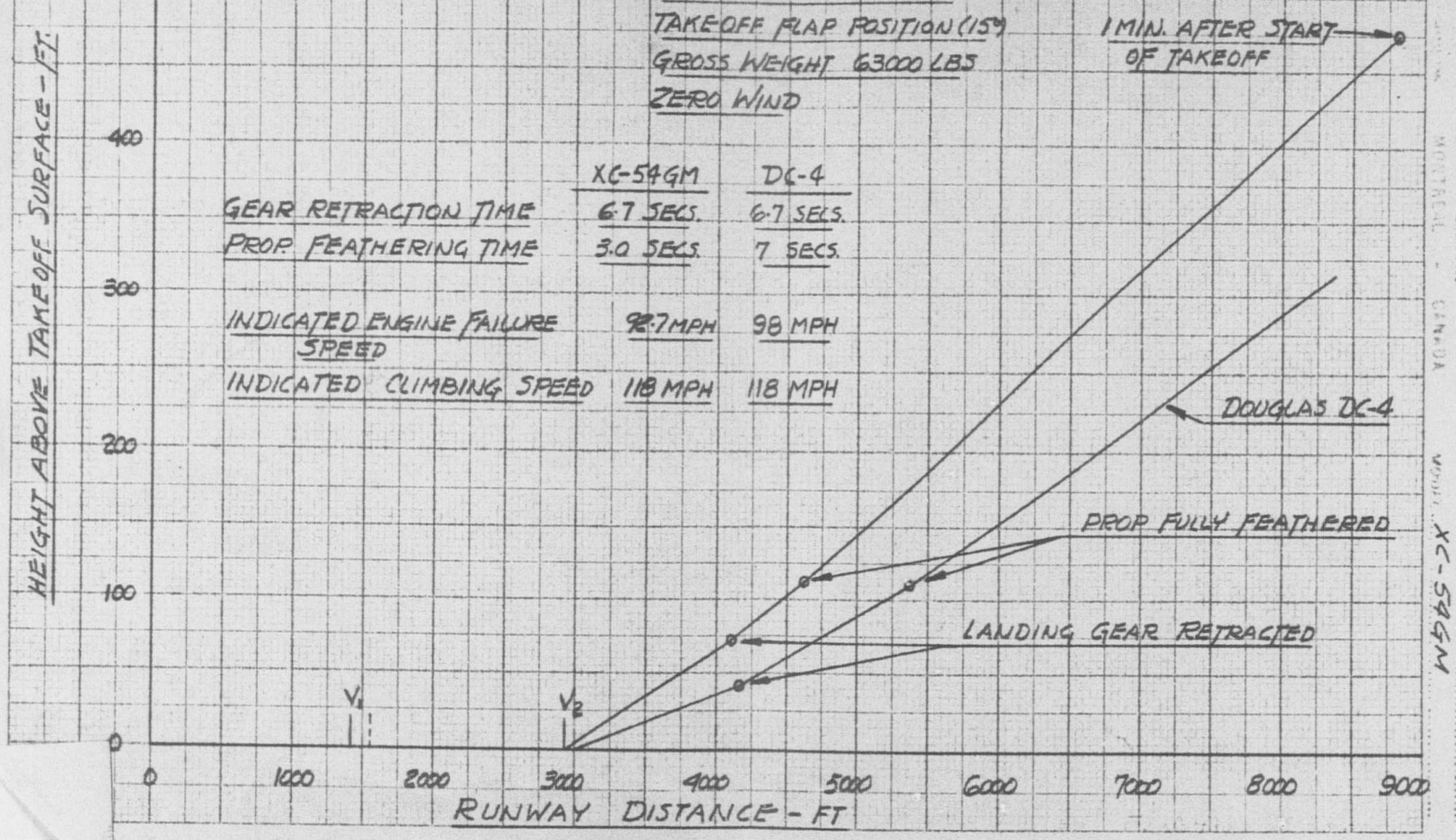
Rates of Climb.

Initial Segment	365	(Pg 6-15
Second Segment	600	Douglas E-168
Final Segment	700	

XC-54 GM FLIGHT PATH
(FLIGHTS 55 & 56)

HARD SURFACE RUNWAY, ZERO SLOPE
SEA LEVEL ATMOSPHERE
TAKE-OFF FLAP POSITION (15°)
GROSS WEIGHT 63000 LBS
ZERO WIND

	XC-54GM	DC-4
GEAR RETRACTION TIME	6.7 SECS.	6.7 SECS.
PROP. FEATHERING TIME	3.0 SECS.	7 SECS.
INDICATED ENGINE FAILURE SPEED	92.7 MPH	98 MPH
INDICATED CLIMBING SPEED	118 MPH	118 MPH



AERODYNAMICS
CANADAIR
LIMITED
MONTREAL - CANADA

56-11
RA-2-123
XC-54GM

DEPARTMENT OF TRANSPORT

FLIGHT REPORT

Ref. No. .....

C-I-607

Aircraft Type..Douglas DC4M..... Registration Mark CF-TEN.....

Pilots..A.J. Lilly..... Base ..Cartierville....

.....D. D. Murphy..... Date .....15-10-46.....

Object of Flight ..Type Test Critical Engine Failure T.O.....

Crew ..W. Harris & J. Hood.....

Passengers .....

.....

Dep. or Arr.	Place	Time	Time in Air	Distance	Details of Flight
	Cartierville Local	09:30			Wind light and across runway from critical side. See results computed from photo recorder.
		09:50	.20		

Pilot .....D.D. Murphy.....

(Test Pilot).

OFFICE & WORKS:
CARTIERVILLE, P. Q.

46

TELEPHONE:
*ATLANTIC 9431

Canadair
Limited

POST OFFICE BOX 6087
Montreal

November 13, 1946.

Mr. D.D. Murphy,
Chief Test Pilot,
Department of Transport,
Ottawa, Ontario.

Dear Sir:

Please find attached two copies of Report RA-2-123 Flight Plan #55 and #56, covering 3 engine take-off distances and accelerations on the CF-TEN aircraft.

I trust you will find these reports satisfactory in every way and that the results obtained meet your requirements.

Very truly yours,

R.M. Crooks.

R.M. Crooks,
Assistant Design Office Supervisor.

RMC:mj

attach.

DDM/M

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

4?

2
6-44

Ottawa, Ontario, November 14th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Test Reports / CF-TEN Aircraft.	5008-T5-14.

MEMORANDUM TO S.A.R., C.A.E.:

58340

1. Attached hereto please find completed reports from Canadair, Ltd. concerning the take-off distance tests accelerating to V2, one engine cut at V1, of the DC4M, Model XC-54GM Douglas aircraft.

2. It will be noted that the velocity of this aircraft was recorded as 130 f.p.s. approximately 92 miles per hour when the engine was cut at V1. The airspeed indicated in the cockpit was, however, 100 miles per hour; the aircraft, therefore, accelerated to V2 and with 3 engines only in very nearly the same time it took the Douglas DC4E to accelerate to V2 after cutting their engine @ 98 miles per hour.

3. It is felt that on the basis of comparison with the DC4E, the DC4M shows equally as good take-off performance in this configuration and its climb to 50' is, of course, considerably better.

4. It is the opinion of the undersigned that the propellers installed on this aircraft at the time of the tests are not the most efficient for take-off performance. It is understood that they are being replaced with Curtiss Electric Propellers which, it is expected, will materially change the performance of this aircraft. If Canadair, Ltd., as a result of their own tests, decide to retain the Curtiss Electric Propellers as standard equipment, it is my opinion that all tests on the DC4M should be re-run.

5. It is recommended that Canadair Report No. RA-2-123 be accepted subject to re-check by aeronautical engineers.

D.D. Murphy

(D. D. Murphy),
Test Pilot.

C.A.E. Please return 1 copy at your convenience. C.F.S. 21/11/46

DDM/M

LCF

5008-T5-14 ✓

~~5010-10-97~~

Ottawa, Ontario,
November 22nd, 1946.

Canadair, Limited,
P. O. Box 6087,
Montreal, Quebec.

Dear Sirs: Attention: Mr. R. M. Crooks.

This is to thank you for your letter of the 13th instant with copies of Report No. RA-2-125 covering the take-off distance tests carried out on CF-TEM. It is noted that you have only shown data for a weight of 65,000 lbs. Since you are desirous of obtaining a type certificate for this aircraft at a gross weight of 75,000 lbs., it will be necessary to show the comparison of the take-off distance performance of the DC4M with the Douglas DC4 aircraft at 75,000 lbs.

It is presumed that comparison will be based upon the tests run on October 15th, 1946.

Yours truly,

CAE

(D. D. Murphy),
Test Pilot.

DIAR MONTREAL

M

PA

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

4 9 2 8-45

910 Confederation Building,
Montreal 2, Que., December 17, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T5-14	Douglas DC4M-1 CF-TEN-X	5008-T5-14

L.A.C

62592

PA

TRANSPORT RECORDS
DEC 18 A.M 1946
File 5008-T5-14.

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer

1. The subject aircraft, having a total flying time of 137-17 hours, is undergoing engine change at Canadair Limited together with a 100 hour inspection of the aircraft structure.

2. During this inspection it was found that the skin plating on the top surface of the centre plane was badly cracked along each rib at the rear of each engine nacelle fairing, and that the skin is also cracked on each rivet along the lap of the plating.

3. It is understood that the company has grounded the aircraft pending decision of the Engineering Department as to the method of repairing, if any, and further information will be forwarded when a repair scheme has been drawn up and offered by Canadair Engineering Staff.

noted 18/12/46

Noted

D. T. Jackson,
Resident Inspector, A. I. D.,
for District Inspector, Air Regulations.

DTJ:AR

Globe and Mail 27 Jan 47

5008-TS-14

50

68232

LIBRARY
Department of Transport
OTTAWA, CANADA



U.S. Firm to Produce Canadian Plane—The Electric Boat Company of New York, manufacturer of submarines, has entered the aviation field by taking over the complete production of the four-engined "North Star" transport plane. The plane is now being produced at Montreal for Trans-Canada Airlines and the RCAF. —AP.

T.C.A.P.

CAR

C. B. Edwards

6

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-47

910 Confederation Building,
Montreal 2, Que., January 19, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Rolls Royce Engine Failure Douglas DC4M1 CF-TEN-X	5008-T5-14

A33364 TRANSPORT-RECORDS
JAN 20 A.M.
File 5008 T5-14

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer

1. On June 29, 1947, while the subject aircraft was being test flown for the purpose of checking the performance of the three bladed Curtiss Propellers, No. 4 engine, Rolls Royce No. 304425, failed eighteen minutes after take off. The aircraft returned to Cartierville Airport and the engine was removed.

2. It was found that the connecting rod had punctured the side of the crankcase and the complete engine was forwarded to Rolls Royce Limited, England, for official investigation and report. This report is now on hand and a copy is attached hereto, together with copy of the remarks of Canadair's Chief Inspector.

3. It is noted from this report on the second page under the title "Discussion on Causes of Failure" that the initial failure of the connecting rod assembly was due to the nut slackening back on the fork rod bolt after the split pin had been lost. The lost split pin was recovered during inspection and found to have one tang broken and the other approximately straightened out.

4. The writer does not agree with the conclusions contained in Rolls Royce Limited Report, since it is considered extremely unlikely that vibration would break one tang of a split pin and straighten the other without affecting the many other split pins in the crank shaft assembly.

5. For your information, please.

Noted 22/1/48 Hob

D. T. Jackson

D. T. Jackson,
Resident Inspector, A.I.D.,
for District Inspector, Air Regulations.

DTJ:AR

"C O P Y"

D E F E C T I N V E S T I G A T I O N R E P O R T

ISSUED BY

R O L L S - R O Y C E L I M I T E D. D E R B Y

Copies Circulated To:

Rbr.
FTH.
Ctl & Ctl/AGN.
Cal.
Cal/McB.
Pan/JHL.
EW-D/HB/WSM.
Brns. (2)
E/TGD...Library.

Subject: Connecting Rod Failure in Flight

Ref: EW-D/HB/JRH.3/JMG. 19m. 23. 10. 47.

Engine No. Merlin 620 - 304425. Ex Aircraft North Star MI. Prototype CF-TENX.

Operator Canadair Ltd. RUNNING TIME 130hrs. 30 mins.

Installation Starboard Outer

History

The above engine was one of the engines supplied to Canadair to replace the original Prototype Merlin 620 engines which had a limited life of 150 hours. This engine which had Mod. 2328 (Spherically seated main bearing cap nuts) fitted retrospectively in Canada by Rolls-Royce personnel, was installed in T.M.L. Power Plant No. 300004 and fitted to No. 4 position of CF-TENX. Since installation it had completed a series of flights at Canadair with Curtis Wright electric propellers.

Condition at Time of Failure

The aircraft took off and after 15 minutes attempted a second segment climb' to CAA requirements, i.e. a three engine climb at maximum power 3000 r.p.m. and 70" Hg. with No. I engine idling. After approximately 3 minutes at this power condition at an altitude of about 3,500 feet the oil inlet temperature was 80°C and the coolant temperature was 125°C to 140°C when there was a report and shock from the No. 4 engine. The engine which was spewing oil and glycol was feathered immediately. The oil pressure which was normal at the time of failure was maintained until the engine was feathered approximately 20 secs. afterwards.

Investigation

An investigation was carried out in Canadair by EW-D, Pan/JHl, and JHl/Gbr. and further investigation at Derby merely confirmed the conclusions reached in Canada. The following data was compiled from pieces recovered from the engine in Canada and returned by air for examination.

Examination of the engine showed that No. I connecting rod assembly had failed completely while No. 2 fork connecting rod was torn away from the big end assembly which was still held on the crankshaft by No. 2 blade rod.

The failed parts of the No. 1 connecting rod assembly showed fretting on the joint faces of the cap and blade rod bearing blocks while fretting was also evident on the joint faces of the blade rod and its cap.

The four fork rod bolts from No. I assembly were recovered and it was noted that the seating faces of the nuts were

COMPILED BY :
EW-D/HB/JRH.

APPROVED BY :
EW-D/HB.

52

severely fretted. On three of the broken bolts the nuts were properly pinned but on the fourth the nut was found partially slacked back while the split pin was missing. The split pin with one tang broken and the other approximately straightened out was recovered from the lower half and it was considered that this pin was the one missing from the above fork rod bolt. The broken tang was also found.

The fork rod bolts belonging to the No. 2 assembly were also recovered and it is considered that these were broken in overload. There were no signs of fretting on the seating faces of the nuts.

Examination of the remainder of the engines at Derby revealed no abnormal features, the main bearings, and the remaining connecting rod bearings being all in satisfactory condition.

Discussion on Causes of Failure

From the above it is clear that the initial failure has been of the No. I connecting rod assembly due to the nut slackening back on the fork rod bolt after the split pin had been lost. This is confirmed by the severe fretting on the mating faces of the assembly. Examination of the failed split pin showed that one tang had broken off in rapid fatigue and it is most probable that this has been associated with some abnormal vibration condition. However even with one tang broken off the split pin should have been held in the nut by the remaining tang and it is possible that a contributary factor to the failure is that the second tang had been insufficiently bent. The split pinning on the remaining connecting rod assemblies was quite satisfactory.

For the last 5 hours 40 mins running (including 3 hours 10 mins flight) three bladed Curtis Wright propellers with 744 type blades had been fitted to the engines of this aircraft. With these propellers which are not cleared for operation on the Merlin or, as far as we know for normal use on any engine, complaints were made by the Canadair Chief Test Pilot of roughness and vibration and several unsuccessful attempts had been made to eliminate it. On installing the replacement engine following the failure a test flight was made during which cockpit vibration observations were made by Curtiss Wright engineers using a portable vibration meter and as a result of this they removed No. 4 propeller for rebalancing and blade angle checking, since they considered it to be causing severe vibration. This is the same propeller which was fitted to the engine on which the connecting rod failure occured.

The only previous case on record of a Merlin engine throwing connecting rod split pins occurred on a Development engine and was traced to vibration caused by a rear propeller shaft bearing which was breaking up, and summing up it is very significant that the only case of connecting rod split pin failure in service, on a Merlin either military or civil occurred on an engine where severe vibration had been imposed from and external source, i.e. the propeller.

Conclusions

It is therefore considered that this connecting rod failure can be directly attributed to severe vibrations imposed on the engine during experimental flight with a non standard propeller, which was later found to be incorrectly adjusted.

EW-D/HB.

Copies made for -
Messrs. I. Manley
T.J. Emmert
K.G. Smith
R.M. Crooks
L.H. Kettmeier
H.L. McKeown

51

January 16th, 1948.

Department of Transport,
910 Confederation Bldg.,
Montreal, Quebec.

Attention: Mr. D. Jackson.

Dear Sir:

In reference to your letter of January 14th, your file 5008-T5-14, two copies of the Rolls-Royce report on engine serial no. 304425 removed from CF-TEH-X are enclosed as requested.

This report attributes the failure directly to severe vibrations imposed on the engine during experimental flight.

Flight crew concerned report that the vibration experienced was not severe and in fact was less than that experienced with common operational problems.

It is my understanding that the vibration was slight enough that it possibly would not have been considered significant except for the effect on the special instrumentation installed for the test program being run.

Very truly yours,

H. L. McKeown
Chief Inspector

nc

c.c. Mr. R. Neale

CONFIGURATION:- ENGINES Merlin MK 624 PROPS Curtiss C532S/742 REDUCTION GEAR .4202 A/C CF-TEN-X

GENERAL Engineering Flight - Canadair 706280 Manifolds - Both Banks

W.R.O. Misc.31, Misc.59 ENGINEERING ORDER DATE April 16, 1948

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
	Ground Checks	--	--	--	--	--	MS	3000 2650 2500 2300 2100 1900	Full Fine Pitch	open	open	--	--	2 hr.	Checks to be carried out on #2 and #3 Power Plants separately. Complete temperature and flow surveys of manifold installation. Sound checks.
194 (A)	Second Segment Climb	72,000 ↓ 71,000	24	2,000 ↓ 4,000	15	up	MS	3000	71.6	25	open	#1W/M	116	1	5 climbs Performance, sound, intercooler and special exhaust system readings.
	Level Runs	71,000 ↓ 69,000	24	10,000	up	up	MS	2850 2650 2500 2400 2300 2200 2100 2000	FT FT FT FT FT FT FT FT	close " " " " " " "	105°C " " " " " " "	--	--	2	Performance, sound & exhaust system readings Intercooler temp. survey and determination of low power heating requirements.
	Cooling Climb	69,000 ↓ 67,000	24	2,000 ↓ 19,000	up	up	MS FS	2850	58.4	55°	open #1 close	#1	159	1	Performance -- intercooler and exhaust system rdgs.
				19,000 ↓ 23,000	up	up	FS	2850	58.4	55°	open	--	159		

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
	Level Runs	67,000 ↓ 65,000	24	23,000	up	up	FS	2850 2750 2650 2500 2400 2300	FT FT FT FT FT FT	close " " " " "	105°C " " " " "	--	--	1½ hr	Performance, sound and exhaust system readings. Intercooler temp. survey and determination of low power heating.
													Total time	5½ hrs.	Landing wt. 64,000 approx.
	Above plan (A) to be followed if temperature lapse rate and other conditions are satisfactory for cooling climb and 23,000 ft. levels. If unsatisfactory conditions prevail, the following plan (B) is to be followed.														
194 (B)	Second Segment Climb	72,000 ↓ 71,000	24	2,000 ↓ 4,000	15	up	MS	3000	71.6	25	open	#1W/M	116	1 hr.	5 climbs Performance sound, intercooler and exhaust system readings. Dump ballast to 68,000# G.W.
	Level Runs	68,000 ↓ 66,000	24	10,000	up	up	MS	2850 2650 2500 2400 2300 2200 2100 2000	FT FT FT FT FT FT FT FT	close " " " " " " "	105°C " " " " " " "	--	--	2 hrs.	Performance, sound, intercooler and exhaust system readings.
													Total time	3 hrs.	Landing wt. 65,000 approx.

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
195 (B)	Cooling Climb	69,000 ↙ 67,000	24	2,000 ↑ 19,000	up	up	MS FS	2850	58.4	55°	open #1 close	#1	159	1 hr	Performance and exhaust system readings.
				19,000 ↑ 23,000	up	up	FS	2850	58.4	55°	open	--	159		
	Level Runs	67,000 ↙ 65,000	24	23,000	up	up	FS	2850 2750 2650 2500 2400 2300	FT FT FT FT FT FT	close " " " " "	105°C " " " " "	--	--	1½ hr.	Performance sound, intercooler, and exhaust system readings.
												Total time		2½ hrs.	Landing wt. 64,000 approx.
195(A) or 196(B)	3 Engine Enroute Climbs	79,000 ↙ 77,000	24	4,000 ↑ 6,000	up	up	MS	2850	58.4	55°	open	#1	159	1¼ hr	5 Climbs. Performance, sound, intercooler, and exhaust system readings. Dump ballast to 68,000# G.W.
	Note: This test may alternatively be carried out at the beginning of Flt. No. 194, as a separate flight, or included in certification program.														
												Total time		1¼ hrs.	Landing wt. 68,000# approx.

TOTAL TIME FOR PROGRAM.....6¾ hours.

CONFIGURATION:- ENGINES Merlin MK 624 PROPS Curtiss C532S/742 REDUCTION GEAR .4202 A/C CF-TEN-X

GENERAL Engineering Flight - Canadair 706280 Manifolds - Inboard Only

W.R.O. Misc. 31, Misc.59 ENGINEERING ORDER DATE April 16, 1948

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Time	Test
197 to 199	Repeat ground and flight tests as detailed for flights 194 to 196 inclusive.														Performance, sound and exhaust system readings with manifolds on inboard banks only. Further intercooler system tests if necessary.

Total time 6¾ hrs.

CONFIGURATION: ENGINES Merlin MK 624 PROPS Curtiss C532S/742 REDUCTION GEAR .4202 A/C CF-TEN-X

GENERAL Engineering Flight - Intercooler Tests

W.R.O. Misc. 59 ENGINEERING ORDER # DATE: April 16, 1948

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	Engines R.P.M.	Engines M.P.	Engines Main Flap	Engines Aux. Flap	Engines Inop. Eng.	I.A.S.	Time	Test
200	Four Engine Take-off	65,000	24	S.L.	15	down	MS	3000	71.6	25°	open	--	--	4	8 Take-offs. Flight recorder measurements of charge temperature during take off. Temperature lag to be determined on both #2 and #3 power plants.
												Total time		4	hrs.

Total time for Dev. Program 17½ hrs.

Allowance for Manoeuvre and Retest 4½ hrs.

TOTAL FLYING TIME 22 hrs.

GROUND RUNNING TIME 5 hrs.

Note: Take-offs of flights 194 to 200 inclusive to be photographed.

CONFIGURATION:- ENGINES Merlin MK 624 PROPS Curtiss C532/742 REDUCTION GEAR .4202 A/C CF-TEN-X

GENERAL Certification Program - Curtiss Propellers and Canadair Manifolds

W.R.O. Misc. 37 ENGINEERING ORDER # DATE: April 16, 1948.

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	Engines R.P.M.	Engines M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
201	Second Segment Climb	81,000 ↓ 80,000	24	2,000 ↓ 4,000	15	up	MS	3000	71.6	25	open	#1W/N	122	⅓ hr.	3 Climbs
	Level Runs	80,000 ↓ 79,000	24	10,000	up	up	MS	*	FT	close	105°C	--	160 - 170	½ hr.	Runs at low power.
														* RPM 160	to be set to give and 170 MPH.
															Dump water to reduce wt. to 72,000#
	Three Engine Enroute Climb	72,000 ↓ 70,500	24	4,000 ↓ 6,000	up	up	MS	2850	58.4	55°	open	#1	155	¾ hr.	3 Climbs. Dump water to reduce wt. to 63,000 lb. app
	Level Runs	63,000 ↓ 62,000	24	10,000	up	up	MS	2850 2650	FT FT	close	105°C	--	--	½ hr.	
											Total time			2¼ hrs.	Ldg. wt. 62,000# approx.

Note: Take-offs of flights 201 - 205 incl. to be photographed.

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
202	Cooling Climb	73,000 ↙ 71,000	24	2,000 ↙ 23,000	up	up	MS FS	2850	58.4	ø	open	†	ø	1 hr.	1 Climb. ø Cooling configuration determined from flight 201. † No.1 engine inoperative to 21,000 ft. approx.
	Level Runs	71,000 ↙ 70,000	24	23,000	up	up	FS	ø	FT	close	105°C	--	160 170	½ hr.	ø RPM to give 160 and 170 MPH IAS. Dump water to reduce wt to 68,000#
	2 Engine Enroute Climb	68,000 ↙ 66,800	24	4,000 ↙ 6,000	up	up	MS	2850	58.4	ø	open	#1 #2	ø	¾ hr.	3 Climbs ø Determined from flt. 201. Dump water to reduce wt to 63,000 lbs.
	Second Segment Climb	63,000 ↙ 62,000	24	2,000 ↙ 4,000	15	up	MS	3000	71.6	25	open	#1W/M	116	½ hr.	3 Climbs.
	3 Engine Enroute Climb	62,000 ↙ 60,800	24	4,000 ↙ 6,000	up	up	MS	2850	58.4	50	open	#1	150	¾ hr.	3 Climbs. Dump water to reduce wt. to 58,000#
	2 Engine Enroute Climb	58,000 ↙ 56,800	24	4,000 ↙ 6,000	up	up	MS	2850	58.4	ø	open	#1 #2	ø	¾ hr.	3 Climbs ø Determined from flight 201

Total time 4½ hrs. Ldg.wt.56,500#

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inops. Eng.	I.A.S.	Est. Time	Test
203	Second Segment	81,000 ← 80,000	24	2,000 ← 4,000	0°	up	MS	3000	71.6	25	open	#1W/M	121	½ hr.	3 Climbs. [illegible]
	Initial Segment Climb	80,000 ← 78,600	24	Approx. 2,000	15	down	MS	3000	71.6	25	open	#1W/M	121	½ hr.	3 Climbs
	Third Segment Climb	78,600 ← 77,400	24	Approx. 2,000	15	up	MS	3000	71.6	25	open	#1	121	½ hr.	3 Climbs
	Fourth Segment Climb	77,400 ← 76,200	24	Approx. 2,000	15	up	MS	2850	58.4	60	open	#1	121	½ hr.	3 Climbs Dump water to reduce wt. to 74,000#
	Second Segment Climb	74,000 ← 72,800	24	Approx. 7,500	15	up	MS	3,000	71.6	25	open	#1W/M	116	½ hr.	3 Climbs
	4 Engine Climb	72,800 ← 72,000	24	5,000 ← 17,000	up	up	MS	2850	58.4	*	open	--	157 to 10,000 152 from 10,000	¼ hr.	1 Climb * Determined from flight 201
	3 Engine Saw-tooth Climb	72,000 ← 69,000	24	17,000 ← 19,000	up	up	FS	2850	58.4	*	open	#1	140 150 160 170	1¾ hr.	2 Climbs each setting. Max. level speed. 160 & 150 MPH IAS. * Determined from flight 201
														Total time 4½hrs.	Dump water to reduce landing wt. to 68,000 lbs. max.

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A. S.	Est. Time	Test
204	4 Engine Enroute Climb	81,000 ↙ 79,800	24	4,000 ↙ 6,000	up	up	MS	2850	58.4	*	open	--	*	¾ hr.	3 Climbs * Determined from flight 201
	4 Engine Climb	79,800 ↙ 79,000	24	5,000 ↙ 16,000	up	up	FS	2850	58.4	*	open	--	157 to 10,000 152 from 10,000	¼ hr.	1 Climb * Determined from flight 201
	4 Engine Saw-tooth Climb	79,000 ↙ 77,000	24	16,000 ↙ 19,000	up	up	FS	2850	58.4	*	open	--	145 155 165	1¼ hr.	3 Climbs Max.level speed 165 MPH IAS * Determined from flight 201 Dump water to reduce wt. to 70,000 lbs.
	4 Engine Saw-tooth Climb	70,000 ↙ 67,800	24	23,000 ↙ 25,000	up	up	FS	2850	58.4	*	open	--	135 145 155 165	1½ hr.	4 Climbs Max.level speed 155 MPH IAS * Determined from flight 201

Total time 3⅝ hrs. Ldg. wt. 67,500# approx.

Flt. No.	Description	Weight	% C.G.	Altitude	Flap	Ldg. Gear	Engines S/CH	R.P.M.	M.P.	Main Flap	Aux. Flap	Inop. Eng.	I.A.S.	Est. Time	Test
205	Initial Segment Climb	72,000 ← 70,600	24	Approx. 2,000	15	down	MS	3000	71.6	25	open	#1W/M	116	½ hr.	3 Climbs
	Third Segment Climb	70,600 ← 69,400	24	Approx. 2,000	15	up	MS	3000	71.6	25	open	#1	116	½ hr.	3 Climbs
	Fourth Segment Climb	69,400 ← 68,200	24	Approx. 2,000	15	up	MS	2850	58.4	60	open	#1	116	½ hr.	3 Climbs
	Second Segment Climb	68,200 ← 67,000	24	Approx. 7,500	15	up	MS	3000	71.6	25	open	#1W/M	113	½ hr.	3 Climbs
	4 Engine Climb	67,000 ← 66,200	24	5,000 ← 17,000	up	up	MS	2850	58.4	@	open	--	151 to 10,000 148 from 10,000	¼ hr.	1 Climb @ Determined from flight 201
	3 Engine Enroute Climb	66,200 ← 65,000	24	17,000 ← 19,000	up	up	FS	2850	58.4	@	open	#1	@	¾ hr.	3 Climbs @ Determined from flight 201
	4 Engine Enroute Climb	65,000 ← 63,800	24	17,000 ← 19,000	up	up	FS	2850	58.4	@	open	--	@	¾ hr. @	3 Climbs Determined from flight 201

Total time 3¾ hrs. Ldg. Wt. 63,500 approx

Total for program	18½ hr.
Allowance for manoeuvrg. and retest	6½ hr.
TOTAL FLYING	25 hrs.

April 19, 1948.

W.R.O. Misc. 31
Misc. 37
Misc. 59

TO: Messrs. T. J. Emmert
K. G. Smith
C. A. Ulsh
A. J. Lilly (2)
H. L. McKeown (2)
R. S. Campbell
B. J. McColl (2)
G. E. Otter (2)
T. V. Chandler (2)
Wm. DeMine

Subject: CF-TEN-X Test Program

The attached flight plans describe the tests necessary to complete the current program on aircraft CF-TEN-X.

These tests will cover the following:

(a) Performance and sound characteristics of Canadair manifolds on both engine banks.

(b) Performance and sound characteristics of Canadair manifolds on inboard banks only.

(c) Engineering data on cooling, and back pressure of Canadair manifolds, and improvement in aerodynamic flow due to revised cowling.

(d) Data on intercooler system effectiveness and possible improvement in intercooling.

(e) Certification of C-4 airplane with Curtiss C532S/742 propellors and Canadair exhaust manifold.

(f) Data for C-4 operation manual.

Items (a) to (d) above constitute a development program and will not require D.O.T. observation. As far as is possible, the development flights will be arranged to take place from Cartierville Airport.

The certification program, items (e) and (f) will require D.O.T. observation and the flying will have to take place from Dorval Airport.

T. A. Harvie
Test and Development Supervisor.

TAH:dr
Encl.

Approved:

K. G. Smith
Project Engineer.

T. J. Emmert
Vice President.

TRANSPORT-RECORDS
JUL 22 P.M.
File 5008-75-14

5008-75-14

Room 44, Trans-Atlantic Admin. Bldg.,
Montreal Airport, Dorval, Que., July 21, 1948.

Canadair Limited,
P.O. Box 4087,
Montreal, Que.

A16933

Gentlemen:

Re: C-54GK Registration CF-TEK-X

This letter will be your authority for a ferry flight from Montreal to Caldwell, New Jersey, U.S.A. and return to Montreal, for the purpose of special vibration and magna-fluxing tests to be carried out on the propellers of this machine.

No passengers other than necessary crew may be carried in this machine during this ferry flight.

Yours truly,

J.P. Fournier,
for J.L. Blondeau,
District Inspector, Air Regulations

JPF:DG

c.c. H.Q.
D.C.A.S.

ANADAIR LIMITED

July 21, 1948

COPY

Mr. J. L. Blondeau
Department of Transport
Room 44
Trans-Atlantic Administration Building
Dorval, Que.

Subject: C-54GM Registration CF-TEN-X

Dear Mr. Blondeau:

It is our intention to fly the subject aircraft from Cartierville to the Curtiss Electric Propellor plant at Caldwell, New Jersey, on or about July 22nd. This flight is necessary in order that Curtiss may carry out special vibration and magna-fluxing tests on the propellers. These tests will be carried out while the aircraft is on the ground and no flying program is anticipated during this trip other than the ferrying flight to and from Caldwell, New Jersey.

In view of the above we request that you issue a restricted temporary letter of authority to cover this flight in order to avoid complications when crossing the border to and from the United States.

Yours very truly,

Ivan Manley
Contract Administrator

WJM:LP

OFFICE & WORKS:
CARTIERVILLE, P.Q.

TELEPHONE:
ATLANTIC 9431*

55

Canadair Limited
POST OFFICE BOX 6087
Montreal

April 21, 1948.

Mr. H. S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
No. 3 Temporary Bldg.,
OTTAWA, Ontario.

TRANSPORT-RECORDS
APR 23 A.M.
File 5008-95-1

14

Canadair Four Development and
Certification Test Program.

~~A 2340~~

Dear Sir:

A 2341

As agreed during our recent conversations, we are forwarding herewith two copies of the flight test program planned for aircraft CF-TEN-X.

We hope to be ready to start the development program by the beginning of next week and the certification program about 10 days after that.

With personal regards.

Yours very truly,

FOR: CANADAIR LIMITED

K. G. Smith
Project Engineer.

TAH:dr
Encl.

c.c. Mr. Geo. Lace - Dept. of Transport

COPY ON 5008-95-1
ENTERED ON CARDS

23/4/48

1-8

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7166

NATIONALITY AND REGISTRATION MARKS CF-TEN-x

1. Type and description	Douglas DC4M-4
2. Name and address of constructor	Canadair Limited, Montreal, P.Q.
3. Constructor's serial number	101
4. Name of owner	Canadair Limited,
5. Address of owner	P.O. Box 6087, Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal, P.Q.
8. Purpose	Commercial (Restricted) (Experimental)

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 10th day of September, 1946, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TEN-X and is of Canadian nationality.

Given at Ottawa this 29th day of July, 1948

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

Extended - not valid after 9-10-48
" " " " 6/12/49
" " " 5.1.51

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

HTP/HMC

59

5008-T5-14;

Ottawa, Ontario,
August 17, 1948

REGISTERED

Canadair Limited,
P.O. Box 6087,
MONTREAL, P.Q.

Gentlemen:

Enclosed herewith Certificate of Registration No. 7166 for Douglas DC4M-4 aircraft, Constructor's Serial No. 101, Canadian registration CF-TKN-x. Also enclosed are Journey and Aircraft Log Book, four (4) Propeller Log Books and four (4) Engine Log Books.

This aircraft may not be issued with a Certificate of Airworthiness but may be operated for the purpose of carrying out experimental test flights including the flying required for the training of licensed personnel called upon to take charge of the aircraft. All such flights must have the approval of the Superintendent, of Air Regulations. No person other than the pilots, mechanics and technical personnel engaged in the test flight programme are allowed on board the aircraft in flight at any time. Parachutes must be provided for each individual in the aircraft during flight.

It is required that the aircraft be kept in a serviceable condition and that the Engine and Journey and Aircraft Log Books be kept and entries made in accordance with Air Regulations, 1943, and Amendments thereto.

NOTED
SEP 1 1948
Revenue Audit
Dept. of Transport.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

CC DIAR MONTREAL

OFFICE & WORKS:
CARTIERVILLE, P. Q.

TELEPHONE:
★BYWATER 5511

Canadair
Limited

60

November 22, 1948.

TRANSPORT-RECORDS
NOV 24 P.M.
File 5008.75-14

Mr. H. S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
OTTAWA, Ontario.

A33897

Dear Sir:

Further to our telephone conversation of this morning, will you give consideration, please, to the removal of the "X" from the registration of CF-TEN-X.

Such action would facilitate our present test program and subsequent certification tests by allowing flight operations from points in the United States where more favourable weather conditions for test work exist.

The tests under consideration do not involve experimental installations, and this will confirm that the airplane will be in completely standard condition for the type. The only deviation from previously certified configurations would be the take-off weight which would of necessity be slightly higher for these tests.

I will be glad to hear at your earliest convenience whether such an arrangement would be feasible.

Yours very truly,

K. G. Smith
Project Engineer

ENTERED
ON CARDS

Phone 29/11/48

HSR/AO'D

5008-T5-14

61

Ottawa, Ontario,
December 1, 1948.

Canadair Limited,
P.O. Box 6087,
Montreal, P.Q.

Attention: Mr. K.G. Smith - Project Engineer

Dear Sir:

In reply to your letter of November 22nd, 1948, Air Regulations advise that as far as Canadian Authorities are concerned it will not be necessary for you to remove the "X" from CF-TEH-X, since as far as Canada is concerned you have authority to proceed anywhere. Therefore, it is only necessary for you to obtain from the C.A.A. permission to fly in the United States for the purpose of conducting non-commercial experimental flights. It is not anticipated that you should have any difficulty, since the C.A.A. granted you permission some time ago to conduct test flights prior to the original certification of your DC3's, but if there should be any hold up, would you please advise and we will endeavour to give what aid we can.

This will confirm our telephone conversation of November 29th.

Yours truly,

(H.S. Rees),
Chief Aeronautical Engineer.

CC: D.C.A.S. Montreal
Attn: Resident Inspector, A.I.D.

OFFICE & WORKS:
CARTIERVILLE, P.Q.

TELEPHONE:
★BYWATER 5511



TRANSPORT-RECORDS
DEC 7 P.M.
File 808-T514

6 December, 1948.

Mr. H.S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
Ottawa, Ontario.

A35657

Re: Insurance of D.O.T. Personnel - CF-TEN - Certification Program.

Dear Sir:

This is to confirm that Canadair have covered Messrs. Murphy and Nesbitt for $50,000.00 each under a Personal Accident Policy, while Messrs. Murphy and Nesbitt are passengers or acting as crew members or in any other capacity while riding in aircraft controlled by Canadair Limited during the forthcoming Certification Program scheduled to start Tuesday December 7th.

Beneficiary Forms will be available here for Messrs. Murphy and Nesbitt to fill in prior to their departure to the United Stated.

Yours truly,

for: CANADAIR LIMITED

K. G. Smith,
Project Engineer.

ENTERED ON CARDS

COPY
1665-6
1814-3394H
1814-3342H

CAI-601

DEPARTMENT OF TRANSPORT

Civil Aviation Division

File No. 5008-T5-14

Place Montreal....

Date..7th Dec.....1948..

TO: Superintendent, Air Regulations.

FROM: District Inspector.

SUBJECT: Aircraft Inspection Report.

Aircraft Type ..Douglas DC4M (Experimental)

Registration Markings ..C.F. TEN-X.....

~~Private or~~ Commercial .....

Date of Inspection ...7.12.48.....

Previous C. of R. Expires 10.9.48.....

Present C. of R. Expires ..6.12.49.....

Remarks .....

.....

.....

.....

.....

.....

.....
District Inspector.

cal.
101.v

Noted
ESI

CAE

COPY

64

ORIGINAL ON FILE 5010-10-157

COPY FOR FILE 5008-T5-14

TRANSPORT-RECORDS
DEC 21 A.M.
File 5008-T5-14

CANADAIR
LIMITED

16 December, 1948.

Department of Transport,
Ottawa, Ontario.

A37209

Attention: Mr. H.S. Rees - Chief Aeronautical Engineer.

Subject: Flight Test for Approval of Model C-4

Your Ref. 5010-10-157

Dear Sir:

We have your letter of November 17, 1948, of the above file reference.

There is a slight misunderstanding regarding the installation of power meters which we would like to clarify. Power meters have been ordered for engines to be fitted to CF-TEN-X. The first two engine have been fitted with power meters and have been calibrated on the test bed by Rolls-Royce. We expect to receive these engines in time to instaal them in CF-TEN/X during part of the program we will conduct to obtain operational manual data. However the engines will not be available until January and so will not be used in the certification program preently underway in Florida. We hope to be able to obtain some correlation of calculated and measured power during the operational flight test program.

After the firsttwo engines are installed, the two engines removed from CF-TEN-X will be sent to Rolls-Royce for calibration, overhaul, fitting of power meters and recalibration. These engines will not be available for the present flight test programs.

I trust this clarifies our present position with regard to power meters.

Yours truly,
for: CANADAIR LIMITED

K. G. Smith
Progject Engineer

8
11-47

ENTERED CARDS

HRR:MB

~~5010-10-157~~
5008-15-14

Ottawa, Ontario,
December 28, 1948

Canadair Limited,
P.O. Box 6087,
Montreal, P.Q.

Attention: Mr. K. G. Smith, Project Engineer

Subject: Flight Test for Approval of Model C-4

Dear Sirs:

This will acknowledge receipt of your letter of December 15th regarding installation of two engines fitted with power meters in CF-TEN-X.

Yours very truly,

H. S. Rees,
Chief Aeronautical Engineer

TRANSPORT - RECORDS
JAN 24 A.M.
5008-T5-14

5008-T5-14

Rm. 44, Trans-Atlantic Administration Bldg.,
Montreal Airport, Dorval, Que., Jan. 23, 1950.

REGISTERED

Canadair Limited,
P.O. Box 6087,
Montreal, Que.

43020

Attention: Mr. H.R. Cruise, Supervisor,
Contract Administration

Gentlemen:

Re: DC4M-4-TEN-X

The Certificate of Registration No. 7166 for the above mentioned aircraft has been renewed to read valid until January 5, 1951, and is returned herewith.

Yours truly,

J. P. Fournier,
for J. L. Blondeau,
District Superintendent, Air Regulations.

JPF:gd
Encl.

noted

c.c. D.C.A.S.
C.R.
H.Q.

Records to file on 5008 + file (1) CAR CCA (2) CAE

49646

2181

DEPARTMENT OF TRANSPORT
RADIO DIVISION

6252-4

INSPECTION REPORT ..... AIRCRAFT STATIONS.

1. Aircraft registration markings....CF-TEN-X.....

2. Make....Canadair..... .....Type....4.....No..101.....

3. Registered Owner (Name and Address)..Canadair Limited, P.O. Box 6087, Montreal, Que.

4. If aircraft operated by other than registered owner (Name & Address).....

.....

5. Licensee of aircraft radio station (Name & Address). Canadair Limited,.....

.Cartierwille Airport,. Cartierville,. Que.....

6. Where is aircraft normally maintained?. Cartierville....Based?...Cartierwille

7. Class of service performed.....Experimental.....
Scheduled Non-Scheduled Private

8. Certificate of Registration No..7166.....Date Expires Jan..5/51

9. Certificate of airworthiness.....Date of expiration.....

10. Operating Certificate No.....

11. Do radio communication facilities comply with Departmental requirements?. Yes.
Yes or No

12. Radio Licence No...311.....19..49..19.50....Is copy kept in aircraft?...Yes

13. If no radio station licence, state:
(a) Has application been filed?.....
(b) Date radio installed....February 18, 1950.....
(c) Has radio been operated since April 1st?.....

14. Radio Installation drawings:
(a) Identification..Canadair TD-1054.....
(b) Have they been submitted for approval?.....
(c) Have they been approved by (i) Radio Div?.....
(ii) Civil Av. Eng?.....

15. Was aircraft imported with radio incorporated?.....

16. Was radio installed by aircraft manufacturer?.....

17. Was radio installation made by radio technicians? Canadair Limited.....
Give name of firm or individual

18. Are radio components positioned in accordance with drawings?.....

19. Have modifications or repairs been made to the radio installation since the last radio inspection or as indicated in the aircraft journey log book?. Yes...
SCR 522 replaced by RT18/ARC-1 (Full particulars to be attached)

20. Is any radio equipment or associated wiring considered to be a fire hazard?. No
Yes or No

21. Is aircraft radio station log being kept?.....
Yes or No

22. Will documents carried meet requirements?.....
Yes or No

23. Radio Operator(s).....Cert No.....Grade.....
Cert No.....Grade.....

24. Is radio operator employed in a dual capacity?. Pilot and/or Co-Pilot.....
If so, give details

67

25. Is aircraft equipped for Instrument Flight?.....Day.....Night Yes..

Visual Flight?.....Night.....

FREQUENCIES

26. Licenced	Crystal Controlled (Yes or no)	Active (Yes or no)	Type of emission	Power output Watts	Stations worked each channel
..see over...	...Yes.....	.....	...A3.....	...50 & 8.....	.....
.....	.....	.....	.....	.....	.....

27. TRANSMITTER(s) Make, type, Freq. range power output
(1) Bendix RTA-1B..2.5-13.0 Mc/s...50W.....
(2) ARI.RT16/ARC-1.100-156 Mc/s..8W.....
(3).....

28. Radar, Radio Altimeter, DME or similar devices, describe
Bendix MN53A Marker Receiver 75 Mc/s.....
.....

29. RECEIVER(s) Make, type, Frequency Range
(1) Bendix RTA-1B 2.5-13.0Mc/s.....
(2) ARI.RT18/ARC-1..100-156 Mc/s.....
(3).....

30. LORAN .....

31. Direction finders Make, type Manuel or automatic.
(1)..Bendix MN-31.(2 MN26-T).ADF.....
(2)..
(3).....

32. Emergency radio equipment, including that for survival craft.
.....

33. Blind approach equipment. R89/ARN-5A BC-733D.....
(describe)

34. Aerial(s)
(1) Foremast to fin.....(2) ADF loops. 2 (3). 2 Sense..(4) Marker (5) ILS VHF Stub (describe)

35. Types of Compasses... Magnetic.....

36. Compass error due (a) Earphones....-.....Receiver..- .....Transmitter..-...

37. Compass heading at time of check.....155.....

38. Weight of Radio equipment, Trans. 121. Recv'r.....Misc'l. 280. Total 401...

39. Aircraft battery capacity (a) ampere-hours..89.... .....(b) Voltage...24.....

40. Have radio direction finders been checked for (1) function?..Yes.....
(ii) accuracy?.....Yes.....

41. Is interference to radio reception within tolerable limits?.....Yes.....

42. Are you satisfied the radio equipment complies with airworthiness standards?..Yes

Date and place inspection made (if made in the presence of Civil Aviation Inspector state whom). February. 20, .1950, .Cartierville Airport,.....

REMARKS:

W. B. Elliott
Signature of Radio Inspector.

W.B. Elliott

cc DCAS

If more space required use back of form.

VHMcO:MF

RECORDS TO FILE

~~19676~~ 64

Ottawa, March 6th, 1950.

Inspection - Canadair Aircraft CF-TEN-X

6252-138 (CRI)
5008-T5-

TRANSPORT - RECORDS
MAR 9 A.M.
File 5608-T5-14

On reviewing the Report submitted covering the Inspection of the radio installation on Canadair Aircraft CF-TEN-X, DC 4, serial No. 101, it is observed that a notation is made in Item 19 of the Inspection Report that the SCR 522 VHF equipment was replaced by an RT18/ARC-1.

In order that the records of the radio installation in this aircraft may show the actual equipment, you might communicate with Canadair and arrange to be supplied with three sets of drawings showing the modification, and submit them to Headquarters for approval purposes.

(C.C.W. Browne)
Controller of Radio.

J.M. Colton, Esq.,
District Superintendent of Radio,
Room 403, 400 Youville Place,
MONTREAL 1, Quebec.

IM/DP

7

OTTAWA, Ontario, February 24th, 1959.

5008-T5-14

Douglas DC4M-4 Aircraft, CF-TEN-X

Regional Director, Air Services,
Department of Transport,
Montreal Airport, P.Q.

1. Reference is made to Certificate of Registration No. 7166 dated July 29, 1948 issued to cover the above aircraft for the purpose of carrying out experimental test flights.

2. It would be appreciated if you would find out the present disposition of this aircraft. If it is the intention of the owner to write this aircraft off, please have the Certificate of Registration returned to your regional office for cancellation, and advise this office accordingly, in order that the registration mark may be deleted from the Aircraft Register.

Director of Civil Aviation.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
10-56

Montreal Airport, Que. March 26, 1959 73
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
24 Feb 1959	5008-T5-14	5008-T5-14(ARQ)

SUBJECT

Douglas DC4M-4 Aircraft, CF-TEN-X

TRANSPORT - RECORDS
APR 1 P.M.
File 5008-T5-14

84

Director General, Air Services,
No. 3 Temporary Bldg.,
OTTAWA ONT.

ATTN:- Controller, Civil Air Operations and Regulations.

1. With reference to your memorandum of February 24, 1959, please find attached a letter dated March 20, 1959 from Canadair Ltd.

2. The letter from this office to which they refer is also attached.

J. Macdonald
for Regional Director, Air Services.

Encls.

Note:
In view of the attached letter from Canadair the registration mark of the subject aircraft has been deleted from the aircraft Register.

S.R.L.
2.4.59.

Coded & Noted
2.4.59.

CANADAIR
LIMITED

POST OFFICE BOX 6087, MONTREAL, P.Q.

72

20 March, 1959.

District Superintendent, Air Regulations,
Department of Transport,
Room 44, Trans-Atlantic Administration Bldg.,
Montreal Airport, Dorval, Que.

Reference: 5008-T5-14

Subject: DC4M-4-TEN-X

Dear Sir:

Attached hereto is a copy of your Department's letter dated January 23, 1950, regarding the Certificate of Registration for Aircraft CF-TEN-X.

We regret that we cannot locate the copy of the Certificate of Registration which was attached to this letter. The aircraft was subsequently turned over to the RCAF and as more than three years have elapsed, our records do not contain a copy of the requested certificate.

Yours very truly,

C.G. MacLeod,
Assistant to Director,
Contract Administration.

Attach:

14811

AIR SERVICES REGISTRY
MONTREAL
MAR 24 1959
File 5008 T5-14

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

OF TEN-X 71
Contracts.

REFER TO FILE NUMBER
5008-25-14

Rm. 44, Trans-Atlantic Administration Bldg.,
Montreal Airport, Dorval, Que., Jan. 29, 1951.

REGISTERED

Canadair Limited,
P.O. Box 6087,
Montreal, Que.

Attention: Mr. E.R. Cruise, Supervisor,
Contract Administration

Gentlemen:

Re: [illegible]

The Certificate of Registration No. 7166 for the above mentioned aircraft has been renewed to remain valid until January 5, 1952, and is returned herewith.

Yours truly,

J. P. Sumption,
for the Minister,
District Superintendent, Air Regulations.

JPS:gd
Encl.

FILE No. 5008 - T 5 - 20 VOLUME No. 1

DEPARTMENT OF TRANSPORT FROM JAN., 1947
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - TET - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
0 1959	BF 21/4/59	SRL	~~4-5-59~~		APR 20 1959
APR 20 1959	BF 1/5/59	SRL			
	letter 1.5.59.	SRL	~~4-5-59~~		MAY 1 1959
1959	Reg Mr Lord	SRL			MAY 4 1959
	BF 15/5/59	SRL	~~16-5-59~~		MAY 14 1959
MAY 29 1959	BF 1/6/59	SRL	~~1-6-59~~		JUNE 2 1959
1	BF 1/6/59	SRL	~~7-6-59~~		JUNE 15 1959
	12310	SRL			JUN 26 1959
1959 JUL 6 1959	BF 1/7/59	SRL			JUL. - 1959

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

FILE No. 5008 - T5 - 20 VOLUME No. 1

VOL. 1
5008 - T5 - 20

DEPARTMENT OF TRANSPORT

FROM JAN. 1947
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION INSPECTION & OPERATION
FILE TITLE CF - TET - DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
MAR 28 1957	33451	CAE			MAR 29 1957
APR 16 1957	2332	CAE			APR 25 1957
JUL 19 1957	11636	CAE			JUL 19 1957
NOV 28 1957	22796	ARL			NOV 28 1957
SEP 26 1958	Re Tfr Ferries	C1G		C.T.	SEP 30 1958
	26/9/58 Letter 394	C1G	5/10	C.T.	SEP 30 1958
		AIG	14.4.58	wvy	SEP 30 1958
OCT 1 1958	Re AFW 199	C1G	7/11/58	BR	OCT - 2 1958
	Telitype AFW 199 1/10/58	AIG		wvy	OCT - 2 1958
OCT - 2 1958	BF 6/10/58	C1G		C.T.	OCT 3 - 1958
OCT 9 1958	BF 14/10/58	AIG		C.T.	OCT 7 1958
OCT 23 1958	BF 27/10/58	AIG	12.11.58	wvy	OCT 28 1958
OCT 29 1958	NOV 5 1958 NOV 7 1958 1830	AIG		mo	MAR 31 1959
	Memo 31.10	C1G		wvy	NOV 5 1958
NOV 5 1958	Minute ✱ on Memo 31.10.58	COR ①	11.11.58		NOV 5 1958
OCT 9 1958	Miss Jones, Para 11, Form 2448, 21830	S.R.L ①	25.11.58		NOV 7 1958
NOV 7 1958	NOV 10 1958 BF 7/11/58	CIL	25.11.58	C.T.	MAR 2 1959
	BF 12/11/58	AIG ①		mo	MAR 2 1959 MAR 10 1959
MAR 2 1959 MAR 10 1959	BF 25/11/58	SRL	30.3.59		MAR 11 1959
	BF 28/11/58	C1G		mo	MAR 18 1959
MAR 11 1959	BF 1/12/58	COR			MAR 18 1959
MAR 17 1959	12.2.59 17.3.59	SRL	13/4/59		MAR 31 1959
MAR 26 1959	BF 30/3/59	SRL	20/4/59		APR 10 1959
APR - 2 1959	218	ARL			APR - 3 1959
	minute 3.4.59	Records #3			APR 10 1959
APR 10 1959	BF 13/4/59	ARL	21.4.59		

FILE No. 5008 - T5 - 20 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JAN. 1947
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION INSPECTION & OPERATION

FILE TITLE CF - TET — DOUGLAS DC-3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
N 8 - 48	10778	CAR		SJ	JUN 15 '48
N 27 1949	41598	CAR		SJ	JAN 28 1949
4 1949	Reg. McPattison	CAR		WHP	FEB 28 1949
N 18 1950	42108.	CAR		SJ	JAN 20 1950
	——	CAE		9 JLL	JAN 20 1950
5 1951	38724	CAR			JAN 16 1951
16 1951	——	CAE			JAN 16 1951
17 1952	52500	CAR		SJ	JAN
18 1952	—	CAE		9 mm	JAN 21 1952
JAN 2 1953	46553	CAR		SJ	JAN 3 1953
3 1953	——	CAE		9 mm	JAN 7 1953
JAN - 4 1954	57768	CAR		SJ	JAN 5 1954
5 1954	——	CAE		9 mm	JAN - 5 1954
30 1955	10128	ARL		SJ	JUN 30 1955
JAN - 3 1956	23125	ARL			JAN 9 - 1956
1956	——	RFL			JAN 10 1956
AN 10 1956	——	CAE		18	JAN 17 1956
JAN 9 1956	24387	ARL		SJ	JAN
JAN 2 7 1956	25034	ARL		SJ	JAN 30 1956
	5317	ARR	46166	CAB	JUN 1 1956
N 1 1956	BF 11/6/56	ARR	11/7/56	CAB	JUN 1 1956
	8307	CAE			JUN - 5 1956
8 1956	BF 11/7/56	ARR			JUN 29 1956
OCT 19 1956	19886	ARL		SJ	OCT 22 1956
3 1956 1957	23319	ARL		SJ	DEC 4 1956
EB 1	28342	CAE			FEB 8 1957

8825 Co.

FILE NO. 5008 - T5 - 20

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JAN. 1947

TO

SUBJECT AIRCRAFT INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - TET - DOUGLAS DC 3

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
MAR 8 1947	69668	CAR			FEB 1 5 19
	73769	CAR			MAR 1 4 19
	323	CAR			MAY 5 - 19
MAY 5 194	3632	CAR			MAY 6 19
MAY 7 1947	3909	CAR			MAY 9 19
MAY 12 1947	43444	CAR			
		CAE ①		JUN 19 1947	
		CAOO		JUN 19 1947	
19 1947		CAOO		JUN 20 1947	
JUN 20 1947		Lear ②		JUN 27 1947	
OCT 17	21628	C.A-E		OCT 30 19	
EC 2 947	27973	CAR		DEC 4 947	
		CAE ①			
4 947	Min 1	OPC			
	M 2	CAE ①			
		Cal.		DEC 8 947	
8 947	M 4	OPC		DEC 10 947	
10 947		CAR		DEC 11 19	
19 947	30030	CAR		DEC 19 947	
	Mint	C-E		DEC 30 19	
22 947 DEC 23 947		CAR		DEC 30 947	
30 947		CAA			
JN 30 1948	34462	CAR		FEB 2 - 1948	
		CAE		FEB 2 - 1948	
9 - 48	36064	CAE		FEB 18 48	
		CAE		FEB 18 - 48	
R 19 48	2766	CAR		APR 23 - 48	
		CAE		APR 23	

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., Feb. 6, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3 Manufacturer's Serial #13393	5008-T5-20

69668

TRANSPORT - RECORDS
FEB 8 A.M.
FILE 5008-T5-20

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. An Application for the Registration of the subject aircraft has been received from Trans-Canada Air Lines and they request that markings CF-TET be allotted to this machine. Please confirm.

J. L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations.

JLB:HK

6/12/45

TGS/HMG

Ottawa, Ontario, February 14, 1947

5008-T5-20 Douglas DC3 Manufacturer's Serial #13393 5008-T5-20

District Inspector, Air Regulations,
910 Confederation Building,
1253 McGill College Avenue,
Montreal 2, Quebec

1. With reference to your letter of February 6, 1947, registration markings CF-TET may be used by Trans-Canada Air Lines for display on the subject aircraft.

2. CF-TET was included in a block of markings reserved for Trans-Canada Air Lines on December 6, 1945.

(S. Graham),
Superintendent, Air Regulations

910 Confederation Building,
Montreal 2, Que., March 6, 1947.

Trans-Canada Air Lines,
Winnipeg, Manitoba.

73769

TRANSPORT - RECORDS
MAR 7 P.M.
File 5008-T5-20

Gentlemen:

Re: Douglas DC3 CF-TET

B.D/c 11

This letter will constitute your authority not valid after May 5, 1947, to operate the subject aircraft as a commercial one.

In view of the interior of this aircraft being equipped with bucket seats only, and cabin being not upholstered, this machine may not be used on your regular scheduled flights.

The maximum number of twenty-seven passengers may be carried in this aircraft but in no case more than the number of seats and belts provided.

The maximum all-up weight of this machine must not exceed 25,200 pounds for take off and 24,400 pounds for landing when carrying passengers. These weights, however, may be increased by 146 pounds when full deicer equipment is installed. The gross weight may be increased to 26,900 pounds when aircraft is used as a freighter only with no passengers aboard.

In the latter case, 15 degrees flap deflection must be used for take off and initial climb, and the pilots' compartment must be clearly placarded to this effect.

The weight empty of this machine has been established at 16,937 pounds.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

5008-T4-15-15-1
-14 -2
-15 -3
-16 -4
-17 -5
-18 -6
-19 -7
-20 -8
-21 -9
-22 -10
-23 -18
-24 -19
-25 -20
-26

COPY

ORIGINAL
ON FILE 7150-6
LEJG.

FOR FILE

TRANS--CANADA AIR LINES

P. O. Box 2973,
Winnipeg, March 21, 1947.

File #2445-3.

0323

TRANSPORT - RECORDS
APR 1 P.M.
5008-T5-20
File

4

Mr. A. T. Cowley,
Director of Air Services,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Subject: Operating Weights - Certificate of Airworthiness
DC-3C-S1C3G Aircraft

Dear Sir:

Reference is made to communication received from the Department under date of December 20, 1946, copy of which is attached, granting approval to Trans-Canada Airlines to operate DC-3C-S1C3G aircraft on passenger service at take-off and landing weights of 26,200 and 26,000 pounds respectively under specified conditions.

To complete our records we would appreciate receiving a formal endorsement covering the above approval for attachment to the Certificate of Airworthiness of each of the following aircraft:

T.C.A. No.	Douglas Serial No.	D.O.T. Registration
60	12004	CF-TDM
61	12007	CF-TDN
62	12026	CF-TDO
63	12027	CF-TDP
64	12039	CF-TDQ
65	12042	CF-TDR
66	12092	CF-TDS
67	12093	CF-TDT
68	12106	CF-TDU
69	12110	CF-TDV
70	12139	CF-TDW
71	12141	CF-TDX
72	12191	CF-TDY
73	12192	CF-TDZ
74	12502	CF-TEA
75	12591	CF-TEB
76	12597	CF-TEC
77	12487	CF-TED
78	13559	CF-TEE
79	13560	CF-TEF
80	25313	CF-TEG
81	12440	CF-TEH
82	12442	CF-TEI
83	13337	CF-TEJ
90	12253	CF-TER
91	11906	CF-TES
92	13393	CF-TET

(D.O.T. approved for alternate use as a cargo version at 26,900 lbs. for take-off and landing)

Yours truly,

J. T. Dyment,
Director of Engineering.

ENTERED
ON CARDS

COPY

INCOMING CORRESPONDENCE

ORIGINAL ON FILE 5003-T5-8 COPY FOR FILE 7150-6
5003-T5-9
-8
-10
-18
-19
-20

LEJG

TRANS.--CANADA AIR LINES

P.O. Box 2978,
Winnipeg, Manitoba,
April 22nd, 1947.
File: VP-1851-190.

Mr. A.D. McLean,
Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

7845

TRANSPORT - RECORDS
APR 24 P.M.
7150-6

Dear Mr. McLean:

With a view to establishing proof of ownership, I am sending you attached the duplicates of Bills of Sale covering six Douglas type C-47 aircraft which we purchased from Canadair Limited.

It will be appreciated if you will advise your Superintendent, Air Regulations, at Ottawa and your District Inspector, Air Regulations, at Montreal that these documents are on file with the Department to ensure that there is no hold-up in the issuance of Certificates of Registration and Airworthiness for these aircraft because of this feature.

Very truly yours,

ENTERED ON CARDS

W.F. English,
Vice President.

Attach.

8
11-46

COPY

INCOMING CORRESPONDENCE

ORIGINAL ON FILE 5008-T5-8 ..... COPY FOR FILE 7150-6
5008-T5-9
-8
-10
-18
-19
-20

LBJG

TRANS--CANADA AIR LINES

P.O. Box 2975,
Winnipeg, Manitoba,
April 22nd, 1947.
File: VP-1331-19C.

TRANSPORT - RECORDS
APR 24 P.M.
File 5008-T5-20

7845

Mr. A.D. Mclean,
Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

Dear Mr. Mclean:

With a view to establishing prof of ownership, I am sending you attached the duplicates of Bills of Sale covering six Douglas type C-47 aircraft which we purchased from Canadair Limited.

It will be appreciated if you will advise your Superintendent, Air Regulations, at Ottawa and your District Inspector, Air Regulations, at Montreal that these documents are on file with the Department to ensure that there is no hold-up in the issuance of Certificates of Registration and Airworthiness for these aircraft because of this feature.

Very truly yours,

W.F. English,
Vice President.

Attach.

ENTERED ON CARDS

8
11-46

CANADAIR LIMITED

6

BILL OF SALE

SALES ORDER #44346

KNOW ALL MEN BY THESE PRESENTS: That CANADAIR LIMITED, a corporation formed under the laws of Canada, having its principal place of business in Montreal, Canada, releases:

1 - only - Douglas C-47 Aircraft
Manufacturer's Serial No. 13393
Army Serial No. KG633

TET.

For and in consideration of the monies received, which are hereby acknowledged, Seller does hereby sell, assign, transfer and deliver all right, title and interest in and to the above described aircraft together with all appurtenances attached to or installed therein, unto: **Trans-Canada Air Lines,**
Winnipeg, Manitoba,
its (or his) successors and assigns, to have and to hold, all and singular, the said aircraft forever.

IN WITNESS WHEREOFF, the Seller has duly executed this instrument this **6th day of March, 1947**

CANADAIR LIMITED.

D N Macfarlane
V.P.

WITNESS:

H Thatcher

Ottawa, May 2nd, 1947.

5008-T5-20 Douglas Aircraft CF-TER and CF-TET
Trans-Canada Air Lines

~~5008-T5-18~~
5008-T5-20

HTP/YD

District Inspector, Air Regulations,
910 Confederation Bldg., 1253 McGill College Ave.,
Montreal 2, P.Q.

1. With reference to Douglas DC3 aircraft registration CF-TER, it is noted that temporary authority was granted on March 29th to Trans-Canada Air Lines to operate this aircraft commercially on regular scheduled air operations. To date we have not received an application from Trans-Canada Air Lines for the registration of this aircraft.

2. May we be advised as to the status of this aircraft, please.

3. With reference to Douglas DC3 aircraft, registration CF-TET, it is noted that on March 6th temporary authority was granted to Trans-Canada Air Lines to operate this aircraft commercially, but not on scheduled air operations. To date Headquarters has not received an application from Trans-Canada Air Lines for the registration of this aircraft.

4. May we be advised as to the status of this aircraft, please.

(S. Graham)
Superintendent, Air Regulations

5008-T5-20

910 Confederation Building,
Montreal 2, Que., May 3, 1947.

A 3632

J.T. Dyment, Esq.,
Director of Engineering,
Trans Canada Air Lines,
P.O. Box 2973,
Winnipeg, Man.

TRANSPORT-RECORDS
MAY 5 A.M.
File 5008. T 5-20

Dear Sir:

Re: Maximum permissible take-off and landing weights Douglas CF-TET

It is very much regretted that your letter of March 29, 1947, was not answered earlier in view of extreme pressure of work at the present time.

It will be in order for your company to operate the subject aircraft at a maximum permissible take-off weight of 26,200 pounds, and a maximum permissible landing weight of 26,000 pounds at sea level, provided the pertinent conditions with regard to such operations are adhered to in respect to this aircraft, in the same manner as the other aircraft owned by your company.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6101 E 2

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

DAY LETTER
NIGHT MESSAGE
NIGHT LETTER
EVENING & SUNDAY

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			DAY LETTER COLLECT

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

TRANSPORT-RECORDS
File 5008 75-20

To A H SUTHERLAND
A DIRECTOR OF MAINTENANCE AND OVERHAUL
TRANS CANADA AIR LINES
WINNIPEG MANITOBA

910 CONFEDERATION BUILDING
MONTREAL 2 QUEBEC MAY 3 1947

A 3909

AR-621 PROVISOUS AUTHORITY GRANTED OPERATION DOUGLAS TARE EASY TARE HEREBY EXTENDED NOT VALID AFTER JULY FIFTH FORTY SEVEN SUBJECT AIRCRAFT AIR ONTHE 10

J L BEAUDEAU

Noted Thos

12.40 hrs.
dg

CIVIL AVIATION

8

910 Confederation Building,
Montreal 2, Que., March 6, 1947.

Trans-Canada Air Lines,
Winnipeg, Manitoba.

Gentlemen:

Re: Douglas DC3 CF-TET

This letter will constitute your authority not valid after May 5, 1947, to operate the subject aircraft as a commercial one.

In view of the interior of this aircraft being equipped with bucket seats only, and cabin being not upholstered, this machine may not be used on your regular scheduled flights.

The maximum number of twenty-seven passengers may be carried in this aircraft but in no case more than the number of seats and belts provided.

The maximum all-up weight of this machine must not exceed 25,200 pounds for take off and 24,400 pounds for landing when carrying passengers. These weights, however, may be increased by 146 pounds when full deicer equipment is installed. The gross weight may be increased to 26,900 pounds when aircraft is used as a freighter only with no passengers aboard.

In the latter case, 15 degrees flap deflection must be used for take off and initial climb, and the pilots' compartment must be clearly placarded to this effect.

The weight empty of this machine has been established at 16,937 pounds.

Yours truly,

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

ACTUAL WEIGHT AND BALANCE

MODEL: C-47A

T.C.A. #CF-TET

REPORT: RW-O-231

Canadair
Limited
POST OFFICE BOX 6087
Montreal

5905

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RW-0-231

TITLE ACTUAL WEIGHT AND BALANCE

MODEL C-4-7A

PREPARED D. Paterson

CHECKED A. Runnie

APPROVED W. Banas.
L. J. Hebert

DATE 29th of Jan. 1947.

PREPARED D Paterson
CHECKED D. Rennie
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 1
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

I N T R O D U C T I O N

Airplane model C-47A, overhauled for Trans-Canada Airlines bearing registration number CF-TET, was weighed at Canadair Limited, Montreal, Canada on Jan. 27th 1947.

Aircraft was weighed in the level flight position (tail up) for the weight empty condition.

The aircraft was weighed in a dry condition i.e. There was no fuel or oil in the tanks or in the system.

PREPARED D. Paterson
CHECKED D. Rennie
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 2
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

FIXED EQUIPMENT LISTS

		In A/C	Qty
COCKPIT & FW'D COMP'T.	Flying instruments	✱	-
	Pilot's & co-pilot's seats & belts	✱	2
	Fire extinguisher	-	1
	Cargo web gate	✱	1
	Janitrol heater	-	1
	Radio (complete)	✱	-
MAIN CABIN	Paratroop seats & safety belts	✱	27
	Hand fire extinguisher	-	1
	Entrance ladder	✱	1
LAVATORY	Wash basin	✱	1
	Water tank	✱	1
	Toilet paper dispenser	✱	1
	Soap dispenser	✱	1
	Airwick bottle	✱	1
	Urinal	✱	1
	Toilet	✱	1
			1
MISC.	Flares	-	2
	De-icer boots	✱	-
	Dump valves	✱	-

PREPARED D Paterson
CHECKED L. Lennie
APPROVED

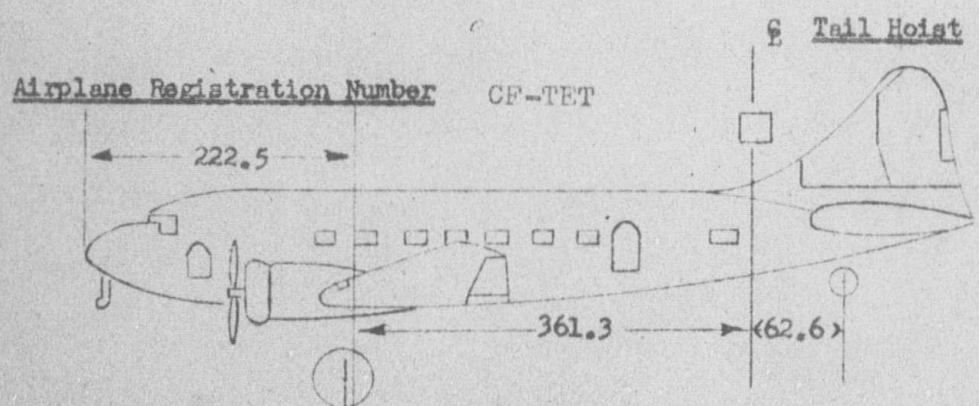
CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 3
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT Actual Weight and Balance.

Weight Empty Data



Airplane Registration Number CF-TET

Jack Point ℄ ← 2.7" → ℄ Front Spar

Level Flight Position

	Scale Reading	Scale Correction	Tare	Net
Left Wheel	7,730	+.30	-	7,760
Right Wheel	7,810	+ 20	-	7,830
Tail Hoist	1,150	- 5		1,145
Total	16,690	+ 45	-	16,735

Less _____ Gals. Oil Sta. 184.5 _____

Actual Empty Weight 16,937 lbs.

Remarks:

PREPARED D. Patyson
CHECKED D. Dennis
APPROVED

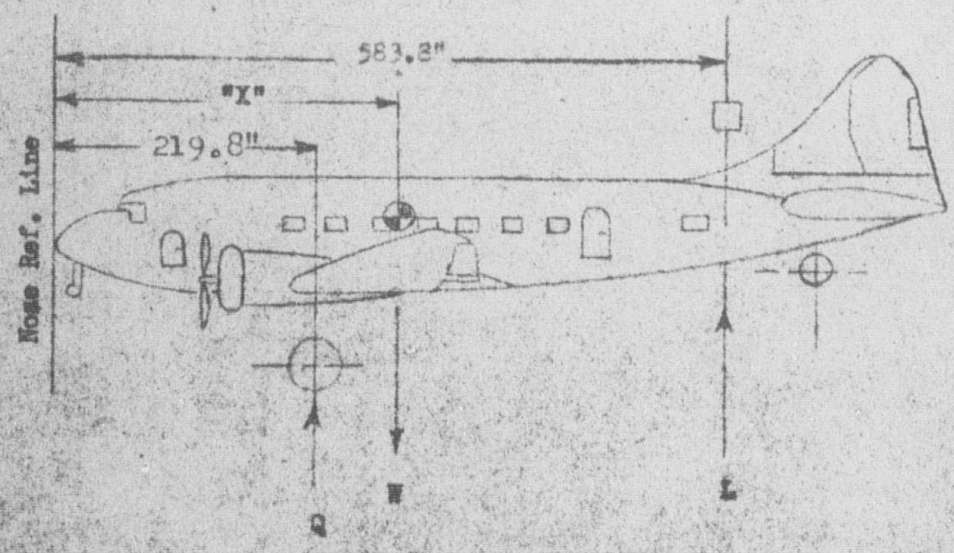
CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 4
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TAIL-UP WEIGHING



Main Wheel, left, net		7,760
Main Wheel, right, net		7,830
Total Main Wheel	Q =	15,590
Tail Hoist Load Reaction	L =	1,145
Aircraft, as weighed	W =	16,735

Center of Gravity Calculation

The aircraft C.G. is given by "X"

$$(Q \times 219.8) + (L \times 583.8) - (W \times X) = 0$$

$$\frac{(Q \times 219.8) + (L \times 583.8)}{W} = X$$

$$\frac{(15,590 \times 219.8) + (1,145 \times 583.8)}{16,735}$$

$$\frac{4,095,133}{16,735} = 244.7"$$

C.G. Location (X) aft of nose ref.: = 244.7 inches.

SUBJECT— ACTUAL WEIGHT AND BALANCE

WEIGHT EMPTY (TRANSPORT)

	Weight	Arm	Moment
Aircraft as weighed	16,735	244.7	4,095,133
Plus:			
1. Hand fire extinguisher (cockpit)	7.2	83.5	601
2. Hand fire extinguisher (cabin)	7.2	493.0	3,550
3. Janitrol heater	101.0	172.0	17,372
4. Trapped fuel and oil	51.0	175	8,925
5. Flares (2)	36.0	604	21,744
Weight Empty (transport)	16,937	244.9	4,147,325

C.G. in % M.A.C. $= \frac{244.9 - 224.4}{138.1} \times 100$

$= 14.8\%$

INDEX: 29.2

PREPARED D Patterson
CHECKED D. Rennie
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 6
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

TEST-FLIGHT RECOMMENDATION

In order to bring the C.G. for test-flight purposes as close as possible to the optimum balance, it is recommended that 600 lbs. of ballast be stowed in the rear cargo compartment.

(561" aft of fuselage nose)

SUBJECT— ACTUAL WEIGHT AND BALANCE

Engineering Information

Dimensional Data of Weighing:

(a) Location of Datum Line:

Leading edge of center - Section wing (192.5) inches aft of horizontal reference line.

(b) Location of Horizontal Reference Line:

Fuselage nose tip (192.5 inches forward of datum Line).

(c) Location of Jig Point.

Rear row screws at center of front spar (223")

(d) Location of Leading Edge M.A.C.

224.4 inches aft of horizontal reference line.

(e) Length of M.A.C.

138.1 inches.

(f) Location of Leveling lugs.

L.H. Outside (390" - 410" approximitely).

(g) Horizontal Arm of Rear Baggage Compt.

561" aft of horizontal reference line.

* (h) Location of Front Spar Center-Line.

222.5 inches aft of horizontal ref. line.

* (i) Location of Tail Hoist Center-Line.

583.8 inches aft of horizontal ref. line.

(j) Trapped Fuel & Oil.

51 lbs. (175.0" aft of horizontal reference line).
(1) Trapped oil = 32#
(2) Trapped fuel = 19#

PREPARED D. Paterson
CHECKED -D. Rimmer
APPROVED

CANADAIR
LIMITED
MONTREAL - CANADA

PAGE 8
REPORT RW-0-231
MODEL DC-3

5904

SUBJECT— ACTUAL WEIGHT AND BALANCE

C.G. Range:

Forward limit: 11% M.A.C. (239.6" aft of nose)
Aft Limit: 28% M.A.C. (263.1" aft of nose)

Maximum Weights:

Max. Take-off 26,900 lbs.
Max. Landing 26,900 lbs.

* Reference:

Douglas DC-3 Dwg. No.: 5071540.

Form ACA 317
(Rev. 3-1-41)

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

STATEMENT OF CONFORMITY

To the CIVIL AERONAUTICS ADMINISTRATION:

I, having been authorized for this purpose by DOUGLAS AIRCRAFT COMPANY, INC. (Manufacturer), certify that the aircraft DOUGLAS (Make), C-47A (Model), 13393 (Serial number), has been manufactured, under Production Certificate No. None,* in conformity with the data forming the basis for Type Certificate No. 669 and any revision or modification thereof approved by the Administration as of 5-23-44 (Date), with the exception of the following deviations:

See Note No. 15 of CAA Aircraft Specification A-669-4 dated January 15, 1946.

DATE October 23, 1946

Schuyler Kleinhans
(Signature)

Schuyler Kleinhans
Assistant Chief Engineer
(Title)

* Delete this phrase if not applicable.

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Production Aeroplane having Canadian Type Approval)

CF-TET

Registration _____

Low Wing Monoplane [redacted] **DC3C-S1C3G**

Aeroplane Type _____ Skiplane Model _____

Douglas Aircraft Co. Inc. **15595**

Manufacturer _____ Serial No. _____

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY:

Normal

[redacted] **cargo**

([redacted] ager
([redacted]
([redacted] goods
([redacted]
([redacted] - Aerial Work.
[redacted]
[redacted]
(g - Research or experimental.

[redacted]
[redacted]ic
Special

PARTICULARS OF ENGINE(S):-

	Left Side		Right Side	
Type	**Pratt & Whitney R 1830-92 (S1C3G)**			
Model	**565611**		**19292**	
Serial No.	**1200 H.P.**		**1200 H.P.**	
Take-off Power	**2700 R.P.M.**		**2700 R.P.M.**	
Take-off R.P.M.	**48" Hg.**		**48" Hg.**	
Take-off Manifold Pressure	**91 (C.F.R.)**		**91 (C.F.R.)**	
Take-off Octane Rating of Fuel	**1050 H.P.**		**1050 H.P.**	
Maximum Power (Continuous Operation)	**2550 R.P.M.**		**2550 R.P.M.**	
Maximum Power R.P.M.	**41.5" Hg.**	**Sea level**	**41.5" Hg.**	**Sea level**
Maximum Power Manifold Pressure	**91 (C.F.R.)**		**91 (C.F.R.)**	
Maximum Power Octane of Fuel				

PARTICULARS OF AIRSCREWS:

	LEFT		RIGHT	
Maker	HAMILTON STANDARD PROPELLERS			
Type	HYDROMATIC QUICK FEATHERING WITH CONSTANT SPEED CONTROL			
Blade Drawing No.	6571A-0		6571A-0	
Blade Serial No.	516606		515948	
	516607		515949	
	516608		515950	
Hub Drawing No.	33D50-101		33D50-238	
Hub Serial No.	159247		159451	
Blade Settings	13.5° Low	89.5° High	17.5° Low	89.5° High
Diameter	11' 6½"		11' 6½"	

PARTICULARS OF ALIGHTING GEAR:

WHEELS: Make Bendix Model B1 (Tail) B3 (Main) Tire Goodyear (Tail) Goodrich (Main)

FLOATS: Installation Assembly Drawing No. N.A.

SKIES: Installation Assembly Drawing No. N.A.

Tail Skid: N.A.

POSITION AND CAPACITY OF FUEL AND OIL TANKS:

FUEL Position	CAPACITY Imp. Gals.	Oil Position	Capacity Imp. Gals.
(1) Centre Plane Left Front (Main)	168	(1) Left Nacelle	24
(2) Centre Plane Right Front (Main)	168	(2) Right Nacelle	24
(3) Centre Plane Left Rear (Aux.)	167	(3)	
(4) Centre Plane Right Rear (Aux.)	167	(4)	
(5)		(5)	
(6)		(6)	

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT

(Essential for C. of A. for any class of operation).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS.
Airspeed Indicator	Pioneer	1426-1AH-A1	34026 34025
Altimeter	Kollsman	571P-1-01	4684 4679
Compass	Pioneer	1818-1-A	AF-42-53977
Engine Speed Indicator	Gen. Elec.	8DJ18AGD	2708991 2708987
Oil Pressure Guage	U.S. Gauge	AW1 7/8-14-CX2	
~~Air/Oil~~ Cyl. Temp. (Liq. Cooled)	Weston	827T9Y2	
~~Air/Oil~~ Oil Temp. (Liq. Cooled)	Weston	72775SY2	
Safety Belt(s)			
Fire Extinguisher(s) Hand			
Engine	Kidde	82511	65699L 63701L

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENTS:

(Make extra sheets as required, using following pro forms and classification).

DESCRIPTION	MAKER	MODEL	SERIAL NUMBERS.
AIRCRAFT INSTRUMENTS: Direct Gyro	Sperry	649742	1202
Flying and Navigation E.G. Turn & Bank	Pioneer	1722-1AU-B1	329881
Bank & Turn Indicator, etc., Turn & Bank Elect.	Pioneer	18300-2A-A2	331
Gyro Horizon Elect.	Pioneer	12401-1C-A1	175
Aircraft Operating e.g., Gyro Horizon	Sperry	656768	10995
Cabin Temperature Rate of Climb	Pioneer	1634-1K-A1	34770 34771
Outside " Outside Air	Weston	728T85Y2	
Flap Indicators De-icer Pres.	U.S. Gauge	AW1 7/8-16-AC2	
etc., Hyd. Pres.	"	AW1 7/8-17-CH2	8270 8249
Fuel Pres.	"	AW1 7/8-15-BT2	
POWER PLANT INSTRUMENTS Suction	"	AW1 7/8-21-W	
Man. Pres.	Pioneer	1919-1V-A1	16041 16043
ELECTRICAL EQUIPMENT Carb. Air	Weston	727T68Y2	
other than signalling Anti-icer Quantity	Liquid.	EA-102-39-L2-24	
Fuel Quantity	Liquid.	EA-134-8-L2-24	
SIGNALLING EQUIPMENT Radio Azimuth	Pioneer	MN58A	K1-125
Ammeter	Westinghouse	F1 8DW53RAAC2	
SAFETY AND EMERGENCY Volt Ammeter			
EQUIPMENT Master Ind.	Pioneer	12010-2E-A1	1156
Repeater Ind.	Pioneer	10061-1AF6B1	530290
AMENITIES Oxygen Pres.	Heidbrink	22210-A	
Oxygen Flowmeter	Heidbrink	38-06-020-AC	

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.				DESCRIPTION
1.	D66-08A-1/1	17053		Drain hole in fuel dump chute assembly.
2.	D78-07D-1	17075		Anti-icer systems modifications (E.O. 040501-212 to -243, 040501-245 to -250, 040501-255,-256,-257,-258,-259).
3.	D66-02B-2/2	17077		Fuel filling and using instruction plate (E.O. 030701-205 and -211).
4.	D82-05B-1/1	17078		Guard installation for flare release cables (E.O. 020605-219, -220,-221).
5.	D72-04B-1/1	17079		Pressure line - Vacuum oil separator (E.O. 030101-239,-244, -247,-264).
9.	D41-02A-1/1	17081		Flight wheel brakes.
10.	U74-03D	18075		Generator blast tube (E.O. 030101-242).
11.		17085		Microphone holder (E.O. 020406-206, -207.).
12.	Oxygen System			Modification to cylinder mounting tubes. (E.O. 040801-305 to -307, 040801-321,-322,-361).
13.	Oxygen System			Modification to cylinder compartment doors (E.O. 010004-215 -216).
14.	Oxygen System			Modification high pressure plumbing. (E.O.'s 040801-310 to 320, 040801-324 to 329). (040801-345,-358,-360,-366, -367,-370,-371).
15.	Oxygen System			Modification to flow meter assembly. (E.O. 040801-353 and -359).
17.	Oxygen System			Captain's oxygen outlet and mounting (E.O. 040801-266,-272, -354).
20.	D77-05C-2/2	17094		Stainless steel lines for Janitrol Heater. (E.O. 030703-18
21.	D71-02B-1/1	17082		Oil Pressure Gauge and carburettor Heat gauge. (E.O. 040101-214).
22.	D64-03-2/1	17042		Propeller feathering switch guards. (Drawing 40304-251).
23.	D71-06A-1/1	17083		Fluxgate Compass (Drawing 40404-35).
24.	D74-10E-2/1	17064		Wing navigation lights. (E.O. 040306-223).
26.		17087		Fuel Tank Selector indicators (E.O. 030701-204).
27.	D82-04A-1	17056) 17057)		Safety wire installation, fire extinguisher switch.
28.	D53-04C-1	17137		Ash tray relocation - flight compartment.
29.	D75-05H-1/3			Dehydrator relocation - MN56 Radio Compass Loop Mounting Base. (E.O. 040405-371).
30.	D75-05H-1/6			Enlarged clearance hole - MN56 radio compass loop mounting base. (E.O. 040405-306-307).
31.	D75-05E-1/2			Communications antenna - feed through hole clearance (040702-269).
	D75-05D-1/2	17153		Stand-off insulator remounting - communication antenna (040405-312,313,314).
		17154	(A)	Janitrol heater package tie-down - shorten tie-down latch tongue (E.O. 040601-358).

RECORD OF APPROVED MODIFICATIONS EMBODIED SUBSEQUENT TO APPROVAL OF TYPE AEROPLANE

DRAWING AND ISSUE NO.		DESCRIPTION
	1.	6000 hour overhaul to Canadair Ltd. engindering orders, drawings, and specifications, (RD-1-111) with additional requirements as specified in RD-1-108. (No alterations made in fuselage structure. Cabin interior similar to C47A
	2.	Compliance with all applicable inspection and special notes in C.A.A. Airworthiness Directive AD669-1.
	3.	Mandatory Douglas Bulletins for C-47 Aircraft as noted in C.A.A. Spec. A-669-4 are accomplished.
	4.	Units and components serialized to comply with T.C.A. Spec 19 issue 2.
	5.	The following Douglas Service Bulletins for DC-3 Aircraft were accomplished:-
D.S.B. 207		Control Surface Balance.
D.S.B. 211		Inspection of spar cap bolts.
D.S.B. 216 S		Re-inforcement of wing flap operating tube support beam attach angle.
D.S.B. 217 S		Inspection of elevator torque tube.
D.S.B. 218		Replacement of rivets with bolts - rudder lower hinge bracket.
D.S.B. 219		Inspection of engine section throttle rod.
D.S.B. 220 Sec. III only		Installation of spar cap bolts locking device.
D.S.B. 222		Rudder pedal torque tube support bracket re-work.
D.S.B. 231		Control Column boot replaced with rubber.
D.S.B. 234		Elevator tab control horn modified.
D.S.B. 238		Inspection of engine mount to firewall fittings.
D.S.B. 241		Drain hole in fuel dump chute.
D.S.B. C47-101		Install additional bolt in rudder pedal attachment torque tube.
D.S.B. C47-10		Install inspection doors in bottom of fuselage.
	6.	Parachute flare installation carried out as per Dou Dwg. 5315811.
	7.	Rudder horn modified (5118056) to clear elevator "A as per Canadair E.O. 020303-204.
	8.	Flying controls cables tensioned for cold weather o ing as per E.O. 020601-207. If operating temperat consistently above 0°C, cables should be rigged for temperatures.
	9.	The following T.C.A. modifications have been carr

RECORD OF WEIGHT AND C. OF G. POSITIONS: **FREIGHTER**

(See Information Circulars M-8/37 and M-1/38

		Landplane	Seaplane	Skiplane
Maximum permissible Gross Weight	Take-off:	26,900 lbs.	lbs.	lbs.
	Landing:	26,900 lbs.	lbs.	lbs.
Tare Weight as Determined		16,937 lbs.	lbs.	lbs.
Disposable Load		9,963 lbs.	lbs.	lbs.

Centre of Gravity of Aeroplane at above tare weight is 244.9 inches behind/

~~xxxxxxxxxx~~ Nose reference line or 14.8% M.A.C.

used as a reference datum point with Aeroplane in flying position.
(The C. of G. Position may be calculated from the approved loading diagram of the Type Aircraft).

List of fixed/ standard/ equipment included in empty weights:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Refer to Weight and Balance Report No: RW-0-231			

List of moveable equipment included in above tare weight:

DESCRIPTION	Lbs.	DESCRIPTION	Lbs.
Refer to Weight and Balance Report No: RW-0-231			

References: Aircraft Specification A-669-4 & Supplement #1.

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary propf issued by the authorities of the country of origine that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed H. DeVries. date JAN 31 1947
Chief Inspector.

CANADAIR LIMITED

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and the aeroplane is airworthy and an entry in the log Book to this effect has been made.

Signed B. Waal. . . . Air Engineer E. Hudkins. FOR. Chief Inspector.
JAN 31 1947

CERTIFICATE OF FACTORY TEST PILOT.

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the type Aeroplane.

Signed. D. H. King. . . . date FEB 4 1947
Test Pilot.

CANADAIR LIMITED.

RECOMMENDATION OF RESIDENT INSPECTOR A.I.D. DEPT. OF TRANSPORT

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category .....
Subdivision..... is recommended.

Signed: George S. Lace
Resident Inspector, A.I.D.,
Department of Transport. Mar 5th 47

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) .....

Signed J. L. Blondeau 5/3/47
District Inspector, Civil Aviation.

590R

CANADAIR
LIMITED
MONTREAL, CANADA

REPORT NO. RH-0-124

TITLE FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TET

MODEL C47-DC3/PT

PREPARED H.H. Whiteman

CHECKED H.H. Whiteman 6 March, 1947

APPROVED H.H. Whiteman

DATE 6 March, 1947

PREPARED H.H. Whiteman
CHECKED 6 March, 1947
APPROVED H.H. Whiteman

CANADAIR
LIMITED
MONTREAL - CANADA

REPORT RH-0-124
MODEL C47-DC3/PT

5904

SUBJECT— FLIGHT TESTS FOR CARBON MONOXIDE CONTAMINATION WITH JANITROL SURFACE COMBUSTION HEATER INSTALLATION - AIRCRAFT CF-TET

AIRCRAFT LICENSE ..... CF-TET

SERIAL NO. (DOUGLAS) 13393

JOB NO. (CANADAIR) 44346

DATE TESTED Mar.5,1947

1.0 INTRODUCTION:

This report is to be attached as an appendix to Report RH-0-103, the equipment and procedure being the same.

2.0 RESULTS:

No indication of carbon monoxide was obtained in the forward cabin, in the vicinity of the heater or in the flight compartment during operation of the heater.

3.0 CONCLUSION:

The carbon monoxide concentration due to heater operation is less than .005 to .007 of one percent by volume in living quarters.

WITNESS: Mr. M. Clements,
Department of Transport.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **Douglas Aircraft Company**

Type **DC-3C-SIC3G (converted C-47A)** Conversion by: **Canadair Ltd., Montreal, Que.** Maker's No. **13393**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	95'-0"	
Length o/a in feet	64'-5"	
Height o/a in feet	16'-11"	

Cubic Capacity (of Airship or Balloon) **N.A.** ~~———~~ See weight Report

Weight equipped, but without load, fuel, or oil **17,300 lbs.**

Total weight authorized (fully loaded) in lbs **26,900** Air speed **241** miles per hour **T.I.A.S.**

EQUIPMENT—(Give number and type).

1. Instruments **See List No. 1 Attached**
2. Gauges **See List No. 2 Attached**
3. Lights **See List No. 3 Attached**
4. Signals **See List No. 4 Attached**
5. Fire Extinguishers **2-95 lb CO_2, Engines, Heater Comp.; Flight Compt. 2-2 lb. Hand Extinguishers.**
6. Parachutes **None**
7. Tools **Pilots' Tool Kit only**
8. Other Equipment **See List No. 5 Attached**

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Pratt&Whitney R-1830-92	Pratt&Whitney R-1830-92		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R.H.	R.H.		
No. of Cylinders	14	14		
H.P.	1200 T.O. 1050 Normal	1200 T.O. 1050 Normal		
Bore	5.50	5.50		
Stroke	5.50	5.50		

5/3/47

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on ~~Yes~~ No unapproved mod

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

5/3/47 J L Blondeau

TET

Date Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413

13

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00 84469

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....
for Trans-Canada Air Lines

Date of Application January 22, 1946.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Trans-Canada Air Lines	360 McGill Street, Montreal, P. Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
H. J. Symington	Chairman & President	Montreal	Canadian
Hon. Wilfred Gagnon	Director	"	"
J. A. Northey	"	Toronto	"
R. C. Vaughan	"	Montreal	"
Hon. C. P. Edwards	"	Ottawa	"
George Herring	"	"	"
J. A. Wilson	"	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)
Commercial

Usual Station Montreal, Toronto, Winnipeg - other Canadian and U.S. Airports

Date of manufacture or reconstruction February 1947.

Crew required Minimum Crew - Pilot and Co-Pilot

Accommodation for what number of passengers ~~21~~ 32 non-revenue pssgrs.plus 2 pilots, 1 observer.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

12

LIST NO. 1 - INSTRUMENTS

Item	No.	Make and Type
Ind. Airspeed	2	Pioneer 1426-1AD2
Pitot Static Head	2	Kollsman 372C-02
Altimeter	2	Kollsman 371K-05
Turn and Bank	1	Pioneer 1722-1AT
Turn and Bank (Elect)	1	Pioneer 15300-2A-A2
Rate of Climb	2	Pioneer 1634-1AA-A1
Gyro Horizon	1	Sperry 656768
Gyro Horizon	1	Pioneer 12401-1C-A1
Gyro Direction •	1	Sperry 649742
Magnetic Compass	1	Pioneer 1821-6-A
Flux Gate Compass		
Master Indicator	1	Pioneer 12010-2E-A1
Repeater Indicator	1	Pioneer 10061-1AR-B1
Clock	2	Pioneer 3315-2D-3

LIST NO. 2 - GAUGES

Item	No.	Make and Type
Oil Temperature	2	Weston 727 T 59Y2
Outside Air Temp.	1	Weston 728 T 35Y2
Carburetor Air Temp.	2	Weston 727 T 68Y2
Cylinder Temperature	2	Weston 827 T 9
Manifold Pressure	2	Pioneer 1919-1B-A1
Fuel Pressure	2	U.S. Gauge AW-1 7/8-15-BT2
Tachometer	2	G.E. 8DJ-13-AGD
Oil Pressure	2	U.S. Gauge AW-1 7/8-14-CZ2
De-Icer Pressure	1	U.S. Gauge AW-1 7/8-16-AC2
Oxygen Pressure	1	U.S. Gauge AW-1 7/8-AD8287
Suction	2	Kollsman 97-02
Hydraulic Pressure	2	U.S. Gauge AW-1 7/8-17-CN2
Fuel Quantity	1	Liquidometer EA-134-8-24
Anti-Icer Fluid Quantity	1	Liquidometer EA-102-39-24

LIST 3 - LIGHTS

1. Tail Lights - Grimes Model C - red
   Grimes Model C - white

2. Wing Tip Lights - Grimes Model E - red (port)
   Grimes Model E - green (starboard)

3. Fuselage Lights - Grimes Model B-2115 - white

   Note: Lights in Items 1 to 3 flash as required by C.A.A. Regulations.

4. Landing Lights - 600 watt sealed beam lamps in each wing leading edge fixture. - G.E. 4560

5. Passing Light - red bulb in L.H. landing light fixture. - G.E. 310

LIST NO. 4 - RADIO EQUIPMENT

Item	No.	Make and Type
Communication Unit (H.F.)	1	Bendix RTA-1B
Compass Receiver	1	Bendix MN-26L
Automatic Control Unit	2	Bendix MN-31C
Loop (Compass)	2	Bendix MN-36C
Compass Receiver	1	Bendix MN-26T
Indicator	1	Bendix MN-58A
Localizer Receiver	1	Airnco BC-733D
Glide Path Receiver	1	Airnco R89 B/ARN-5A
Antenna System	1	Airnco AS-27A/ARN-5
Indicator	2	Airnco ID-48AF/ARN
Communication Unit (VHF)	1	Airnco RT-18/ARC-1
Antenna	1	Airnco AN-104 AX
Marker Receiver	1	Bendix MN-53A

LIST NO. 5 - OTHER EQUIPMENT

1.	Flashlight
1	Verey Pistol
2	Oxygen Masks
1	Emergency First Aid Kit
2	Mechanically Operated Flares
2	Life Belts
2	Safety Belts

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

910 Confederation Building,
Montreal 2, Que., May 6, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3 CF-TET	5008-T5-20

TRANSPORT-RECORDS
MAY 10 A.M.
File 5008 T5-20

A 4344

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the name of Trans Canada Air Lines.

(b) Fees $10.00 (Department Receipt No. 84469), forwarded under Cash Book Folio 3333.

(c) Inspection Release Certificate.

(d) Report on Carbon Monoxide Test.

(e) Statement of Conformity.

(f) Weight and Balance Report.

(g) Copy of our letter of authority for operation.

2. The radio installation in this aircraft has been inspected by our Radio Division and found satisfactory.

3. We understand proof of ownership is available at Headquarters. ✓

4. This application appears in order, and issue of certificates is recommended.

Ref. Pde. 5/5/47

J.L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

5700 (R)
2098 (A)

JLB:dg
Encl.

/38

2462A
8-41

16

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5700

NATIONALITY AND REGISTRATION MARKS CF-TET

1. Type and description	Douglas DC3 (S1C3G)
2. Name and address of constructor	Douglas Aircraft Co.,Inc., Santa Monica, Calif., U.S.A.
3. Constructor's serial number	13393
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal,Toronto, Winnipeg - other Canadian & U.S. Airports
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 6th day of March 19 47 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TET and is of Canadian nationality.

Given at Ottawa this 17th day of May 19 47

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

/mm

5006-75-20

17

Ottawa, Ontario.
June 6th, 1947.

REGISTERED

Trans-Canada Air Lines,
360 McGill St.,
Montreal, P.Q.

Dear Sir:-

Enclosed please find Certificates of Registration No. 5700 and Certificate of Airworthiness No. 2098, together with Engine and Journey and Aircraft Log Books, for your Douglas DC3 (S1C3G) aircraft, CF- TET.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

Encls:

cc. D.I.A.R. Montreal, P.Q.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-44

717 Dominion Public Bldg.,
Winnipeg, Man., October 2, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC3C CF-TET - Cargo Tie-Down Equipment.	5008-T5-20

TRANSPORT-RECORDS
OCT 6 A.M.
File 5008-T5-20

Controller, Civil Aviation, Ottawa.

Attention: Chief Aeronautical Engineer.

A21432 A21628

1. Enclosed are two copies of the following drawings and reports, covering the Installation of Cargo Tie-Down Equipment in the above noted aircraft, which were submitted by Trans-Canada Air Lines:

Drawings 14-32.185
15-32.186

Sketches SK 32.8113
32.8114
32.8116
32.8120 to 32.8122
32.8124 to 32.8126
32.8129 to 32.8146
32.8148 to 32.8150
32.8152 to 32.8185
32.8197 to 32.8199

Reports R-32-1-1
R-32-2-2

COPY ON 7/58

T.C.A. Overhaul Manual Section V - 8 pages.

The above drawings and reports are forwarded for your approval please, together with copy of self-explanatory letter dated September 30, 1947, from Trans-Canada Air Lines.

Fredw Bone

for District Inspector, Air Regulations.

FWB/MC
Encs.

Received 6/10/47.

MDJ

We wish to point out that this job was done under considerable pressure and therefore you may not find the Stress Report while not containing elaborate descriptions of the Installation does, however, thoroughly cover the proof of strength and has been written by an approved Aeronautical Engineer.

You will note that all margins of safety are positive, with the exception of one on page 28. This portion of the design has been changed and re-analized starting in Section 3 on the same page and showing positive margins on pages 30 and 31.

If you care to check this report that may be done quite readily in conjunction with drawings, overhaul manual pages and operating instructions which together give a complete picture on design, production, and use of this installation.

We trust that the enclosed documents will satisfy the requirements of the Department in respect to the subject Installation, but if there is any further information we can provide, we shall be glad to hear from you.

Yours very truly,

"A.E.Ades"
for J.T.Dyment,
Director of Engineering.

Attach.

COPY

TRANS-CANADA AIR LINES

19

P.O. Box 2973,
Winnipeg, Manitoba.
September 30, 1947.

File: 2445-4

District Inspector - Air Regulations,
Department of Transport,
717 Dominion Public Building,
Winnipeg, Manitoba.

Attention: Mr. F.W.Bone.

Dear Sir:

You will find attached two copies of the following drawings and reports covering the Installation of Cargo Tie-Down Equipment in T.C.A. Aircraft 92, registration CF-TET.

Drawings

14-32.185
15-32.186

Sketches

SK 32.8113
.8114
.8116
.8120 to .8122
.8124 to .8126
.8129 to .8146
.8148 to .8150
.8152 to .8185
.8197 to .8199

Reports R-32-1-1
R-32-2-2

T.C.A. Overhaul Manual - 8 pages.

MDJ/AC'D

21

Ottawa, Ontario, October 29, 1947.

Douglas DC3C CF-TET -
Cargo Tie-Down Equipment. 5008-15-20

District Inspector, Air Regulations,
717 Dominion Public Bldg.,
Winnipeg, Manitoba.

Attention: Resident Inspector, A.I.D.

1. Trans-Canada Air Lines Report No. R32-2-2 covering the Stress Analysis of the Davis Cargo Tie-Down equipment in CF-TET has been examined in conjunction with drawings Nos. 14-32.185, 15-32.186 and the various sketches, is considered satisfactory as proving strength of structure.

2. Enclosed herewith, single copies of T.C.A. Reports Nos. R32-1-1, R32-2-2 and sealed copies of the following data, approved as noted below:

Drawings 14-32.185 Approved subject to A.I.D. inspection.
15-32.186 Approved subject to A.I.D. inspection.

Sketches SK 32.8113 Approved
32.8114 Approved
32.8116 Approved
32.8120 to 32.8122 Approved
32.8124 to 32.8126 Approved
32.8129 to 32.8146 Approved
32.8148 to 32.8150 Approved
32.8152 to 32.8185 Approved
32.8197 to 32.8199 Approved.

T.C.A. Overhaul Manual Section V - 8 Pages.

for (H.S. Rees),
Chief Aeronautical Engineer.

Encl.

TRANS-CANADA AIR LINES

22

C
O
P
Y

P. O. Box 2973
Winnipeg, January 30, 1947

File: 2445-1

Mr. J. L. Blondeau
District Inspector, Air Regulations
Deaprtment of Transport,
Room 910 Confederation Bldg.,
Montreal, Quebec.

Subject: Application for Registration and Certificate of Airworthiness - Douglas DC-3C-S1C3G Airplane

Dear Mr. Blondeau:

Please find appended "Application for Registration" forms, duly completed in triplicate, covering one Douglas DC-3C airplane, presently being converted by Canadair Ltd., Montreal, for Trans-Canada Air Lines.

This airplane is being converted from an Army Model C-47A for pilot training and cargo operation. The aircraft, as converted, complies with the provision of Supplement No. 2 to C.A.A. Aircraft Specification A-669-4 concerning cargo operation of DC-3 type aircraft at 26,900 pounds take-off and landing gross weight.

It would be appreciated if registration markings could be assigned to the aircraft as set out hereunder:

Aircraft	T.C.A. No.	Mfgr.'s Serial No.	Registration Marking
DC-3C-S1C3G	92	13393	CF-TET

Our Accounting Department is arranging to forward a cheque in the amount of ten dollars ($10.00) covering the Registration and Certificate of Airworthiness fees.

We would appreciate your handling this matter at your earliest convenience as we are advised that the aircraft is rapidly nearing completion at the conversion plant.

Yours truly,

"J. T. Dyment"

J. T. Dyment,
Director of Engineering.

cc: Mr. T. M. Shields

RECEIVED
NOV 27 1947
D.I.A.R. Winnipeg

24

COPY

DEPARTMENT OF TRANSPORT

910 Confederation Building
Montreal 2, Que. May 3, 1947.

Mr. J. T. Dyment
Director of Engineering
Trans-Canada Air Lines
P. O. Box 2973
Winnipeg, Man

Dear Sir:

Re: Maximum permissible take-off and landing weights Douglas CF-TET

It is very much regretted that your letter of March 29, 1947, was not answered earlier in view of extreme pressure of work at the present time.

It will be in order for your company to operate the subject aircraft at a maximum permissible take-off weight of 26,200 pounds, and a maximum permissible landing weight of 26,000 pounds at sea level, provided the pertinent conditions with regard to such operations are adhered to in respect to this aircraft, in the same manner as the other aircraft owned by your company.

Yours truly,

"J. L. Blondeau"

J. L. Blondeau,
District Inspector, Air Regulations

JLB:dg

RECEIVED
NOV 27 1947
D.I.A.R. Winnipeg

TRANS-CANADA AIR LINES

2 3

P. O. Box 2973,
Winnipeg, March 29, 1947

File: #2445-3.

C
O
P
Y

Mr. J. L. Blondeau
District Inspector, Air Regulations
Department of Transport
Room 910, Confederation Bldg
Montreal, P.Q.

Subject: Maximum Permissible Take-off and Landing Weights
TCA Aircraft No. 92, CF-TET

Dear Mr. Blondeau:

Reference is made to our letter of January 30th, re application for Registration and Certificate of Airworthiness for TCA Aircraft #92, registration marking CF-TET.

It has been brought to our attention that the temporary Certificate of Airworthiness contained in the log book of Aircraft CF-TET states the maximum permissible take-off and landing weights to be 25,200 pounds and 24,400 pounds respectively without de-icing equipment when passengers are carried.

Aircraft CF-TET, which will be used for either pilot training, non-revenue passenger or cargo operation, is a Douglas DC-3C-S1C3G and is exactly similar to our scheduled passenger carrying DC-3C-S1C3G's less certain cabin furnishings, buffet equipment etc. We seek approval therefore, to carry non-revenue passengers on CF-TET at the same take-off and landing weights as permitted for our remaining DC-3C-S1C3G aircraft, viz. 26,200 and 26,000 pounds respectively. We trust that you will see fit to make this change on the permanent Certificate of Airworthiness for this aircraft and would appreciate receiving notice to this effect at your earliest convenience so that we may prepare final loading instructions for this aircraft.

In our Application for Registration for CF-TET which was forwarded with our letter of January 30th, through lack of information we stipulated only twenty-one passengers plus two pilots plus one observer. Since there is accommodation for twenty-seven passengers we were pleased to note that this number has been authorized in the temporary Certificate of Airworthiness.

Yours truly,

J. T. Dyment,
Director of Engineering.

cc: District Inspector, DOT, Winnipeg.

RECEIVED
NOV 27 1947
D.I.A.R. Winnipeg

TRANS-CANADA AIR LINES

Serves the Nation

26

P. O. Box 2973
Winnipeg, November 24, 1947

File: #2445-3

Mr. F. W. Bone,
District Inspector, Air Regulations,
Civil Aviation Division,
Department of Transport,
717 Dominion Public Building,
Winnipeg, Manitoba.

RECEIVED
NOV 27 1947
D.T.A.R. Winnipeg

Subject: Revenue Passenger Loads - A/C CF-TET

Dear Sir:

Reference is made to the following correspondence (copies attached):

1. Our letter of January 30th, 1947 (file 2445-1) to Mr. J. L. Blondeau, Montreal

2. Our letter dated March 29th, 1947 (file 2445-3) to Mr. J. L. Blondeau, Montreal

3. Letter dated May 3rd, 1947 from Mr. Blondeau (D.O.T. file 5008-T5-20) directed to the writer

Our cargo aircraft, CF-TET, is presently certified for a gross take-off weight of 26,900 pounds on cargo operations and for the same maximum permissible operating weights as our standard passenger carrying DC-3C-S1C3G aircraft when passengers are carried.

When registration of aircraft CF-TET was applied for last January, it was felt that this airplane would be used chiefly for pilot training and, to a lesser degree, for cargo service and transportation of Company personnel. For this reason, therefore, the Application for Registration form submitted for aircraft CF-TET stipulated non-revenue passenger loads. There developed, however, an immediate demand on this aircraft for cargo transportation with the result that it was equipped with cargo carrying facilities last summer. To date, aircraft CF-TET has enjoyed increasing popularity on charter operations and in this connection a question has arisen

TCA TRANS-CANADA AIR LINES

Serves the Nation

concerning the carriage of passengers on this aircraft.

On cargo operations, the case arises quite frequently where the charterer desires shipment of a load consisting of cargo and passengers. In cases such as this, it is not economically feasible for Trans-Canada Air Lines to transport passengers on a non-revenue basis and derive revenue solely from the cargo load. We, therefore, seek Department of Transport confirmation that it is permissible to carry revenue passengers on CF-TET. It is understood, of course, that flights on which passengers are carried, regardless of whether cargo is carried or not, will be conducted at the take-off and landing weights authorized for our standard passenger carrying DC-3C-S1C3G airplanes and not at 26,900 pounds.

As a matter of fact, the Certificate of Airworthiness at present in the log book of CF-TET makes no reference to whether the passenger loads permitted shall be revenue or non-revenue. However, since the Certificate of Registration form submitted with our letter of January 30th, 1947 to the Department of Transport, Montreal, stipulated a non-revenue passenger load, we have taken it upon ourselves to contact you at this time in order that clear-cut authorization may be obtained to carry fare-paying passengers on aircraft CF-TET.

As stated above, our immediate goal is to obtain approval to carry revenue passengers on aircraft CF-TET on the basis that passenger loads will be limited to the number of seats with safety belts with which the cabin of aircraft CF-TET is equipped, viz. eight.

Yours truly,

J. T. Dyment

J. T. Dyment,
Director of Engineering.

RECEIVED
NOV 27 1947
D.T.A.R. Winnipeg

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

27 2 6-47

717 Dominion Public Bldg.,
Winnipeg, Man., November 28, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Revenue Passenger Loads - Douglas DC-3 CF-TET.	5008-T5-20

TRANSPORT-RECORDS
DEC 1 A.M.
File 5008 T5-20

Controller, Civil Aviation, Ottawa.

1. Attached please find letter dated November 24, 1947, from Trans-Canada Air Lines, in connection with the above noted subject and aircraft, which is self-explanatory.

A27973

2. After perusal of the contents, it is felt that the request made by Trans-Canada Air Lines for the carrying of revenue passengers on charter flights may be granted, provided the maximum gross take-off weights for the normal passenger category are complied with and seats with safety belts are provided for all on board.

1 copy M.B.H. 1812-47

3. In view of the fact that application for registration, etc., and correspondence concerning the carrying of company personnel, etc., was submitted through the office of the D.I.A.R., Montreal, it is suggested that this matter be referred to him before approval of Trans-Canada Air Lines' request is granted.

3. Submitted please.

DOPR 337
5360-337

F. W. Bone,
District Inspector, Air Regulations.

FWB/MC
Enc.

(1) qcc
Has TCH an Operating Certificate for non scheduled Charter? If so could I see it please!
The question as to whether they will be allowed to operate under the same conditions as their scheduled services!!
4/12 Fmm Flemming

(2) CAE
Have you any comments on this matter please.
4/12 Fmm Flemming

(3) C.A.L. No objection to T.C.A.'s proposals as far as airworthiness is concerned. H.S. Foster Capt. (Mem)

CAR We spoke with OPC 4/12/47

(4) OPC
I now see no objection to approval being given provided all up weight as for passenger aircraft when passengers are carried.
6/12 Fmm

WDL/VB 28

5008-T5-20

Ottawa,
December 9th, 1947.

The Secretary,
Air Transport Board,
No. 5 Temporary Bldg.,
Ottawa, Ontario.

Trans-Canada Air Lines,
Non-scheduled Charter Service.

Dear Sir:

Attached for your information is a copy of a letter received from the District Inspector of Air Regulations, Winnipeg, and the letter from Trans-Canada Air Lines referred to therein.

It will be noted that the Company proposes to carry passengers and goods and that the aircraft in question has been modified to seat eight people and the remaining space is for cargo, subject of course to take-off weight in respect to the carriage of passengers and/or freight.

We would appreciate receiving any views which the Board may have in connection with this operation.

Yours truly,

5-260-357

(S. Graham),
Superintendent, Air Regulations.

Encls.

1 copy
M.P.H.
18-12-47

HW

AIR TRANSPORT BOARD
No. 3 TEMPORARY BUILDING
OTTAWA, CANADA

A.T.B. File 2-T1-12A 29

Address Reply to
The Secretary

16th December 1947.

Superintendent, Air Regulations,
Civil Aviation Division,
Department of Transport,
Ottawa, Ontario.

TRANSPORT-RECORDS
DEC 17 A.
File 5008-T5-20

A30030

Attention - Mr. Fleming

Dear Sir,

This refers to your letter of the 9th of December regarding Trans-Canada Air Lines, Non-scheduled Charter Service, your file 5008-T5-20.

Trans-Canada Air Lines is licenced to operate non-scheduled charter commercial air services for the transport of passengers and/or goods. The Board has therefore no objection to T.C.A. carrying out the operations described in the documents enclosed in your letter.

It is considered that the arrangements referred to above are entirely within the jurisdiction of the Department of Transport.

Yours truly,

Gerald Brouse

A. S. McDonald
Acting Secretary.

ENTERED ON CARDS

COPY
5260-357

OPC
We can now give this operation our blessing with all-up-weight limitation
18/12

1 copy
M.P.D.
18-12-47

30

Ottawa, Ontario, December 27th, 1947.

5008-T5-20

T.C.A. Revenue Passenger Loads,
CF-TET

5008-T5-20
5200-567

District Inspector,
Air Regulations,
717 Dominion Public Bldg.,
Winnipeg, Manitoba.

1. This is to refer to your letter dated November 28th on the above noted subject and to the attached request by Trans-Canada Air Lines to carry a mixed load of passengers and cargo in CF-TET.

2. The District Inspector of Air Regulations, Montreal, has indicated that he has no objection to T.C.A. operating CF-TET for the transportation of mixed cargo and revenue passengers provided the all-up weight for passenger carrying DC3's is not exceeded and Headquarters concurs provided, of course, that the terms of their A.T.B. Licence, Operating Certificate and Aircraft Certificate of Airworthiness are fully complied with and you may advise T.C.A. accordingly.

3. A copy of this letter is being forwarded to the D.I.A.R. Montreal for his information.

A. D. McLEAN

(A. D. McLean),
Controller of Civil Aviation.

WDL/VB/ABG

c.c. D.I.A.R. Montreal

AIRCRAFT INSPECTION REPORT

Date of Inspection 22/1/48 Owner Trans-Canada Air Lines Registration a/c 92 Markings CF-TET

Type Douglas DC-3 S1C3G Serial No. 13393 Purpose Commercial

C. of R. 5700 C. of A. 2098 Date of Last Inspection March 7, 1947.
Previous C. of R. & A. Expires March 6, 1948. Present C. of R. & C. of A. Expires 23/1/49

AIRFRAME

Crew 2 Passengers 9 No. of Fuel Tanks 4

Capacity 670 Imp. gals. No. of Oil Tanks 2 Capacity 48 Imp. gals.
Total Hours Since New 2568:50 Since 31/1/47 Overhaul 1268:00 Since Reconditioned --

WEIGHTS

	Gross	Tare	Empty	Carrying Capacity
Landplane Passenger				
Landplane Freighter	25200	(1) 17540	(2) 17398	2206
Seaplane Passenger				
Seaplane Freighter				
Skiplane Passenger				
Skiplane Freighter				

(1) Includes weight of Item "F" Equipment I.C.A.O.
(2) Includes de-icing equipment.

A34462

TRANSPORT-RECORDS JAN 29 A.M. File 5008.75-20

ENGINE(S)

LEFT		RIGHT	
Make P. & W.	Model Twin Wasp S1C3G	Make P. & W.	Model Twin Wasp S1C3G
Serial No. 353511	H.P. 1050 @ 2550 RPM	Serial No. 19288	H.P. 1050 @ 2550 RPM
Total Hrs. Since New 1384:56		Total Hrs. Since New 2677:31	
Since Complete Overhaul 755:16		Since Complete Overhaul 813:05	

PROPELLER(S)

LEFT		RIGHT	
Make Hamilton Standard	Model Hydromatic Full Feathering	Make Hamilton Standard	Model Hydromatic Full Feathering.
Diameter 11'6"	Pitch 18.5° - 89.5°	Diameter 11'6"	Pitch 18.5° to 89.5°
Blade Design 6571A-0		Blade Design 6571A-0	
Mfg.No.1 514723 2 514724 3 514725		Mfg. No.1 513736 2 513737 3 513738	
Total Hrs.1 3996:35 2 do 3 do		Total Hrs.1 3083:53 2 3083:53 3 3083:53	
Hub Design 33D50-101	Mfg. No. 158635	Hub Design 33D50-233	Mfg. No. 158363
Total Hours 3996:35	Since Last Overhaul 1277:54	Total Hours 3083:53	Since Last Overhaul 1057:32
Date of Last Overhaul	1/8/46	Date of Last Overhaul	29/7/47
Date of Last Inspection	22/1/48	Date of Last Inspection	22/1/48
Date Purchased	1/8/46	Date Purchase	31/7/46

UNDERGEAR

Skis —
Floats —
Wheels Bendix B3

Radio Licence No. 607
Chassis —
Chassis Standard- Retractable.

OVER

STANDARD EQUIPMENT, I.C.A.N. ITEM "F" - DOUGLAS DC-3

Water Thermos (incl. water, 1 gal.)	(1)	17.0 lbs.
Aluminum Pitcher	(1)	0.4 "
Lunch Boxes, less food	(24)	35.3 "
Thermos, 2 qt. less fluid	(5)	20.3 "
Silverware - complete sets	(24)	9.4 "
Paper Drinking Cups	(25)	0.2 "
Lucite Cup Handles	(30)	2.1 "
Lunch Box Inserts	(30)	3.1 "
Plastic Cups & Plates, sets	(24)	5.7 "
Hot & Cold Cups	(60)	1.8 "
General Utensils, allowance		2.0 "
Casseroles & Covers (Round)	(24)	13.0 "
Service Trays, large,	(6)	6.0 "
Cafatray, small,	(2)	0.6 "
Snack Kit	(1)	6.8 "
Pillows (at seats, complete with covers & slips)	(21)	21.4 "
Sickness Containers (at seats)	(21)	2.5 "
Whisk, Toy Broom and 2 Dusters		1.2 "
Dust Pan - long handle	(1)	0.4 "
Cleansing Tissue, Kleenex, 1 box		0.6 "
Stewardess Satchel	(1)	7.9 "
Linen Hand Towels (12"x 10")	(12)	0.9 "
Flyswatter (1) & Atomizer	(1)	1.2 "
Blankets (in rear service compartment)	(12)	36.0 "
Headrest covers (on seats)	(21)	2.1 "
Sanitary Napkins	(12)	1.0 "
First Aid Kit	(1)	4.1 "
Shopping Bags	(3)	0.6 "
Oxygen Masks (above seats)	(21)	15.8 "
Spare Sickness Containers	(10)	1.2 "
Spare Hand Towels (12) Headrest Covers	(10)	1.9 "
Spare Oxygen Masks	(5)	3.8 "
Spare Pillows complete	(3)	3.1 "
Crew Baggage	(3)	60.0 "
Magazines (in binders)	(10)	17.9 "
Bible	(1)	1.5 "
Life Belts - Passengers	(21)	54.6 "
Life Belts - Crew	(3)	7.8 "
Wash Water (2½ Imp.gals.)		25.0 "
Cargo Tie-down straps (cargo compts.)	10 sets	10.0 "
Anti-Icer Fluid (2½ Imp.gals.)		19.9 "
Propeller De-Icers	(6)	6.0 "
Wing, inner, De-Icers	(2)	12.4 "
Wing, outer, De-Icers	(2)	38.1 "
Stabilizer De-Icers	(2)	12.0 "
Fin De-Icers	(1)	4.3 "
Cabin & Toilet Frost Shields	(15)	0.9 "
Stewardess		120.0 "
		619.8 lbs.

Certificate of Airworthiness endorsed as follows:

Para. 12 - from "32" to "11".

Para. 25 - from "16937" to "17398"

Para. 31 - from "2667" to "2206" .

dated January 24, 1948.

RLB/MC

F. W. Bone,
District Inspector, Air Regulations.

TRANS-CANADA AIR LINES 37

P.O. Box 2973,
Winnipeg, Apr. 12, 1948.

File No. 2445-3
Your File 5008-T5-20

Mr. F. W. Bone,
District Inspector, Air Regulations,
Civil Aviation Division,
Department of Transport,
717 Dominion Public Building,
Winnipeg, Manitoba.

Subject: C. of A. Aircraft CF-TET.

Dear Sir:

Reference your letter of February 28th, 1948 in connection with the maximum number of persons to be carried in aircraft CF-TET.

As requested, attached hereto please find the instructions which will be used in the event the cabin of aircraft CF-TET is equipped with bucket seats additional to the eight seats presently installed in this aircraft.

These instructions consist of a page for our Overhaul Instructions Manual and Sketch 33.8136. All other sketches mentioned in the attached instructions have already been forwarded to your office in connection with the original installation of cargo ty-down equipment in this aircraft.

retained in AED J. + 1948

The installation instructions attached cover up to a total of 27 cabin seats. Therefore, it will be appreciated if you will arrange to have the Certificate of Airworthiness of CF-TET revised to read as follows with respect to the maximum number of persons to be carried including crew:

"Limited to the number of seats with safety belts provided but not in any case to exceed Thirty".

It will be noted that we are requesting that the maximum number of persons to be carried, including crew, be limited to thirty rather than thirty-two as previously requested in our letter of Jan. 28th, 1948. In the United States, the CAA Specification for this airplane limits the maximum number of seats to thirty-two. In the event that the absolute maximum number of seats might some day be installed, we saw fit to specify this figure in our letter of January 28th. However, since the appended instructions only cover the installation of twenty seven bucket seats in the cabin it is now necessary to limit the maximum number of persons to be carried, including crew, to thirty.

We trust that we have complied with the request contained in your letter of February 28th and that we shall hear from you shortly on this matter.

Yours truly,

J. T. Dyment

J. T. Dyment,
Director of Engineering.

har'vb

CTT/M

35

Ottawa, Ontario, February 17th, 1948.

5008-T5-20 Douglas DC-3, CF-TET. 5008-T5-20

AIR MAIL

District Inspector, Air Regulations,
717 Dominion Public Building,
Winnipeg, Manitoba.

1. With reference to your letter dated February 5th, 1948, and copy of letter from Trans-Canada Air lines, you are advised that the above company has already discussed the proposal to carry a mixed cargo and passenger load and this Headquarters has concurred.

2. There is no question, we believe, that passengers will be carried without adequate seats and belts, in fact, this was stipulated at the time that the above discussion took place and as stated by the company, they wish to avoid the necessity of obtaining a new certificate of airworthiness every time seats are added to or removed from the cabin of the aircraft.

3. It is suggested that the point raised by you in your letter (that fittings on the cabin wall had not been provided for additional seats) could be covered by requiring T.C.A. to produce an approved drawing showing the installation of seats that would be followed in the event of any alteration in the seating accommodation. This drawing, supported by letter stating that this plan would be followed in the event of any change, could be retained on file and in conjunction with the endorsement proposed by them in their letter of January 28th, 1948, would be sufficient to ensure the maintenance of adequate safety standard.

C.T.

(C. T. Travers),
Assistant Superintendent, Air Regulations.

W

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

34 2 6-47

717 Dominion Public Bldg.,
Winnipeg, Man., February 5, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 CF-TET Certificate of Airworthiness No. 2098	5008-T5-20

A36064

TRANSPORT-RECORDS
FEB 9 A.M.
File 5008-T5-20

A/SAR
From facts as stated by D.I. & feel he is in order to deny this endorsement to T.C.A. They should be made to install the approved fittings before authority is granted to carry additional passengers.
9 HPP 12-2-48

Controller, Civil Aviation, Ottawa.

1. Attached please find copy of letter from Trans-Canada Air Lines in connection with the above noted subject.

2. It is desired to point out that this office feels justified in amending the subject certificate as stated. Inspection of the aircraft revealed only 9 seats properly secured and fitted with safety belts. This inspection did not reveal any additional fittings on the cabin wall whereby additional seats could be easily and quickly installed.

3. It is felt, therefore, that under the present circumstances the requested amendment to the Certificate of Airworthiness cannot be considered.

4. Submitted for your comments please.

Fredw Bone

F. W. Bone,
District Inspector, Air Regulations.

FWB/MC
Encs.

33

TRANS-CANADA AIR LINES

Serves the Nation

P. O. Box 2973,
Winnipeg, January 28, 1948.

File 2445-3

Mr. F. W. Bone,
District Inspector, Air Regulations,
Civil Aviation Division,
Department of Transport,
717 Dominion Public Building,
Winnipeg, Manitoba.

Subject: C. of A.- Aircraft CF-TET

Dear Sir:

Reference is made to our letter of November 24, 1947, and your reply of January 6, 1948, your File 5008-T5-20, in connection with revenue passenger loads on Aircraft CF-TET.

We regret very much having to pursue this matter further with you but a question arose during the renewal of the C. of A. of Aircraft CF-TET, last Saturday, which we are anxious to have settled.

In the course of renewing the C. of A. of this aircraft, your Mr. Bolduc saw fit to change the figure opposite "Maximum number of persons to be carried (including crew)", from 32 - the number shown on the former C. of A. - to 11, on the new Certificate of Airworthiness; the latter figure including a crew of 3 plus the number of bucket seats with safety belts in the cabin.

Mr. Bolduc further advised that, in the event that additional seats with safety belts were installed in Aircraft CF-TET, it would be necessary to obtain a revised C. of A. before more than 11 persons could be carried.

Since we may, at any time, equip Aircraft CF-TET to accommodate more than the 11 persons presently provided for, we are desirous of obviating the necessity of obtaining a new C. of A. every time seats are added to or removed from the cabin of this aircraft, thereby eliminating

32

the work required, both of ourselves and your own Department, with respect to changing the C. of A., and also eliminating any possibility of mishandling.

To achieve this end, it is requested that the C. of A. of CF-TET be revised to read as follows, with respect to the maximum number of persons to be carried including crew:

"Limited to the number of seats with safety belts provided but not in any case to exceed Thirty-two."

We would appreciate hearing from you on this matter at your earliest convenience.

Yours truly,

J. T. Dyment

J. T. Dyment,
Director of Engineering.

RECEIVED
JAN 31 1948
D.I.A.R. Winnipeg

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

38 2 6-47

717 Dominion Public Bldg.,
Winnipeg, Manitoba, April 16, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 - CF-TET Certificate of Airworthiness No. 2098	5008-T5-20

A 2766

TRANSPORT-RECORDS
APR 19 A.M.
File 5008.T5 -20

Controller, Civil Aviation, Ottawa.

1. Reference is made to correspondence forwarded to Headquarters dated February 5th, 1948, in connection with the requested amendment to the above noted Certificate by Trans-Canada Air Lines. Attached please find copy of letter together with duplicate preliminary design sketches submitted by Trans-Canada Air Lines.

2. Reference is made to Headquarters' letter dated February 17th, 1948, in reply to this office's letter mentioned above. May this office be advised of Headquarters' decision on this matter please.

3. Submitted.

F. W. Bone,
District Inspector, Air Regulations.

FWB/CH

Encls.

39

MDJ/AC'D

Ottawa, Ontario, April 22, 1948.

5008-TS-20 DC-3 - CF-TET Certificate of Airworthiness No. 2098 5008-TS-20

District Inspector, Air Regulations,
717 Dominion Public Building,
Winnipeg, Manitoba.

1. Further to Headquarters' letter dated February 17th and in reply to yours dated April 16th, 1948, Trans-Canada Air Lines' sketch No. SK 33.8136 and instructions, covering the installation of the bucket seats in the subject aircraft, have been examined with previously approved data and a sealed copy of sketch No. SK 33.8136 is returned herewith.

2. The submission of the above data in conjunction with the endorsement proposed by Trans-Canada Air Lines in their letter dated April 12th, 1948, is sufficient to ensure that an adequate safety standard will be maintained.

(H.S. Rees),
Chief Aeronautical Engineer.

Encl.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-47

717 Dominion Public Bldg.,
Winnipeg, Man., June 4, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 CF-TET	5008-T5-20

TRANSPORT-RECORDS
JUN 8 A.M.
File 5008-T5-20

Controller, Civil Aviation, Ottawa.

A10178

1. It is desired to advise that the Certificate of Airworthiness No. 2098 for the above noted aircraft has been endorsed as follows, dated June 4, 1948:

Item 12 - Note added -

"N.B. The maximum number of persons to be carried (including crew) may be increased to conform to the number of seats with safety belts provided, but not in any case to exceed 30."

F. W. Bone,
District Inspector, Air Regulations.

RLB/MC

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
2-48

717 Dominion Public Bldg.,
Winnipeg, Man., January 24, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 CF-TET	5008-T5-20

TRANSPORT-RECORDS
JAN 27 A.M.
File 5008-T5-20

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

A41598

1. It is desired to advise that the Certificate of Registration No. 5700 and Certificate of Airworthiness No. 2098 for the above noted aircraft have been renewed, to be valid until January 20, 1950. ✓

2. Radio Licence No. 74 for this aircraft is valid until March 31, 1949.

Fred W. Bore

for D. G. Joy,
District Controller of Air Services.

FWB/MC

Jones Jones
to mde/HH
27/1/49
Noted
GJJ

45

12108 5008-T5-20

Rm. 44, Trans-Atlantic Administration Bldg.,
Montreal Airport, Dorval, Que., Jan. 17, 1950.

TRANSPORT - RECORDS
JAN 18 A.M.
File 5008-T5-20

Trans-Canada Air Lines,
Montreal Airport,
Dorval, Que.

Gentlemen:

The Certificates of Registration and Airworthiness for your aircraft Douglas DC3 (SIC3G) CF-TET have been renewed to read valid until January 17, 1951, and are returned herewith.

Please note that during the validity of the Certificate of Airworthiness, the Weight and Balance Report for this aircraft must be kept up to date, and that the Centre of Gravity location must remain within the prescribed limits under all loading conditions while this aircraft is being operated.

Yours truly,

J. F. Fournier,
for J. L. Blondeau,
District Superintendent, Air Regulations.

JFF:gd
Encl.
c.c. H.Q. ✓

1. Compliance with Information Circulars T/13/48 and T/14/48: Yes.
2. Copy of Weight and Balance Report attached to letter: No.
3. Amendments made to Certificate of Airworthiness:
   Page 2, Paragraphs 25 to 32 inclusively: deleted. ✓

Noted EJ

c.c. D.C.A.S.
C.R.

Page 3, Para. "D": "The Aircraft Operating Manual with Amendments, ✓ Approved Loading Chart (DC3 SIC3G) Weight and Speed Limitations form part of the Certificate of Airworthiness and must be carried on board the aircraft during flight.

AIRCRAFT INSPECTION REPORT FOR RENEWAL OF C OF A & R

ype DC3 Owner Trans-Canada Air Lines Registration Markings CF-TET T.C.A. Ser. No. 392

fgr's. erial No. 13393 Purpose Commercial C.of R. 5700 C. of A. 2098

revious C.of R nd A. Expires January 20, 1950. Present C.of R & C. of A. Expires

AIRFRAME

ew 2 Passengers ~~21~~ CARGOLINER Number of Fuel Tanks 4 Capacity 670 gals.

mber of l Tanks 2 Capacity 48 Gal. Total Hours on A/C since new 5271:12 Since Last 1000 hr. Check 950:39

nce Last 0 hr. Check 204:38 Since Last Check 19 - 19 Radio Licence No. 459

WEIGHTS

	Gross	Operational Empty	I.C.A.N. or D.O.T. Empty	Carrying Capacity
Passenger ndplane				
Freighter	26900	18411		8489

ENGINES

~~Number 1 Position~~ Right engine

te Pratt & Whitney Model R1830-92-SIC3G

ial No. 20489 H.P. 1200

al Hours ce New 11898:16 Since Complete Overhaul 417:45

~~Number 2 Position~~ Left engine

Make Pratt & Whitney Model R1830-92-SIC3G

Serial No. 19820 H.P. 1200

Total Hours Since New 6848:49 Since Complete Overhaul 950:39

Number 3 Position

e Model

ial No. H.P.

al Hours ce New Since Complete Overhaul

Number 4 Position

Make Model

Serial No. H.P.

Total Hours Since New Since Complete Overhaul

AIRCRAFT INSPECTION REPORT

43

DATE IT [illegible]

PROPELLERS

[illegible] Right

[illegible] Left

Make Hamilton Std. Model Hyd. Full Feathering	Make Hamilton Standard Model Hyd. Full Feathering
Diameter ____ Pitch ____ Blade Design ____	Diameter ____ Pitch ____ Blade Design ____
Blade Serial Numbers No. 1 ____	Blade Serial Numbers No. 1 ____
No. 2 ____ No. 3 ____ No. 4 ____	No. 2 ____ No. 3 ____ No. 4 ____
Total Hours Blade No. 1 ____	Total Hours Blade No. 1 ____
No. 2 ____ No. 3 ____ No. 4 ____	No. 2 ____ No. 3 ____ No. 4 ____
Hub Design 33D50 Mfr's. No. 159250	Hub Design 33D50 Mfr's. No. 158521
Total Hours 7050:43 Since Last Overhaul 1449:32	Total Hours 6770:30 Since Last Overhaul 1894:33
Date of Last Overhaul ____ Date of Last Inspection ____	Date of Last Overhaul ____ Date of Last Inspection ____
Date Purchased Hub ____	Date Purchased Hub ____
Blade No. 1 ____	Blade No. 1 ____
Blade No. 2 ____	Blade No. 2 ____
Blade No. 3 ____	Blade No. 3 ____
Blade No. 4 ____	Blade No. 4 ____

Number 3 Position

Make ____ Model ____	Make ____ Model ____
Diameter ____ Pitch ____ Blade Design ____	Diameter ____ Pitch ____ Blade Design ____
Blade Serial Numbers No. 1 ____	Blade Serial Numbers No. 1 ____
No. 2 ____ No. 3 ____ No. 4 ____	No. 2 ____ No. 3 ____ No. 4 ____
Total Hours Blade No. 1 ____	Total Hours Blade No. 1 ____
No. 2 ____ No. 3 ____ No. 4 ____	No. 2 ____ No. 3 ____ No. 4 ____
Hub Design ____ Mfr's. No. ____	Hub Design ____ Mfr's. No. ____
Total Hours ____ Since Last Overhaul ____	Total Hours ____ Since Last Overhaul ____
Date of Last Overhaul ____ Date of Last Inspection ____	Date of Last Overhaul ____ Date of Last Inspection ____
Date Purchased Hub ____	Date Purchased Hub ____
Blade No. 1 ____	Blade No. 1 ____
Blade No. 2 ____	Blade No. 2 ____
Blade No. 3 ____	Blade No. 3 ____
Blade No. 4 ____	Blade No. 4 ____

Number 4 Position

4

A/C ~~392~~

DATE ~~17-1-50~~

AIRCRAFT INSPECTION REPORT

UNDERGEAR

Chassis ~~Standard Retractable~~ Wheel Bendix 57386

Remarks:-

"I hereby certify that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date, that no unapproved modifications have been incorporated and that the aircraft is airworthy".

Sgd. A.W. Dane

"B" Air Engineer Certificate No. A1617

HD

TRANSPORT - RECORDS
JAN 15 A.M. 1951
File 5008-T5-20

46

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS 3721

Registration - CF-TET (TCA 392) Serial No. 13393

1. C. of A. No. 2098 Expires JAN. 17/51 C. of R. No. 5700 Expires JAN. 17/51
Aircraft Data - Manufacturer Douglas Aircraft Co. Inc., Model DC-3/P
Hours flown - Since New _____ Since Overhaul _____
Engine Data - Manufacturer Pratt & Whitney Model S1C3G-92

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) LEFT - 61A32E		
(2) RIGHT - 61A31E		
(3)		
(4)		

Signature of Applicant D.K. Huckeman
Date January 10th, 1951.

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed D.K. Huckeman
"A" & "C" ~~EK~~ Engineer A-1940
Date January 10th, 1951

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot

Date _____

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report (when applicable) [ ]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5760 and C. of A. No. 2098, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed George S. Lace
for District Aircraft Inspector
Date Jan. 10/51.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING A.I. CANADA

7. C. of A. and C. of R. renewed, not valid after.

(Date)- January 17, 1952 ✓
Permissible Gross Weights - Wheels 26900 lbs (maximum)
- Skis
- Floats

noted RM

Signed A.L. Blondeau
District Superintendent, Air Regulations
Date 10/1/51

B

Other Action:-

8. H.Q. Action C.A.P.

C.A.E.

49

52500

TRANSPORT - RECORDS
JAN 17 A.M.
File 5008-T5-20

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W.... January 16th 1952..

Your File 5008-T5-20

SUBJECT Renewal of Certificates of Registration and Airworthiness

CF / T E T

Our File 5008-T5-20

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF T E T

2. Copy of Log Sheet attached.

A R Pinder

for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach. 1.

B

48 2444 4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TET SERIAL No. 13393

1. C. of A. No. 2098 Expires Jan.17/52 C. of R. No. 5700 Expires Jan.17/52

AIRCRAFT DATA—Manufacturer Douglas A/C Corp. Model DC-3

Hours flown—Since New ..... Since Overhaul .....

ENGINE DATA—Manufacturer Pratt and Whitney Model SlE 3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A33E		
(2) 61A25E		
(3)		
(4)		

Signature of Applicant E. Gee

Date Jan.16/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E. Gee
"B" ENGINEER

Date Jan.16/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT

Date .....

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed S Ball
DISTRICT AIRCRAFT INSPECTOR

Date Jan 16/52

7. C. of A. and C. of R. renewed, not valid after (Date) January 17, 1953

Permissible Gross Weights— Wheels - 25,200 lbs.
Skis
Floats

Noted Gen.

Signed A P Linder
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date January 16th 1952

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

(1)

AIRCRAFT No. 392 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620
6-49

(2) CREW PERSONNEL		(3) FLIGHT		(4) FLIGHT TIME DATA						OIL ADDED			
CAPTAIN	W H KENT	DESIGNATOR	DATE	LEGS OR FLIGHT		FLIGHT TIMES				INDICATE QUARTS			
FIRST OFFICER	R B LANK			FROM	TO	OFF	ON	HOURS	MIN	LEFT	RIGHT	STA	BY
STEWARDESS	J B ACTESON	TF-392	12-1-52										
STEWARD				YZ	YZ	13.39	14.06		27				
				YZ	YZ	14.38	16.22	1	44				
							TOTAL TIME	2	11				

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

Copy in log book

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.	
147	Glide path Receiver weak
	Flag up until passed O.M. Ac 376 reports glide path Ok

SIGNED W H Kent per RBL CAPTAIN

(7) **AIRCRAFT TIME DATA**

STATION YZ	DATE 12-1-52
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.)	123.23
TOTAL AIRCRAFT TIME	7227:59

(8) **WORK TO BE DONE NEXT CHECK STATION**

	STA.	BY
CREW PERSONNEL		
CAPTAIN		
FIRST OFFICER		
STEWARDESS		
STEWARD		

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
	a/c Preflight Checked	YZ	H Ballenger
	#3 Check Completed	YZ	G Myers

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

G Myers 12-1-52 YZ

SIGNED H Ballenger AIR ENGINEER. DATE 12-1 STATION YZ

TRANSPORT - RECORDS
52
JAN 2 ... 1953
File 5008-T5-20

DEPARTMENT OF TRANSPORT 46553

TORONTO, 260 Richmond St. W. December 31, 1952

Your File 5008-T5-20

SUBJECT Renewal of Certificates of Registration and Airworthiness
Douglas DC3 (SIC3G) CF-TET

Our File 5008-T5-20

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for CF-T E T

2. T.C.A. Flight Report attached.

H. W. Saunders
(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

51 2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— TET SERIAL NO. 13393

1. C. of A. No. 2098 Expires Jan 17/53 C. of R. No. 5700 Expires Jan 17/53
AIRCRAFT DATA—Manufacturer Douglas A/C Corp Model DC-3
Hours flown—Since New ..... Since Overhaul .....
ENGINE DATA—Manufacturer Pratt & Whitney Model S1E3G

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 61A20E		
(2) 61A37E		
(3)		
(4)		

Signature of Applicant O Gee
Date Dec 30/52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed O Gee
"B" ENGINEER
Date Dec 30/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed .....
TEST PILOT
Date .....

4. The following documents are attached:
Certificate of Airworthiness [X] Certificate of Registration [X] Weight and Balance Report [X] (when applicable)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 5700 and C. of A. No. 2098, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [illegible]
DISTRICT AIRCRAFT INSPECTOR
Date Dec 31/52

DEPARTMENT OF TRANSPORT AERONAUTICAL INSPECTION CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) January 17, 1954
Permissible Gross Weights— Wheels 25,200 Lbs.
Skis
Floats

Signed H. W. Jinks
DISTRICT SUPERINTENDENT, AIR REGULATIONS
Date December 31, 1952

Other Action:— Note 1

8. H.Q. Action— C.A.R.
C.A.E.

(7) **AIRCRAFT TIME DATA**

STATION YZ DATE 29-12-52	
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 573:40	
TOTAL AIRCRAFT TIME 8621:04	

(8) **WORK TO BE DONE NEXT CHECK STATION**

	STA.	BY

(9) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	SIGNATURE
91	Green ice changed a/c Checked	YZ YZ	N Penner

(10) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

TCA-620
6-49

(1)

AIRCRAFT No. 392 TRANS-CANADA AIR LINES FLIGHT REPORT

(2) CREW PERSONNEL		(3) FLIGHT	
CAPTAIN	J H HOLLEY	DESIGNATOR	DATE
FIRST OFFICER	A M MARSHELL	ICF	29-12-52
STEWARDESS			
STEWARD			

(4) FLIGHT TIME DATA

LEGS OR FLIGHT		FLIGHT TIMES				OIL ADDED (INDICATE QUARTS)			
FROM	TO	OFF	ON	HOURS	MIN	LEFT	RIGHT	STA	BY
YZ	YZ	13.12	1411		59	8	8	YZ	WP
					TOTAL TIME		JF		

(5) INSTRUMENT READINGS

	CLIMB		CRUISE			CLIMB		CRUISE	
MIXT. CON. POSITION					INDICAT. AIR SPEED				
PRESSURE ALTITUDE					OUTSIDE AIR TEMP.				
	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.					CARB. AIR TEMP.				
MANIFOLD PRESS.					CYL. HEAD TEMP. (R)				
OIL PRESSURE					CYL. HEAD TEMP. (F)				
FUEL PRESSURE					OIL TEMPERATURE				
COWL FLAP POSIT'N.					TIME				

(6) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.	

DEF. NO.	
91	Green vee has heavy background

SIGNED J H Holley Per A Yee CAPTAIN

Copy log sheet

Director of Air Services,
OTTAWA. Attention: S.A.R.

CANADA

57768

TRANSPORT - RECORDS
JAN 4 P.M. 1954
5008-T 5-20
File
2444 3-52

55

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF - TET SERIAL NO. 13393

1. C. of A. No. 2098 Expires Jan. 17/54 C. of R. No. 5700 Expires Jan. 17/54
Aircraft Data—Manufacturer Douglas Aircraft Corp. Model DC-3C-S1C36-92
Hours flown—Since New 11051:56 Since Overhaul 9751:06
Engine Data—Manufacturer Pratt & Whitney Model R1830-92-S1C3G

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	CP 350253 (Left)	16064:53	:00
(2)			
(3)	19820 (Right)	13898:08	:00
(4)			

Signature of Applicant H. F. Robinson

Date Dec. 29, 1953

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed H. F. Robinson

"M" Licence No. WGM-76

Date Dec. 29, 1953

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Pilot

Date _____

4. The following documents are attached:

Certificate of Airworthiness	[X]
Certificate of Registration	[ ]
Weight and Balance Report (when applicable)	[ ]

Note: Attached herewith duplicate copy of last engine and aircraft log sheet prior renewal of C of A this date.

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed R C Smith
District Aircraft Inspector

Date Dec 29/53

7. C. of A. and C. of R. renewed, not valid after.

Date 28-12-1954

Permissible Gross Weights—Wheels 26200 lbs TAKE OFF
—Skis —
—Floats —

Signed K/ Bentley
District Superintendent, Air Regulations

Date 29-12-1953

Other Action:—

Noted

8. H.Q. Action C.A.R.

C.A.E.

(8) AIRCRAFT TIME DATA		(9) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION	WG. DATE 25/12/53			
TIME SINCE LAST NO. 1 OR 2 CHECK (CIRCLE NO.)	994.26			
TOTAL AIRCRAFT TIME	11051.56			

(10) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	DATE	SIGNATURE
	#6 Check Completed	WG	30/12/53	
	Progressive Overhaul carried out on Zones A2, H, K	WG	"	
	C of A renewed this date	WG	30/12/53	

INSPECTION RELEASE CERTIFICATE A. I. - 12

Complete Aircraft — After Overhaul Major Repair and/or Alterations

A/C Registration - CF - TET Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft have been completed satisfactorily: that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: Dec 30/53 Signed W. T. Robinson, WGM 76
Air Engineer "B"

(11) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY.

SIGNED ..... AIR ENGINEER. DATE ..... STATION .....

(1) AIRCRAFT No. 392 TRANS-CANADA AIR LINES FLIGHT REPORT

TCA-620

(2) CREW PERSONNEL		(3) FLIGHT	
		DESIGNATOR	DATE
CAPTAIN	A. W. Ross		
FIRST OFFICER	G. LaFreniere		
STEWARDESS		2609-23	24-12-53
STEWARD			

(6) INSTRUMENT READINGS

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION		A/L	INDICAT. AIR SPEED		148/148
PRESSURE ALTITUDE		6100	OUTSIDE AIR TEMP.		0° C

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.			2060	2050	CARB. AIR TEMP.			~~20°~~	20°
MANIFOLD PRESS.			28	28	CYL. HEAD TEMP. (C)			175	200
OIL PRESSURE			102	100	CYL. HEAD TEMP. (F)				
FUEL PRESSURE			15.5	14.5	OIL TEMPERATURE			73	78
COWL FLAP POSIT'N.			CLSD		TIME			16:55 E	

(4) FLIGHT TIME DATA — LEGS OR FLIGHT 35 FLIGHT TIMES

FROM	TO	OFF	ON	HOURS	MIN
UL	QT	1410	2102	6	52
QT	WG	2127	2347	3	20
			TOTAL TIME	10	12

(5) OIL ADDED — INDICATE QUARTS

LEFT	RIGHT	STA	BY
8		QT	ER

(7) REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT

DEF. NO.	
67	Cabin door comes open in flight locking handle opens with vibration.

DEF. NO.

SIGNED "A. W. Ross" CAPTAIN

(8) AIRCRAFT TIME DATA	(9) WORK TO BE DONE NEXT CHECK STATION	STA.	BY
STATION WG DATE 25/12/53			
TIME SINCE LAST NO. 5 OR 6 CHECK (CIRCLE NO.) 994.26			
TOTAL AIRCRAFT TIME 11051.56			

(10) **DEFECTS RECTIFIED AND OTHER WORK DONE**

I HEREBY CERTIFY THAT THE WORK LISTED WITHIN THIS SECTION OPPOSITE MY SIGNATURE HAS BEEN COMPLETED AS STATED AND THAT THE COMPONENTS AFFECTED ARE SERVICEABLE IN ACCORDANCE WITH APPROVED PRACTICES.

DEF. NO.		STA.	DATE	SIGNATURE
	#6 Check completed	WG	30/12/53	
	Progressive Overhaul carried out on Zones A2, H.K	WG	"	
	C of A renewed this date	WG	30/12/53	

INSPECTION RELEASE CERTIFICATE A.I. - 19

Complete Aircraft — After Overhaul Major Repair and/or Alterations

A/C Registration - CF-JET Work Done By - Trans-Canada Airlines

I hereby certify that under my supervisory inspection, the repairs and adjustments to this aircraft have been completed satisfactorily: that all work has been done with certified material according to accepted practice; that all Airworthiness Directives (or equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

I further certify that all Log Book entries required by Technical Instructions and Procedures Regarding Civil Aircraft have been properly completed.

Date: Dec 30/53 Signed: W. Robinson WGM76
Air Engineer "B"

(11) I HEREBY CERTIFY THAT THE WORK DONE ON AND THE INSPECTION OF THIS AIRCRAFT HAS BEEN CARRIED OUT IN ACCORDANCE WITH APPROVED PRACTICES AND THE AIRCRAFT IS AIRWORTHY

SIGNED _____ AIR ENGINEER DATE STATION

53

TCA-620

(1) **AIRCRAFT No. 392** **TRANS-CANADA AIR LINES FLIGHT REPORT**

(2) CREW PERSONNEL		(3) FLIGHT	
		DESIGNATOR	DATE
CAPTAIN	A. W. Ross		
FIRST OFFICER	G. LaFreniere		
STEWARDESS		2009-23	24-12-53
STEWARD			

(4) **FLIGHT TIME DATA**

LEGS OR FLIGHT FROM	LEGS OR FLIGHT TO	FLIGHT TIMES OFF	FLIGHT TIMES ON	HOURS	MIN
UL	QT	1410	2102	6	52
QT	WQ	2127	2347	3	20
			TOTAL TIME	10	12

(5) **OIL ADDED** — INDICATE QUARTS

LEFT	RIGHT	STA	BY
8		QT	ER

(6) **INSTRUMENT READINGS**

	CLIMB	CRUISE		CLIMB	CRUISE
MIXT. CON. POSITION		A/L	INDICAT. AIR SPEED		148/148
PRESSURE ALTITUDE		6100	OUTSIDE AIR TEMP.		0° C

	LEFT	RIGHT	LEFT	RIGHT		LEFT	RIGHT	LEFT	RIGHT
ENGINE R.P.M.			2060	2050	CARB. AIR TEMP.			20°	20°
MANIFOLD PRESS.			28	28	CYL. HEAD TEMP. (R)			175	200
OIL PRESSURE			102	100	CYL. HEAD TEMP. (F)				
FUEL PRESSURE			15.5	14.5	OIL TEMPERATURE			73	78
COWL FLAP POSIT'N.			CLSD		TIME			1655 E	

(7) **REPORT OF CONDITION OF AIRCRAFT, ENGINES, AND ACCESSORY EQUIPMENT**

DEF. NO.	
67	Cabin door comes open in flight locking handle opens with vibration.

DEF. NO.	

SIGNED "A. W. Ross" CAPTAIN

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO 5008-T5-20

DUPLICATE - DIST. FILE NO. _____

TRANSPORT - RECORDS
56
JUN 30 A.M.
File 5008-T5-20

AIRCRAFT LICENSING RECORDS

1. Registration mark CF-TET 10128 2. Old C of R No.

3. New C of R No. 5700 ..... Date .....

4. C of A No. 2098 ..... Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....

otherwise covered .....

.....

.....

13. C of A valid from Permanent C. of A. per. HQ. to Letter May 13. 1955

Temporary authority from ..... to .....

Date June 28th 1955

District Superintendent Air Regulations

Engines

18. Number installed: Two

19. Makes: Pratt & Whitney

20. Types: SI.C3G

21. International power of the engine or engines at

Take-Off (a) Sea Level 1200 H.P. at 2700 revolutions per minute. (International number of revolutions)

M.E.T.O. (b) Rated Altitude 1090 H.P. at 2550 revolutions per minute. (International number of revolutions)
at 7500 ft.

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews { Number fitted: Two Types: Hamilton Standard No. .....
{ Pitch: Constant Speed Diameter: 17 3/8

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	16,937 lbs.
	(b) Seaplane	lbs.
	(c) Skiplane	lbs.

Weight of Fuel and Oil

26. Fuel (at 7·2 lbs. per gallon)	4,824 lbs.
(a) Number of tanks: Four	
(b) Capacity of tanks: 670 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	432 lbs.
(a) Number of tanks: Two	
(b) Capacity of tanks: 48 Imp. gals.	
28. Weight allowed for crew	340 lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	2206 8667 lbs.
32. Maximum total weight authorized	lbs.
Landplane (Landing) 24,400 (Take-off)	25,200 lbs.
Seaplane	lbs.
Skiplane	lbs.

Compulsory Conditions

33. Maximum total weight authorized (write in full):
Landplane (Take-off) Twenty-five Thousand two hundred pounds
Seaplane (Landing) Twenty Four thousand four hundred pounds
Skiplane

34. Minimum crew necessary: Two

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 47.1 inches and 70.6 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2550 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2700 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated March 6, 1947 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 17th day of May 19 47

Superintendent, Air Regulations.

/JS

61

2462
7-45

+5

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 2098

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

CENTRAL NORTHERN AIRWAYS LIMITED (22.12.55)

1. Surname of owner (or name of Company) ~~Trans-Canada Air Lines~~
2. Christian name
3. Address P.O. Box 5, Winnipeg 12, Manitoba ~~360 McGill St., Montreal, P.Q.~~
4. Nationality ~~Canadian, BRITISH~~ Canadians

NAME OF CONSTRUCTOR

5. Name Douglas Aircraft Company, Inc.

NATIONALITY AND REGISTRATION MARKS

6. CF-TET

DESCRIPTION OF AIRCRAFT

7. Type Douglas Series DC3(S1C3G) Constructor's No. 13393
8. Place and year of construction of aircraft Santa Monica, Calif., U.S.A. Feb. 1947

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) ~~Thirty-one~~ Eleven (24.1.48)
13. Category Normal (4.6.48)
14. Subdivision a,b,c,d, & e
15. Maximum span (in flying position) 98'
16. Maximum length (in flying position) 65'
17. Total height (with and without trolley in case of seaplanes) 17'

(The maximum number of persons to be carried (including crew) may be increased subject to the number of seats with safety belts provided, but not many case to exceed 30)

The maximum total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

60

MIM/ZC/LEM

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

DC3C (SIC3G) Weight and Speed Limitations.

1. The following is a summary of the maximum take-off and landing weights which have been authorized for the DC3C (SIC3G) aircraft.

(a) Scheduled Air Carrier Operations:

Landing - 24,400 lbs. - Except in an emergency
Take-off - 25,200 lbs.

(b) For Cargo Operations only:

Take-off and landing - 26,900 lbs. (Dump Valves not required)
A flap setting of 15 degrees is required at weights in excess of 25,200 lbs.

(c) For Non-Scheduled Passenger Operation only:

Landing - 25,200 lbs.) Dump Valves not required
Take-off - 25,200 lbs.)

(d) The weight limitations given in (a) and (c) above may be increased as follows for Domestic operations only in Canada:

Landing - 26,000 lbs. at sea level) Dump Valves
Take-off - 26,200 lbs. at sea level) not required

Under (d) the maximum permissible take-off and landing weights are reduced with increasing airport altitude in accordance with weight limitation charts approved by the Department of Transport.

Note: Maximum landing and maximum take-off weight may be increased 146 lbs. when compete de-icer is installed, except that no allowance may be made for de-icers at take-off and landing weights above 25,200 lbs.

2. Airspeed Limits.

	Up to 24,800 lbs.	24,800 to 25,200 lbs.	25,200 to 26,200 lbs.	26,200 to 26,900 lbs.
Level flight or climb	217 mph	211 mph	205 mph	200 mph
Glide or dive	262 "	257 "	250 "	241 "
Flaps extended	112 "	112 "	112 "	112 "

(All speeds True Indicated)

(S. Graham),
Superintendent, Air Regulations.

OTTAWA, Ontario.
March 25th, 1947.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		March 6,1948 Jan 22/49 20/1/50 17.1.51 17.1.52. January 17, 1953 January 17, 1954 May 13, 1955 November 28, 1956	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

58

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Landing Lights 17.1.56

2 Engine Revolution Counter
2 Oil Pressure Gauge
2 Oil Temperature Gauge
Emergency Flares

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First aid kit

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

This Certificate of Airworthiness is valid for non-scheduled passenger operations, and cargo operations only.

See insert for weight limitation for cargo operations.

The aircraft Operating Manual with Amendments, Approved Loading Chart (DC 3 S1.C35) Weight & Speed Limitations form part of the Certificate of Airworthiness & must be carried on board the aircraft during flight (17.1.56)

Total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.

Note: This certificate is subject to Air Regulations, ~~1938~~, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

24/1/48 Certificate renewed not valid after January 23, 1949. R. L. Bolduc

21/1/49 Certificate renewed to be not valid after the 20th day of January, 1950. J. P. Caton.

Renewed valid until Jan 17/1951 J. Baxter

Renewed not valid after Jan. 17/52 J. L. Bolduc

Transport Canada Civil Aviation Division

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

/JS

2462A
8-41

57

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5700

NATIONALITY AND REGISTRATION MARKS CF-TET

1. Type and description	Douglas DC3 (S1C3G)
2. Name and address of constructor	Douglas Aircraft Co.,Inc., Santa Monica, Calif., U.S.A.
3. Constructor's serial number	13393
4. Name of owner	Trans-Canada Air Lines,
5. Address of owner	360 McGill St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal,Toronto, Winnipeg - other Canadian & U.S. Airports
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 6th day of March 19 47, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-TET and is of Canadian nationality.

Given at Ottawa this 17th day of May 19 47

H. L. Watts

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

62

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 14315

NATIONALITY AND REGISTRATION MARKS CF - TET

1. Type and description	Douglas DC3 (S1C3G)
2. Name and address of constructor	Douglas Aircraft Co., Inc., Santa Monica, Calif., U.S.A.
3. Constructor's serial number	13393
4. Name of owner	Central Northern Airways Ltd.
5. Address of owner	P.O.Box 5, Winnipeg 12, Manitoba.
6. Nationality of owner	British
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 22nd day of December 19 55, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF - TET and is of Canadian nationality.

Given at Winnipeg this 23rd day of December 19 55

Original Signed by
J. D. C. CRATON
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T5-20

DUPLICATE - DIST. FILE NO. T5-20

TOP[illegible].S. OTTAWA
ATT[illegible]N: S. A. R.

TRANSPORT - RECORDS
DEC 30 P.M.
File 5008-15-20

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- TET 23125 2. Old C of R No. 5700 Attached.....

3. New C of R No. ..14315..... Date ..December.23rd,.1955.....

4. C of A No...2098.....Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane (x) Seaplane [ ] Skiplane [ ]

6. Classification Changes } State [ ] to Commercial [ ] to Private [ ]
Commercial [x] to State [ ] to Private [ ]
Private [ ] to Commercial [ ] to State [ ]

Valid for Day [x] Night [x]

7. Surname of owner ..Central.Northern.Airways.Ltd,..... Citizen of British.....
Christian name ....

8. Address of owner .P.O. Box 5, Winnipeg 12, Manitoba. .....
.....
Change of address to .....

9. Aircraft based at .....Winnipeg, Manitoba.....

10. Type	Weight empty	Max. gross weight
Land		25200
Sea		
Ski		

11. Minimum crew	Two	Maximum passengers		Pass with freight

12 Wt. and balance report [ ] Date Copy attached [ ]
Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not ..Revised Weight and Balance dated Dec. 1st, 1955 inserted. Page 4 - otherwise covered ."This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance .. with their system of continuous maintenance and inspection approved by the Minister" deleted. Item 4- Canadian deleted and British inserted.

13. C of A valid from ..November 29th, 1955..... to ....November 28th, 1956.....

Temporary authority from .December 22nd, 1955. to ..January 21st, 1956.....

Date December 29th, 1955.....

L. D. Baton
District Superintendent Air Regulations

GJ/SEK

64

Ottawa, Ontario, January 9th, 1956.

Douglas DC3 (S1C3G),
Aircraft, CF-TET

5008-T5-20

District Controller of Air Services,
612 Power Building,
WINNIPEG, Manitoba.

Attention: District Superintendent, Air Regulations.

1. We acknowledge receipt of Form AC-5-132 covering Douglas DC3 (S1C3G) Aircraft, CF-TET.

2. It is desired to point out that Item 4 of the Certificate should not have been amended to read "British" instead of "Canadian".

3. Will you, please, therefore, make the necessary correction and advise this office when this has been done.

Superintendent, Air Regulations.

AC-5-132

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

TRAD. A. S. OTTAWA
AUTHORIZATION: S. A. R.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T5-20

DUPLICATE - DIST. FILE NO. T5-20

TRANSPORT - RECORDS
JAN 19 A.M.
File 5008-15-20

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- TET 24387 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 2098 ..... Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not otherwise covered . Certificate of Registration Item 6 - British deleted and Canadian inserted; Certificate of Airworthiness Item 4 - British deleted and Canadian inserted.....

.....

13. C of A valid from ..... to ..... Nil

Temporary authority from ..... to .....

Date January 16th, 1956.....

District Superintendent Air Regulations

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T-5-20

DUPLICATE - DIST. FILE NO. T-5-20

TO: D[illegible]. S. OTTAWA
ATTE[illegible]ON: S. A. R.

TRANSPORT - RECORDS
66
JAN 27 P.M.
File 5008-T5-20

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- TET 25034 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 2098 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....
Christian name ....

8. Address of owner .....
.....
Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date January 21st, 1956. ✓ Copy attached ☐
Skiis

Amendment not .....Weight and Balance Report Supplement for skiis inserted.....
otherwise covered ...in the Certificate of Airworthiness.....
.....
.....

13. C of A valid from ..... to .....Nokd.....
Temporary authority from ..... to .....nil.....

Date ..January 25th, 1956.... District Superintendent Air Regulations

5028-T-5-20

CANADIAN NATIONAL TELEGRAPHS

5317 67

(2) ARR/SAR In view Air Regs it would be of interest to know why the aircraft was short of fuel. 10/5. Ley.G.

SAR

10 MAY AM 9 18

CNTGA003 65/63 NL 0246

ST WINNIPEG MAN MAY 10

(1) DIRECTOR OF AIR SERVICES

DEPT OF TRANSPORT OTTAWA ONT

ATTENTION SUPERINTENDENT OF AIR REGULATIONS

ARW62 RE INSPECTION INSTRUCTION

(A) DC THREE CHARLIE FOXTROT - TANGO ECHO TANGO

(B) CENTRAL NORTHERN AIRWAYS

(C) MORTEL

(D) FOURTEEN FORTY CST MAY EIGHTH FIFTY SIX

(E) UNKNOWN

(F) PELLEY LAKE FIFTY MILES NORTH WEST FROBISHER

(G) NIL

(H) AIRCRAFT FORCED LANDED ON SKIS SHORT OF FUEL UNDAMAGED.
SUCCESSFUL AIR DROP OF FUEL CARRIED OUT AND AIRCRAFT PROCEEDED
TO FROBISHER. PILOTS REPORT FORTHCOMING

DISTRICT CONTROLLER OF AIR SERVICES..

728AM..

(3) CAB

Please have this placed on file and D.F. to await pilots report.

My. 10/5 56

ARR

Resend 68

B/F on
file on
June 1/56.
thanks
A.P.J.
ARR
10.5.56.

Noted
10/5/56
GL

67

CENTRAL NORTHERN AIRWAYS LTD.

STRUCTURAL FAILURE REPORT

ENGINE OR AIRFRAME

(TO BE COMPLETED IN TRIPLICATE)

To comply with Department of Transport Air Regulations and Engineering and Inspection Manual Part I, Chap. V, Paragraph 5.4

COMPLETE ALL ITEMS IN THE FOLLOWING TABLE

ITEM	MAKE & MODEL	SERIAL NO.	REGISTRATION	HOURS SONCE O/H	HOURS SINCE NEW
AIRCRAFT	Douglas DC3	13393	CF-TET	747:20	14537:21
ENGINE	Pratt & Whitney Twin Wasp R1830-92	21511		747:20	19460:34
PROPELLOR	Hamilton Standard 33D50	158522		747:20	22760:20

DATE FAILURE OCCURRED May 16th., 1956. | PLACE FAILURE OCCURRED (Nearest) Churchill, Manitoba.

SPECIFIC PART WHICH CAUSED FAILURE not established

NAME OF PART | PART NO.

Describe in detail the failed part or difficulty and the circumstances under which it occurred. (Attach separate sheet if insufficient space; also sketch or photograph.

Pilot observed excessive amount of oil being thrown from the crankcase breather during climb. Aircraft returned to base with starboard engine at reduced power.

State probable cause of failure and recommendations to prevent recurrence.

Oil tank contents were checked on arrival and 7 gallons of oil were left in the tank. The oil tank was refilled and engine ground run, oil pressure then reported to be 20 p.s.i. at 1,000 r.p.m. Engineer stated that engine seized on further ground running. A quantity of ferrous and non-ferrous metal was found in the oil pressure filter and main sump drain plug.

Cause of failure not known until engine is dismantled for further inspection.

Report Submitted by	Occupation	License No.	Date of Report
S. G. Marsh	Superintendent, Aircraft Maintenance, Churchill, Manitoba.	QMM 53	May 26th., 1956.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2

511 Power Building,
Winnipeg 1, Manitoba, May 31, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 - CF-TET	5008-T5-20

8307

TRANSPORT - RECORDS
JUN 4 A.M.
File 5008-T5-20

Director of Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. For your records, we are attaching hereto Structural Failure Report, covering a Pratt & Whitney Twin Wasp R1830-92 engine, Serial No. 21511, operated by Central Northern Airways Ltd., which was removed from the above aircraft on May 16, 1956.

R C Smith

for District Controller of Air Services.

Enc.

Noted.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

MDJ:AO'D

2
71

Ottawa, Ontario, August 10, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Douglas DC-3 CF-TET Radio Installation	6252-311 5008-T5-20 (CAE)

MEMORANDUM TO: R.I.E.

1. Trans-Air Limited Drawing No. 0036 titled "Installation ART 13 Transmitter BC 348 Receiver in DC-3 CF-TET", detailing the installation of radio equipment in CF-TET, is satisfactory insofar as airworthiness is concerned and approved subject to DAI inspection and test. Four stamped copies of Drawing No. 0036, approved as noted, are returned for your distribution.

(H.S. Rees),
Chief Aeronautical Engineer.

cc: DAI WINNIPEG

72

MDJ:AO'D

Ottawa, Ontario, August 10, 1956.

Douglas DC-3 CF-TET
Radio Installation 5008-T5-20 (CAE)

District Controller of Air Services,
509 Power Building,
Winnipeg 1, Manitoba.

Attention: District Aircraft Inspector

1. The attached memorandum, approving the noted installation subject to DAI inspection and test, is forwarded for your information and action.

for (H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

Attach.

2413
1-56

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

THE DISTRICT CONTROLLER OF AIR SERVICES,
DEPARTMENT OF TRANSPORT

Winnipeg, Manitoba.

(Parts A, B and C must be completed by the applicant)

PART "A"

Application is hereby made for the registration under the Air Regulations of the aircraft described below and the issue of a Certificate of Airworthiness if required.

Nationality and Registration Marks	Manufacturer	Manufacturers Designation of Aircraft	Aircraft Serial No.
CF-TET	Douglas Aircraft Co., Inc. Santa Monica, Calif., USA	DC3(S1C3G)	13393
			Date of manufacture
			1947

The aircraft is to be certificated and operated as a (State, Commercial, Private) aircraft Commercial

The proposed base of operation is Churchill, Manitoba.

The minimum Flight Crew required is Two

The maximum take-off weight applied for is Landplane / Skiplane } 25,200 - non-scheduled Passenger; 26,900 - Cargo Operations Lbs.

The Airworthiness Certification (will be/has been) made under { Aircraft Type Approval No. ; C.A.A. Spec. No. TC 669

Type of engine(s) installed is/are Two - Pratt & Whitney S1C3G

The Weight and Balance Report to be submitted is for LAND [X] SEA [ ] SKI [X]
All documentation and clearances will be submitted prior to inspection of the aircraft for acceptance [ ]
The Registration Fee of $5.00 is enclosed [ ]
The Certificate of Airworthiness Fee of $5.00 is enclosed [ ]

OWNER, OR OWNERS OF AIRCRAFT

Print or Type Name in Full	Permanent Address	Nationality (Citizen of)
TRANSAIR LIMITED	P.O. Box 5, St. James, Manitoba.	Canadian
(List of Directors and Officers attached)		

I certify that the foregoing facts are to the best of my knowledge and belief true and correct.

Signature of Applicant [signature]

Date of Application September 25, 1956.

NOTE:—The Fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for a Certificate of Airworthiness is $5.00.

(SEE REVERSE SIDE)

CC: H. Q.
D. S. R. R. WINNIPEG

Noted

PART "B"

I hereby certify that complete legal evidence of ownership including any hidden agreements, liens, encumbrances or mortgages will be submitted to the Department of Transport, Air Services Branch: That the described aircraft is not registered in any foreign country: That the owner now applying for registration comp[illegible] in full with the ownership and citizenship requirements of the Air Regulations.

Signature of Applicant ..... Les Travis

Witness ..... R. H. Campbell

PART "C"

If the aircraft is equipped with a radio, list the Make and Model of each unit of apparatus:

A. Transmitter(s) ..... 1 - RT16/ARC1 Transmitter-Receiver
1 - RTA1B Transmitter-Receiver
1 - MN53A Marker Receiver
1 - BC733 Localiser receiver

B. Receiver(s) ..... 1 - Collins type 51V-2 UHF Glide path receiver

C. Miscellaneous (ADF, ILS, Etc.) .....

Radio Licence Number ..... 416 ..... Date of Issuance ..... April 1, 1956.

PART "D"

(For Use of the Department only)

	INITIAL	
Application checked for acceptance	☐	Date .....
Registration and Identification Marks CF—		Allotted ☐ initial
All documents including Form No. 2445 submitted and checked		☐ initial

Registration and the issue of a Certificate of Airworthiness (if required) approved for issue as applied for.
Registration amended due to change of Company name.

Dated at ..... Winnipeg, Manitoba. .....

this ..... 12th ..... day of ... Oct. .... 19 .. 56.

District Superintendent, Air Regulations.

INFORMATION TO APPLICANTS FOR REGISTRATION OF AN AIRCRAFT

Before an aircraft will be registered and certified as airworthy, the following documentation must be submitted to the Department of Transport.

1. Evidence of ownership (Bill of Sale, etc.) affidavits if applicable.
2. Registration Fee of $5.00.
3. Certificate of Airworthiness Fee of $5.00.
4. Weight and Balance Report (in duplicate).
5. Airplane Flight Manual.
6. Certificate of Airworthiness for export or equivalent document.
7. Operating limitations.
8. Customs clearance Form B.1.
9. Certification of Aircraft imported complete Form No. 2443.

DIRECTORS & OFFICIALS OF TRANSAIR LIMITED

Name	Position	Address
M. E. Ashton	Chairman of the Board of Directors	Ft. of Wexford St., Charleswood, Man.
R. D. Turner	President & Director	Transair Limited, P.O. Box 5, St. James, Man.
G. H. Sellers	Vice-President & Director	809 Grain Exchange Bldg., Winnipeg, Man.
F. C. McKay	Secretary-Treasurer	Transair Limited, P.O. Box 5, St. James, Man.
G. W. Northcott	General Manager	Transair Limited, P.O. Box 5, St. James, Man.
J. N. T. Bulman	Director	McDermot & Francis Sts., Winnipeg, Man.
A. J. Vincent	"	919 Grain Exchange Bldg., Winnipeg, Man.
F. R. Brown	"	4 Lonsdale Apts., River Avenue, Winnipeg, Man.
J. A. Roberts	"	c/o Spartan Air Services, 74 Sparks Street, Ottawa, Ont.
J. H. Lymburner	"	Room 1007 Commonwealth Bldg., 77 Metcalfe St., Ottawa, Ont.
A. G. Bailey	"	c/o Bailey Selburn Gas & Oil Ltd., 901 - 8th Ave., West, Calgary, Alberta.
J. T. Lockhart	"	c/o British American Oil Co., 1600 Erin St., Winnipeg, Man.

2444
5-52

75

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF –TEP~~D~~ / SERIAL No. 13393

1. C. of A. No. 2098 Expires Nov. 28/56 C. of R. No. 14315 Expires
Aircraft Data—Manufacturer Douglas Aircraft Co. Model DC-3
Hours flown—Since New 15206:55 Since Overhaul 1421:30
Engine Data—Manufacturer Pratt & Whitney Model S13C6

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	425577	5032:25	581:40
(2)	24032	4128:25	676:10
(3)			
(4)			

Signature of Applicant J.M. Leathcott

Date November 23, 1956

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed J.J. Massey Q1111-5-7
"M" ~~Licence~~ No.

Date November 23, 1956

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed D.M. Rose AT-206
Pilot

Date November 23, 1956

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 14315 and C. of A. No. 2098, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed R.L. Smith
District Aircraft Inspector

Date Nov 27/56

7. C. of A. and C. of R. renewed, not valid after.

Date November 22, 1957

Permissible Gross Weights—Wheels
—Skis
—Floats

Noted
LSJ

Signed [illegible]
District Superintendent, Air Regulations

Date November 27, 1956

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

2462
2-56

76

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 2098

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E T	Douglas Aircraft Company Inc. Douglas DC-3	13393

(4) CATEGORY: Commercial — LANDPLANE [x] SEAPLANE [ ] SKIPLANE [x]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER November 28th, 1956.

DATE OF ISSUE March 6th, 1947.

SEAL

for SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

CC:H.Q

TRANSPORT - RECORDS
DEC 3 A.M.
File 505-15-20

2462
2-56

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 2098

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E T	23319 Douglas Aircraft Company Inc., - Douglas DC-3	13393

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [X]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER November 22nd, 1957.

DATE OF ISSUE March 6th, 1947.

SEAL

SUPERINTENDENT, AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

19 1-56

511 Power Building,
Winnipeg 1, Manitoba, February 4, 1957.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-20

SUBJECT: Structural Failure Report - CF-TET

28342

TRANSPORT - RECORDS
FEB 7 A.M.
File 5008-T5-20

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Attached hereto is Structural Failure Report from TransAir Limited, covering Pratt & Whitney 1830 engine Serial No. 425577, which failed at Fox, and was recently removed from CF-TET.

2. Submitted for your records.

A.A. Walker

for District Director, Air Services.

Enc.

18

CENTRAL NORTHERN AIRWAYS LTD.

S T R U C T U R A L F A I L U R E R E P O R T

ENGINE OR AIRFRAME

(TO BE COMPLETED IN TRIPLICATE)

To comply with Department of Transport Air Regulations and Engineering and Inspection Manual Part I, Chap. V, Paragraph 5.4

COMPLETE ALL ITEMS IN THE FOLLOWING TABLE

ITEM	MAKE & MODEL	SERIAL NO.	REGISTRATION	HOURS SONCE O/H	HOURS SINCE NEW
AIRCRAFT	Douglas DC3	13393	CF- TET	1495:35	15300:30
ENGINE	Pratt & Whitney R 1830-92	425577		675:45	5129:30
PROPELLOR					

DATE FAILURE OCCURRED Jan. 10th., 1957 | PLACE FAILURE OCCURRED (Nearest) Fox

SPECIFIC PART WHICH CAUSED FAILURE not established

NAME OF PART | PART NO.

Describe in detail the failed part or difficulty and the circumstances under which it occurred. (Attach separate sheet if insufficient space; also sketch or photograph.

Captain reported loss of oil pressure between Site 26 and 30 (Fox). Due to a full load Captain did not attempt to feather and continued for approximately 100 miles with no indication of pressure. On landing and taxiing up to the loading ramp a pressure of 30 psi was evident.

State probable cause of failure and recommendations to prevent recurrence.

Engineer checked oil tankand after adding five gallons of oil proceeded to ground run the engine. A pressure of 70 psi was recorded and after approximately 20 seconds the pressure dropped to 20 psi with resultant engine seizure. Cause of failure not established until engine has been dismantled for inspection.

Report Submitted by	Occupation	License No.	Date of Report
S. G. Marsh	Maintenance Supervisor	QMM-53	Jan. 25/57

80

OSL:AO'D

Ottawa, Ontario, February 7, 1957.

February 4, 1957 5008-T5-20 5008-T5-20 (CAE)

Engine Failure Report - P & W R1830-92 Serial #425577

District Director, Air Services,
511 Power Building,
Winnipeg 1, Manitoba.

Attention: District Aircraft Inspector

1. With reference to your letter of February 4, 1957, concerning the engine failure reported by Central Northern Airways Limited it is noted that the cause of the failure cannot be determined until the engine is dismantled.

2. It is requested that a copy of the Inspection Report be obtained from the company who overhauls this engine and mailed to this office as soon as it is available.

3. Our file shows that another engine failure was reported by your office May 31, 1956, on this same aircraft and no report on the cause of failure of this engine (R1830-92 #21511) has yet been received.

4. Please check with the company concerned and advise this office in order that our records may be completed.

(H.S. Rees),
Chief Aeronautical Engineer,
for
Director, Civil Aviation.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
1-56

511 Power Building,
Winnipeg 1, Manitoba, March 25, 1957.
PLACE DATE

85

YOUR LETTER DATED	YOUR FILE	OUR FILE
February 7, 1957	5008-T5-20(CAE)	5008-T-5-20

SUBJECT
Engine Failure Report - P & W R1830-92 Serial #425577

33451

TRANSPORT - RECORDS
MAR 28 A.M.
File 5008-T5-20

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. With reference to Headquarters' letter dated February 7, 1957, relative to Aero Engine failures No. 425577 and 21511 in aircraft, CF-TET.

2. We have checked with the owner and to date have only received Overhaul Report for engine Serial No. 21511 (enclosed), which was installed on the Starboard side. Engine Serial No. 42577 installed on port side is still in their shops awaiting to be dismantled.

3. This attached Overhaul Report indicates possible failure of centre main bearing.

A.J. Walker.
for District Director, Air Services.

Enc.

CHIEF INSPECTOR'S COPY SHEET No. 1

CANADIAN PRATT & WHITNEY AIRCRAFT CO., LIMITED

ENGINE INSPECTION RECORD

STANDARD AERO ENGINE LIMITED WINNIPEG, MAN.

R-1830

14

Engine No.

WORK ORDER NO. 53662

CUSTOMER Trans Air ENGINE NO. 21511

REASON FOR OVERHAUL T X

ENGINE TYPE 1830-92 TOTAL TIME No Log T.S.O. No Log DATE Sept/56

REDUCTION DRIVE HOUSING	O.K.			Type & Gear Ratio	16:9
Data Plate	O.K.	Red. Drive Anchor	O.K.	Gov. Dr. Gear Bush	O.K.
Prop Shaft	O.K.	Oil Transfer Rings	Renew G.P.	Gov. Dr. Gear	O.K.
Serial No.	323810	Red. Dr. Gear Assy. Set No.	36699	Thrust Brg. Liner	O.K.
Runout At Thrust .0003	At End .0005	Fixed Gear	O.K.	Thrust Nut	O.K.
Cage & Pinion Shaft Holes	O.K.	Driving Gear	O.K.	Thrust Plate	O.K.
Splines	O.K.	Pinions	O.K.	Thrust Plate Liner	O.K. - Grind +10
Cone Seats	O.K.	Pinion Bushings	O.K.	Oil Seal Rings	Renew G.P.
Plugs	O.K.	Pinion Shafts	O.K.	Oil Slinger	O.K.
Oil Seal	Renew G.P.	Pinion Shaft Pins	O.K.	Thrust Spacer	O.K.
Thrust Brg. Frt.	Renew - pitted	Pinion Thrust Brgs.	Renew G.P.	Thrust Bearing	Renew - pitted.
Rear	Renew - pitted	Pinion Brg. Washers	O.K. modify	Prop. Oil Feed Pipe	O.K.
Rear Brg.	Renew - pitted	Sludge Cups	O.K.	Oil Transfer Pipe	O.K.
Spanner Nut	O.K.	Snap Rings	Renew 2 - cracked	Studs	O.K.
Remarks	Roller Bearings & Thrust Bearings pitted & scored			Emblem	---
SUPPORT PLATE	O.K.			Shim	O.K.
Liner	O.K.	Cam Red. Gear Bush.	O.K.	Oil Pump Dr. Gear	O.K.
Support Brg.	O.K.	Inter. Gov. Dr. Gear	O.K.	Oil Pump Dr. Gr. Bush	O.K.
Red. Dr. Front Cplg. LH/RH		Spanner Nut	O.K.	Remarks	
MAIN CRANKCASE	O.K.				
Mating No. (Front)	71898	(Center)	71898	(Rear)	71898
Liners (Front)	O.K.	(Center)	O.K.	(Rear)	O.K.
Cam Red. Gear (Front)	O.K.	(Rear)	O.K.	Spacer	O.K.
Cam Red. Gear Bush. (Front)	O.K.	(Rear)	O.K.	Lifting Links	O.K.
Tappets	O.K.	Guides	O.K.	C/Case Bolts	O.K.
Rollers	Renew 9 - pitted	Pins	O.K.	Studs (C/Case)	O.K.
Brg. Retainer (Front)	O.K.	(Center)	O.K.	Studs (Cyls.)	O.K.
Oil Trans. Pipe		Breather Baffle	O.K.	Breather Assy	O.K.
Remarks				Breather Pipe Assy	
CAM (Front) Pt. No.				(Rear) Pt. No.	
Cam Track (Front)	O.K. stone Cam Track			(Rear)	O.K. Stone Cam Track.
Cam Brg. (Front)	O.K.			(Rear)	O.K.
Remarks					
CRANKSHAFT	Renew			Runout	
C/S. M.B. Assy.	59.28C	Weight		Serial No.	
Crank Pin (Front)	Scored	Crank Pin (Rear)	Scored	Journal—Front	
Diam. (Hor.)		Diam. (Hor.)		Center	
(Vert.)		(Vert.)		Rear	
Main Bearing—Frt.	O.K.	Frt. Oil Seal/Bushing	O.K.	Splines	
Center	Renew	Rear Support	O.K.	Red. Drive Heb	Renew worn.
Rear	O.K.	Retainer Shoes	Renew - worn	Spanner Nut	O.K.
Fly Weight	O.K.	Oil Jets	O.K.	Coupling Gear	O.K.
Rear Gear	O.K.	Oil Passages	O.K.	Plugs	Renew
				Rear Gear	O.K.

REMARKS Crankshaft scored and excessive overheated
Centre main bearing scored due to foreign material.

Previous Overhaul by:

Magnafluxed by Inspector Approved

CPWA 1072-1A

CHIEF INSPECTOR'S COPY

83 SHEET No. 2

CANADIAN PRATT & WHITNEY AIRCRAFT CO., LIMITED

ENGINE INSPECTION RECORD

STANDARD AERO ENGINE LIMITED WINNIPEG, MAN. **R-1830**

ENGINE No. 21511 **WORK ORDER No.** 53662

MASTER ROD	SER. NO.	CONDITION	BRG. MAIN	BRG. BACK	P. PIN BUSH	SHIMS	M/ROD BOLTS	NUTS	OIL HOLE
Front		O.K.	Renew	Renew	Renew	O.K.	O.K.	O.K.	O.K.
Rear		Renew	Renew.	----	----		O.K.	O.K.	O.K.

Remarks: Rear Master Rod showed signs of excessive heat.

	1	2	3	4	6	7	8	9	10	11	13	14
LINKRODS	O.K.											
Piston Pin Bushings	Renew	All	- scored									
Link Pin Bushings	"	"	"	3 foreign material								
Piston Pins	Renew	3	- corrosion inside pin.									
Piston Pin Plugs/Shapings	Renew	All	- G.P.									
Link Pin Holes	O.K.											
Link Pins	Re-work											

Remarks: #4 Link Rod - Link Pin Busing worked - loss from Link Rod.

SUMPS O.K.

Main Sump	O.K.	Strainer	O.K.	Rocker Drain Sump	O.K.
Drain Conn.	O.K.	Plugs	O.K.	Drain Pipe	O.K.
Conn. Springs	O.K.	Support Bracket	O.K.	Threads	O.K.

Remarks

MISCELLANEOUS

Push Rods	O.K.	Primer Lines		Nose Suction Pipe	O.K.
Push Rod Covers	O.K.	Primer Dist.	O.K.	Rocker Suction Pipe	O.K.
Packing Nuts	O.K.	Primer Fittings		Main Press. Pipe	O.K.
Intake Pipes	O.K.	Primer Clamps		Sump Supp. Pipes	O.K.
Packing Nuts	O.K.	Primer Nozzles		Rocker Box Plugs	O.K.
Cyl. Deflectors					
Head Deflectors	O.K.	Plates	7	Rivets	
Remarks				Grommets	

COLLECTOR CASE O.K.

Ratio	7-15-1	Intake Pipe Seats	O.K.	Studs	O.K.
Impeller	O.K.	Liner Oil Seal Frt.	O.K.	Cam Rod. Gear Bush	O.K.
Impeller Shaft	Renew (Corroded)	Rear	O.K.	Mtg. Brackets 90°/35°	O.K. (9 not rec'd.)
Impeller Brg. Frt.	Renew - G.P.	Rear Brg. Liner	O.K.	Imp. Shaft Rear Spacer (C4)	N.A.
Rear	Renew - G.P.	Retainer Plate	O.K.	Thrust Plate (C4)	N.A.
Ring Carrier Frt.	O.K.			Spanner Nut	Renew - cracked
Rear	O.K.			Oil Press. Pipe	O.K.
Oil Seal Rings	Renew - G.P.			Threads	O.K.
Remarks					

OIL PUMP FRONT O.K.

Bodies	O.K.	Drive Gear Shaft	O.K.	Idler Shaft	O.K.
Drive Gears	O.K.	Idler Gear	O.K.	Keys	Renew
Remarks	O.K.				

OIL PUMP REAR O.K.

Bodies	O.K.	Drive Gear Shaft	O.K.	Idler Shaft	O.K.
Drive Gears	O.K.	Idler Gears	O.K.	Keys	O.K.
Remarks					

REMARKS

PWA 1072-2Z

CHIEF INSPECTOR'S COPY

8J

SHEET No. 3

CANADIAN PRATT & WHITNEY AIRCRAFT CO., LIMITED

STANDARD AERO ENGINE LIMITED
WINNIPEG, MAN.

ENGINE INSPECTION RECORD
R-1830 (C3)

GINE No. 21511 WORK ORDER No. 53662

RMEDIATE REAR SECTION O.K.

r Gear Frt. Bush. R. O.K. Gen. Idler Gear Frt. Bush. O.K. Carb. Mounting Pad O.K.
L. O.K. Gen. Dr. Gear Bush. O.K. Studs O.K.

ERMEDIATE	Gear	Bearing	Pinion Assy.	Plate	Springs	Buttons	Pins
RING	O.K.	Renew	O.K.	O.K.	O.K.	Renew 2	O.K.
VES	O.K.	Renew	O.K.	O.K.	O.K.	Renew 2	O.K.

Bearing Flanges worn.

Dr. Shaft O.K. Diffuser O.K. Fuel Drain Valve O.K.
Dr. Gear O.K. Diffuser Bolts O.K. Insert O.K.
Dr. Adapter O.K. Intake Inserts O.K. Oil Press Bolt O.K.
ter Jaw Stud O.K. Sup. Drain Conn. O.K. Oil Passages O.K.
arks

SECTION

Inter Gr. Rear Brg. R O.K. Starter Jaw Renew - cracked Strainer & Plug O.K.
L O.K. Starter Jaw Nut Renew - stripped Oil Scav. Pipe O.K.
Gear Bush. O.K. Oil Seal Rings Renew Oil Press. Relief Pipe O.K.
Inter. Gr. R. Bush. O.K. Fuel Dr. Housing O.K. Breather Body O.K.
Inter. Gear O.K. Fuel Dr. Coupling O.K. Breather Pipe Assy. O.K.
Dr. Gr. Rear Bush. O.K. Main Oil Screen Renew Vent. Assy. A.S.B. 274 ----
Dr. Gear O.K. Check Valve " Studs O.K.
Pump Dr. Gr. Bush O.K. Retainer & Spring " Oil Passages O.K.
Pump Dr. Gear O.K. Screen Cover O.K. - modify Threads O.K.
Pump Drive Housing O.K. By-Pass Valve
rks

ETO	Front Bush	Support	Rear Bush.	Oil Seal Adapter	Gear	Pinion
R.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.
L.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.

rks

ARY	Aux. Drive Shaft	Aux. Shaft Adapter	Aux. Shaft Bushing	Pinion	Drive Shaft	Aux. Mount Assy.	Drive Bushing
R.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.
L.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.

rks

METER	Shaft	Insert	Inner Cplg.	Outer Cplg.
R.	O.K.	O.K.	O.K.	O.K.
L.	O.K.	O.K.	O.K.	O.K.

BLANKING COVERS					
Starter---	----	Aux. Drives	----	Vac. Drive	----
Generator---	----	Fuel Drive	----	Governor Dr.	----

s.

SS. RELIEF VALVE O.K. Type Non-compensating Thermostat Plug
g O.K. Valve & Plunger O.K. Plunger Body O.K.
& Adj. Screw O.K. Spring & Guide O.K. Piston O.K.

RIES

os: R.H. Type SF14LN3 Serial No. 38711 Carb. Model No.
" L.H. Type " Serial No. 167153 Serial No.
Harness Overhauled Spark Plugs

035 3Z

81

CHIEF INSPECTOR'S COPY

CANADIAN PRATT & WHITNEY AIRCRAFT CO., LIMITED

ENGINE INSPECTION RECORD

STANDARD AERO ENGINE LIMITED
WINNIPEG, MAN.

R-985, R-1340, R-1830

CUSTOMER Trans-Air

ENGINE NO. 21511 TYPE 1830-92 WORK ORDER NO. 53662

PISTONS O.K. - Renew 1
Part No. 22725 Comp. Ratio

Location No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Condition	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	Renew	O.K.
Dish	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	O.K.	Renew	O.K.

Rings—Compression Renew) Type Wedged
—Oil Control Renew) G.P. Type
—Scraper Renew) Type
Remarks

CYLINDERS Type Studs
Part No. ---- Exh. Port Liner ----
Int. Port Coupling ---- Exh. Port Faces ----

Location No.	(1)	(2)	(3)	4	(5)	6	(7)	8	9	(10)	(11)	(12)	(13)	(14)
Condition	All Std.													
[illegible]														
[illegible]														
[illegible]														
Int. Valves	Renew 14													
[illegible]														
Int. Guides	O.K.													
Exh. Guides	Renew 14													
Exh. Valve	O.K.													
Exh. Valve Dia.														
Exh. Valve Stretch														
Valve Seat—Int.	Renew 6													
—Exh.	Renew 9													
Spark Plug Bush.—S	O.K.													
—R	O.K.													

Rockers O.K. Upper Washers O.K. Primer Fittings Renew 8
Rocker Shafts O.K. Lower Washers O.K. [illegible]
Rocker Bearings Renew 28 Bearings Inner Springs Renew 5 [illegible]
Adj. Screws ---- Outer Springs Renew 5 Hose Clamps
Adj. Screw Nuts ---- [illegible] ---- Rocker Box Studs
Int. Locks ---- [illegible] ---- Rocker Box Plugs
Exh. Locks ---- Rocker Shaft Inserts (Cyl. 8) Renew 2 Nuts
[illegible] ----

REMARKS Cylinders circled in red above, are cracked beyond limits at spark plug holes.

Inspector [signature] Approved

86

We are at the present time awaiting a report from Standard.

Pratt & Whitney R-1340-AN1 Serial No. 22561 - Removed from CF-CRF in November 8, 1956.

This engine overhauled by Standard Aero Engine Limited in November, 1955. At the present time, at Standard Aero Engines Limited - we are awaiting a report.

2. We will submit additional reports as received.

A/ D/ Taylor

for District Director, Air Services.

Enc.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
1-56

87

Original only

511 Power Building,
Winnipeg 1, Manitoba, April 11, 1957.
PLACE DATE

R LETTER TED	YOUR FILE	OUR FILE
April 4, 1957	5010-6-1 (CAE)	5010-4 (AIW)

JECT

Engine Failures

2332

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Further to Headquarters' letter dated April 4, 1957, regarding engine failure from aircraft CF-HFQ, CF-TET, CF-CRF, CF-ENB, further inspections have been carried out as follows:

Rolls-Royce Merlin 502 Serial No. 211667 - Removed from CF-HFQ in May, 1956 -

This engine was shipped to Rolls-Royce Limited, Glasgow, Scotland, for overhaul. Attached hereto is a copy of Investigation Report No. 5325, which is self-explanatory. In a letter received from Rolls-Royce of Canada, they have accepted the reliability in the case of this engine.

Rolls-Royce Merlin 502 Serial No. 324691 - Removed from CF-HFQ in August, 1956 -

COPY ON 5005-H6-17

This engine is on hand in Winnipeg, awaiting shipment to Rolls-Royce Limited, Glasgow.

-T5-20
-En-2
-C18-6

Pratt & Whitney R-1830-92 Serial No. BP.425577 - Removed from CF-TET in January, 1957.

This engine was given a major overhaul by American Airmotive, Miami, Fla. On removal from TET, it was shipped to Winnipeg. We have today issued instructions for shipment of this engine to Standard Aero Engine Limited, Winnipeg, to be exchanged for a serviceable engine.

Pratt & Whitney R-1340-AN1 Serial No. 17646 - Removed from CF-ENB, in March, 1957.

This engine overhauled by Standard Aero Engine Limited, in June, 1955. Installed in CF-ENB December, 1955. Removed March 4, 1957 - Sent over to Standard Aero Engine Limited.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 89
1-56

511 Power Building,
Winnipeg 1, Manitoba, April 15, 1957.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-20 (AIW)

SUBJECT

Structural Failure Report - CF-TET

2653

TRANSPORT - RECORDS
APR 18 P.M.
File 5008-T5-20

Director General, Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. Attached hereto is Structural Failure Report from TransAir Limited, covering P & W R-1830-92 engine, serial No. CP 326315, which was recently removed from CF-TET.

2. Submitted for your records.

for District Director, Air Services.

Enc.

88

TRANSAIR LIMITED

STRUCTURAL FAILURE REPORT

ENGINE OR AIRFRAME

(TO BE COMPLETED IN TRIPLICATE)

TRANSAIR LIMITED RECEIVED APR 8 - 1957 WINNIPEG, MAN.

To comply with Department of Transport Air Regulations and Engineering and Inspection Manual Part I, Chap. V, Paragraph 5.4

COMPLETE ALL ITEMS IN THE FOLLOWING TABLE

ITEM	MAKE & MODEL	SERIAL NO.	REGISTRATION	HOURS SINCE O/H	HOURS SINCE NEW
AIRCRAFT	Douglas DC-3	13393	CF-TET	13785:03	15491:20
ENGINE	P.W.R-1830-92	CP326315		176:20	26602 0
PROPELLOR	HAMILTON STANDARD 23E50 HYDRAMATIC	48336		213:50	NOT KNOWN

DATE FAILURE OCCURRED March 20-1957 | PLACE FAILURE OCCURRED (Nearest) KNOB LAKE

SPECIFIC PART WHICH CAUSED FAILURE BROKE CONNECTING ROD

NAME OF PART | PART NO.

Describe in detail the failed part or difficulty and the circumstances under which it occurred. (Attach separate sheet if insufficient space; also sketch or photograph.)

fifteen minutes north of Knob Lake the engine began to vibrate and shake. The engine was feathered immeadiately. There was no noticable variation in engine temperatures or pressure The A/C returned to Knob Lake and visual inspection revealed that a connecting rod had come through the power section of the engine directly in front of #11 cylinder and that the propellor shaft was free from all connecting rods.

State probable cause of failure and recommendations to prevent recurrence.

Report submitted by	Occupation	License No.	Date of Report
Chas Chapman	Engineer	WCM 246	April 3/57

Last Overhaul By: **American Airmotive - March 29, 1956.**

Engine Will Be Overhauled By: **This engine is now en route to Winnipeg from Mont Joli, and in all probability will be returned to American Airmotive, Miami, Fla., on an exchange basis.**

90

TRANSAIR LIMITED

STRUCTURAL FAILURE REPORT

ENGINE OR AIRFRAME

(TO BE COMPLETED IN TRIPLICATE)

To comply with Department of Transport Air Regulations and Engineering and Inspection Manual Part I, Chap. V, Paragraph 5.4

COMPLETE ALL ITEMS IN THE FOLLOWING TABLE

ITEM	MAKE & MODEL	SERIAL NO.	REGISTRATION	HOURS SINCE O/H	HOURS SINCE NEW
AIRCRAFT	Douglas C-47	13393	CF- TET	1164:45	15978:10
ENGINE	P & W R-1830-92	CP-351909		690:40	Unknown
PROPELLOR	H-S 23E50-473	FC9780A		690:40	690:40

DATE FAILURE OCCURRED June 21, 1957 | PLACE FAILURE OCCURRED (Nearest) Knob Lake, P.Q.

SPECIFIC PART WHICH CAUSED FAILURE Broken valves

NAME OF PART	PART NO.

Describe in detail the failed part or difficulty and the circumstances under which it occurred. (Attach separate sheet if insufficient space; also sketch or photograph.)

Broken valves on cylinders Nos. 6, 10, 11 and 12, caused excessive metal throughout engine, warranting engine change.

State probable cause of failure and recommendations to prevent recurrence.

Not known until engine is dismantled and investigated further.

Report submitted by	Occupation	License No.	Date of Report
Chas Chapman	Licenced Mechanic	WEM-216	June 22, 1957.

Last Overhaul By: Standard Aero Engine

Engine will be Overhauled By: Unknown.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

9/2
1-56

509 Power Building, Winnipeg 1, July 15, 1957.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T5-20

SUBJECT: Structural Failure Report - CF-TET

11636

TRANSPORT - RECORDS
JUL 18 P.M.
File 5008-T5-20

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer

1. Attached hereto is Structural Failure Report from TransAir Limited, covering P & W R-1830-92 engine, Serial No. CP-351909, which was recently removed from CF-TET.

2. Submitted for your records.

R C Smith

for District Director, Air Services.

Enc.

2444
6-56

92

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval TC-669

REGISTRATION – CF – TET SERIAL No. 13393

1. C. of A. No. 2098 Expires Nov 22/57 of R. No. 14315 Expires Nov 22/57
Aircraft Data—Manufacturer Douglas Aircraft Co Model DC-3
Hours flown—Since New 15 980 : 35 Since Overhaul 2180 : 40
Engine Data—Manufacturer Pratt & Whitney Model R1830 - 92

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	72059	3445 : 20	513 : 40
(2)	CP-328504	1219 : 55	16 : 25
(3)			
(4)			

TRANSAIR LIMITED
Signature of Applicant J J Mongrenier.
Date 15 Nov 57

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated 55-5 Signed J R Humble
"M" Licence No. HQM-41

Serial No. of last Service Bulletin incorporated Date 22 Nov 57

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date Nov 22/57 Signed E L Richards AT-639
Pilot

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached: Certificate of Airworthiness ☑ Certificate of Registration ☑
Weight and Balance Report ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.
Date Nov 21/57 Signed V C Smith
District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after. Date: November 23, 1958

Permissible Gross Weights—Wheels 25,200 Skis 25,200 Floats —

Amendment or other Action:

November 23, 1957 Signed [illegible]
District Superintendent, Air Regulations

on C.A.R.

C.A.E.

Noted
28.11.57

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

93

CATEGORY.- PRIVATE ☐
COMMERCIAL ☒
STATE ☐

NO. 14315

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E T	Douglas Aircraft Company Inc. - Douglas DC3	13393

19886

TRANSPORT - RECORDS
OCT 19 A.M.
File 5008-15-20

(4) NAME OF OWNER TRANSAIR LIMITED

(5) ADDRESS OF OWNER P. O. Box 5, St. James, Manitoba.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

December 22nd, 1955.

DATE OF ISSUE

SEAL

for R.

SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

cc: H.Q.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

22796

CERTIFICATE OF AIRWORTHINESS

94 2462 2-56

SERIAL NO. 2098

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E T	Douglas Aircraft Company Inc., - Douglas DC - 3	13393

(4) CATEGORY: Commercial — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [X]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

RECORDS
NOV 27 P.M.
File 5008-T520

(6) NOT VALID AFTER November 22nd, 1958.

DATE OF ISSUE March 6th, 1947.

SEAL

SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

Controller, Civil Air Regulations.

5008-T.5-20

95

19262

C I G 394

1958 SEP 26 PM 1 54

AIG

VAA 90 CYHQ

VFT4 6 VAA

VFW5 46 VFT4

DHQ 7 VFW5

CYWG DHQ 7 260935

JJ DIGEN CYHQ ATTN COR

BT

JET

ARW195 (A) DC 3 CHARLIE FOXTROT TANGO ECHO TANGO (B) TRANSAIR LIMITED

(C) 251630 EST APPROXIMATELY (E) UNKNOWN CORAL HARBOUR

(F) CORAL HARBOUR AIRPORT (G) NIL UNKNOWN (H) CRASH LANDING EXTENSIVE

NURSE CHECKING PASSENGERS DECISION RE BOARD PENDING.

DIDAS WINNIPEG

~~CFM ARW 195 . DC 3 251630 .~~

Entered on Accident Cards

SEP 26 1958

FORM 2195

DEPARTMENT OF TRANSPORT

DEPARTMENTAL COMMUNICATIONS

FILE NO. 5002-25-20

DATE SEPTEMBER 30 1955

OTTAWA ONTARIO

9L

WPG/SS

DIRAS
WINNIPEG
MANITOBA

AIRWAY NIXEL AIRWAYS ACCIDENT 20-5 TANGO ROMEO TANGO.

PLEASE REFER POLICY LETTER 5002-A DATED AUGUST 5

AND FORWARD EXPLANATION FOR NON COMPLIANCE THEREWITH

A. Brown.

DIRECTOR CIVIL AVIATION

FILE COPY

→ 5008-T5-20
5008-K9-9

SRL 97

C&R 658

19730 1958 SEP 30 PM 1 55

VAA 71 CYHQ
VFT4 21 VFW5
VFW5 42 VFT4
MDHQ 11 VFW5
CYWG DHQ 11 291410
JJ DIGEN CYHQ ATTN COR
BT
ARW 197 ARW195 NO FURTHER DETAILS CHARLIE FOXTROT TANGO ECHO TANGO
NO FURTHER DETAILS CHARLIE FOXTROT KILO INDIAN INDIA MCMURDO
INVESTIGATING
DIDAS WINNIPEG
~~CFM ARW 197 ARW195~~.

COPY ON FILE
5008-K9-9

G.

5008-T 5-20

n/c

98

AIG 727

1958 OCT 1 AM 9 11

19731

VAA 25 CYHQ

VFT4 68 VAA

VFW5 87 VFT4

DHQ 37 VFW5

CYWG DHQ 37 301440

JJ DIGEN CYHQ ATTN COR

BT

ARW 199 AIG259 ARW195 ACCIDNT DC THREE TANGO ECHO TANGO RECOMMEND NO BOARD HINDERKS INVESTIGATING AIRCRAFT CRASHED ON LANDING DUE CROSS WIND FURTHER DETAILS WILL BE FORWARDED WHEN THEY BECOME AVAILABLE STATEMENTS FROM DEPARTMENTAL PERSONNEL ON BOARD EXPECTED AT LATER DATE COMMUNICATIONS WINNIPEG CORAL HARBOUR EXTREMELY DIFFICULT

DIDAS WINNIPEG

~~CFM ARW 199 AIG259 ARW195~~

Entered on Accident Cards

OCT 1 1958

5008-T 5-20

Wpg AIG

0017 99

C.H.

1958 OCT 3 PM 3 32

19807

VAA 69 CYHQ

VFT4 21 VAA

VFW5 28 VFT4

JVG 18 VFW5

CYWG DHQ 18 031600

JJ DIGEN CYHQ ATTN COR

T

ARW200 UR AIG259 NO PROGRESS

DIDAS WINNIPEG

CFM ~~ARW200 AIG259~~

5-008-T5-20

Vol 1

VAA 67 CYHQ
WT4 33 VAA

1958 OCT 23 PM 2-16

641

EQB5 52 VFT4
DHQ 6 VFW5
CYWG DHQ 6 231725

22002

JJ DIGEN CYHQ ATTN AIG
BT
ARW 224 ACCIDENT CHARLIE FOXTROT DASH TANGO ECHO TANGO
INVESTIGATION NEARING COMPLETION TWO FOUR FOUR EIGHT BEING-
PREPARED
DIDAS WINNIPEG
CFN ARW 224

57

TRANSPORT RECORDS
CANADA
OCT 27 P.M.
File 5008-T-5-20

Date:- Oct. 23, 1958

District File No. 5008-T-5-20 (ARW)
5802-6789 (ARW)
5802-3248 (ARW)

AIRCRAFT ACCIDENT REPORT

To: Director General, Air Services
Department of Transport
Ottawa, Ontario

Attention: Controller, Civil Air Operations & Regulations

WINNIPEG District

1. (a) Date Sept. 25, 1958 21830 (b) Time (standard): Use 24-hour clock 13:50

2. (a) Type of Aircraft Douglas C47 (b) Nationality and Registration Marks CF - T E T

(c) C. of A. Valid to Nov. 22, 1958 (d) C. of R. Valid Yes (x) No ( )

AIRCRAFT ACCIDENT ANALYSIS FORMS COMPLETED
MAR 7 1960

3. Name of Owner, Operator or Hirer TransAir Limited

4. (a) Crew information

Name	Duty	Age	Licences & Ratings			Experience		
			Type	No	Expiry date	Total	On type	
							Total	Within 90 days
Charles Albert WEBER	Pilot	33	Senior Commercial	WGS-570	Dec. 2, 1958	7000	350	110
Lawrence Dean BROWN	First Officer	26	Commercial	YZC-7390	Jan. 11, 1959	1576:55	5:15	5:15

(b) Now enrolled in Approved School Yes ( ) No ( ) Approved School graduate Yes ( ) No ( )

(c) Name and location of school

(d) Instructor's name Category

(e) Instructor's name who recommended issue of pilot's licence Category

(f) Instructor's name who conducted flight test Category

5. (a) Last point of departure Churchill, Manitoba.

(b) Intended destination Coral Harbour, Southampton Island, N.W.T.

6. (a) Place of accident Latitude ° ' N. Longitude ° ' W. Altitude ASL

Airport, Coral Harbour, Southampton Island, N.W.T.

(b) Terrain: Mountain ( ) Prairie ( ) Arctic (x) Maritime ( ) Bush ( ) Inter-city -populated or semi-populated areas- ( )

(c) Weather:

Ceiling 1500 broken - 2000 overcast

Visibility 15 plus

Wind Speed and direction 22K from East

Were icing conditions encountered? Yes ( ) No (x)

COPY ON 5802-18908

Dew point 31

Temperature 34°

Turbulence: light ( ) medium ( ) heavy ( )

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

(d) Did pilot obtain weather forecast or attend a meteorological briefing Yes (x) No ( )

(Over)

7. Number of persons (a) killed None (b) seriously injured None

8. Nature of accident Landing accident

9. Type of flying (Private, non-scheduled, ferry, etc.) Non-scheduled

10. Opinion as to the cause of the accident
(Use ICAO Manual of Accident Investigation) Pilot error

11. Damage

Apparent write-off

12. Infractions of: (a) The Air Regulations

(b) Air Navigation Orders Further investigation under way. Will advise Headquarters of infractions and action taken in due course.

13. Disciplinary action proposed taken

14. Remarks

Company investigation underway and further report to be forwarded
See attached statements
Pilot error in that the pilot lost control during a cross wind landing

15. Sketch

See attached.

J. B. Hinderks
.....
Regional ~~Director~~ Director, Air Services B. H. Hinderks

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

BHH/PF

Pilots' statement 109

...t report CF-TET
CAPTAIN WEBER
F/O OFFICER BROWN

Coral Harbour
Sept 25/58

1 of 8

Departed Churchill at 16.19Z for Coral Harbour Enroute flight was routine. On arrival Coral Harbour at 19:50Z the wind was found to be almost 90° to the runway at 22k gusting. a circuit was made and the wind seemed to be favoring a landing in the northerly direction (010° mag. 335°T). This direction giving us a cross-wind from the right. approach and landing check were made in the routine manner. On final approach it was my intention to observe the crab angle near ground level and if it was excessive I would elect to land on un-maintained temporary strip which I knew to be in good condition although not commissioned and at some distance from the airfield proper which was more or less into wind. I could not consider proceeding to any other airport as our remaining 2 hrs fuel was not sufficient. Near ground level the crab angle seemed not to be excessive and I decided to execute a landing, however, although I had the windward wing considerably down or contact or nearly so the left wing dropped rather severely; Considering it a dangerous attitude too near the ground I decided to abort the landing applying full power right rudder and partial aileron. The aircraft became airborne again but was not responding normally and although by no means certain I believed the left wing tip may have touched the ground as I felt an undue pressure on the aileron control, when the aircraft would not to respond ~~to the~~ to coarse right rudder I firmly believed

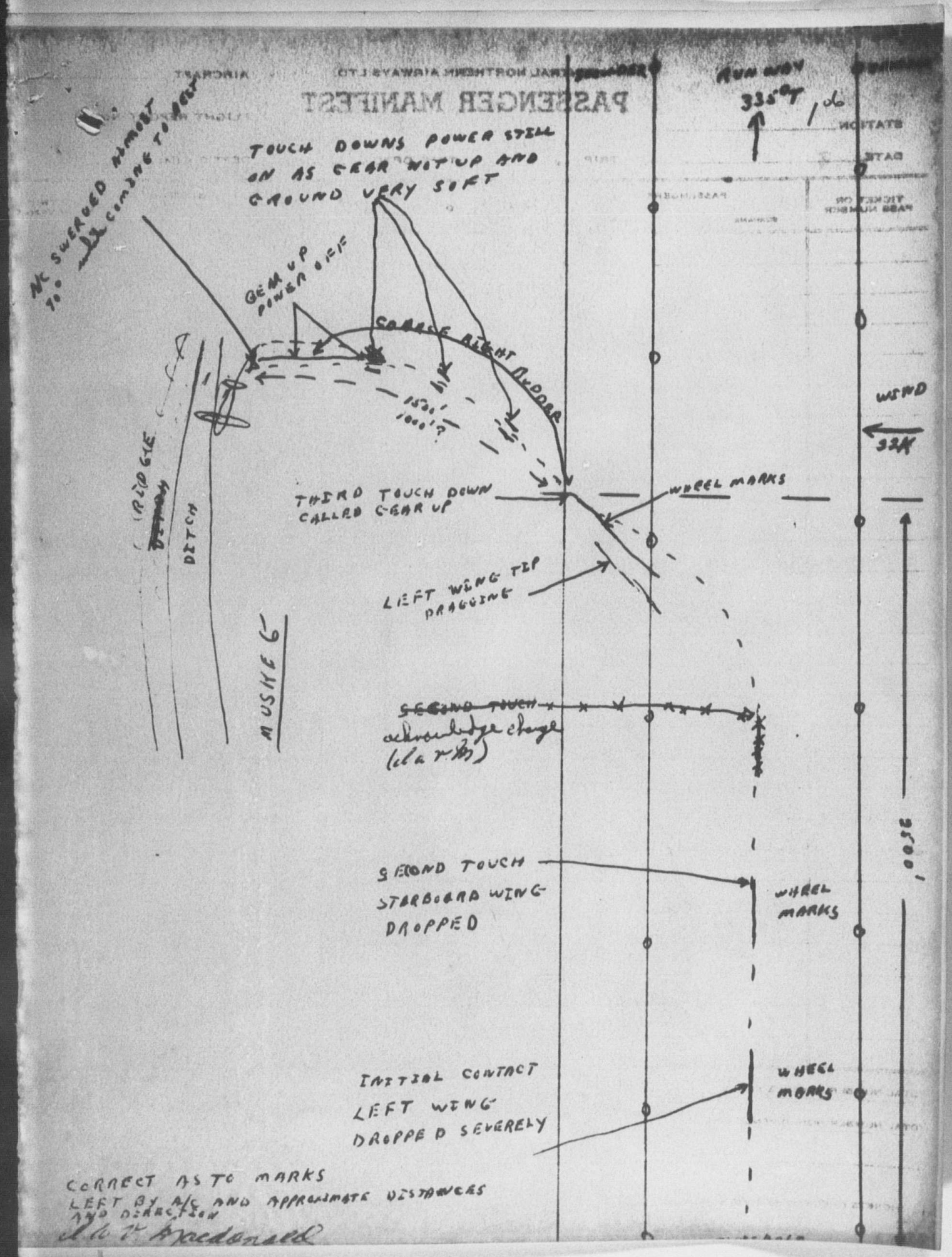
that the left wing tip and aileron were damaged and the aileron [redacted] thoroughly out of control I called for flaps up and closed the throttles and landed straight ahead (We were at this time on a heading of 145° to the runway in use to this point the A/C had struck the ground twice and an attitude sketch) the leeward direction of the aircraft would not answer right rudder. Immediatly on coming to rest I attempted to enter the cabin compartment with the first officer to evacuate the passengers but the cabin door was jammed shut me thereupon exited through a hole in the port side of the baggage compartment made by the port propellor. all the passengers were outside at this time and seemed to be O.K. except for minor cuts etc.

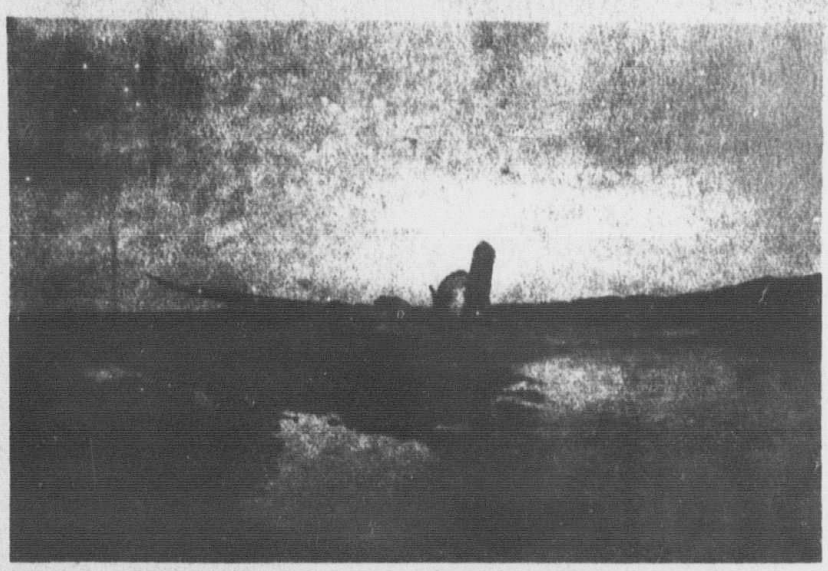
at this time the co-pilot mentioned that he had been attempting to help me with the aileron without my knowledge.

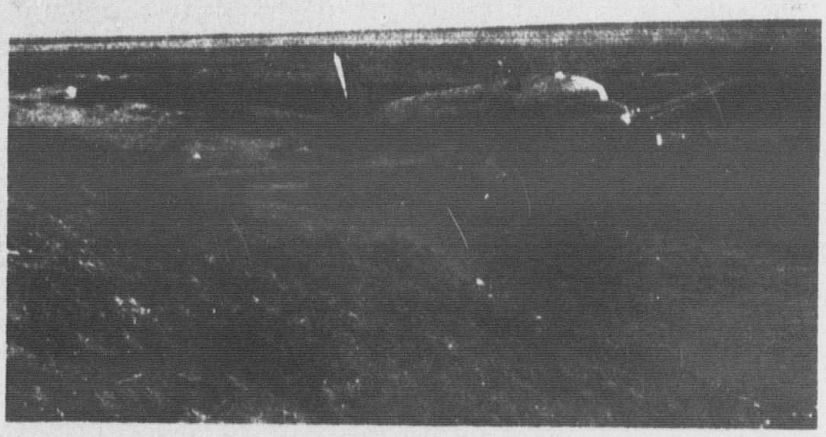
I am quite sure that we were struck by a severe gust just prior to touchdown, or slightly after, with a considerable down wind component and the aircraft was in a near stall condition. I believe I aggravated the situation by over controlling on the aileron being under the impression that the wing had touched the ground and that the aileron control was damaged.

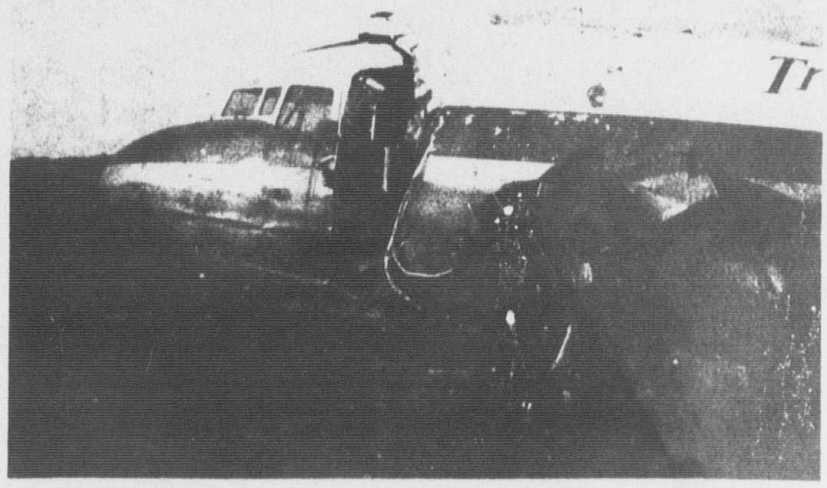
a Thorough check of the runway was made and the only marks found were as shown on the attached sketch. according to spectators although the wing came extremely close to the runway it did not touch until the A/C finally left the runway the left wing touched and bent the wing tip and aileron up to an angle approx. 15° as shown in photograph.

C. A. Fisher


PASSENGER MANIFEST
RUN NOV
335°T / 06
TOUCH DOWNS POWER STILL ON AS GEAR NOT UP AND GROUND VERY SOFT
NC SWERVED NORTH TO
COMING TO WEST
GEAR UP POWER OFF
COARSE RIGHT RUDDER
1530'
1000'?
WIND
32K
THIRD TOUCH DOWN CALLED GEAR UP
WHEEL MARKS
LEFT WING TIP DRAGGING
RIDGE
DITCH
MUSKEG
SECOND TOUCH
acknowledge charge (illegible)
SECOND TOUCH STARBOARD WING DROPPED
WHEEL MARKS
INITIAL CONTACT LEFT WING DROPPED SEVERELY
WHEEL MARKS
3500'
CORRECT AS TO MARKS LEFT BY A/C AND APPROXIMATE DISTANCES AND DIRECTION
A. A. MacDonald







Coral Harbour N.W.T.
Oct 17 1958
1st

We left Coral Harbour at approximately 10.30 AM on board Transair aircraft CF-TET, bound for Coral Harbour. For the first 2 hrs. it was clear, after that we travelled above a layer of layers of cloud. As we approached Coral Harbour, we entered the cloud layers as the pilot began to let down for the approach. We were in dense cloud for approximately ½ hour, during which some icing apparently was present. As we approached Coral Harbour, we circled the field once then came in for what was apparently a normal approach. The aircraft touched down, bounced up and tilted to the port side, with the port wingtip striking the runway, after which the plane lurched, and the motors were revved up. The aircraft left the runway travelling over the tundra for a considerable distance, finally coming to a sudden stop, partially in a drainage ditch. As the aircraft stopped the ring to which the seat belt was fastened tore loose from the seat and I was thrown from the seat on to the top of the cargo. I sustained injury to my left wrist and hand, which showed considerable ~~swelling~~ swelling and at this date some swelling and soreness persists. I also received

abrasions to my nose accompanied by swelling and discoloration.

The Cargo was tied down with the exception of some luggage and cartons which were loose, as well as some cars at the rear of the plane. Damage to my suitcase is considerable, but the contents were undamaged

S. S. Vapsi

Coral Harbour
Oct 17/58

Trans-Air Flight Churchill to Coral

I am Harold Stropp, employed by the D.O.T. as an Electricians helper.
We departed from Churchill via CF-TET
Sept 25/58. There were six passangers on
board and each person had a seat and safety belt.
The bulk of the cargo was tied down, with
the exception of our luggage, a few cartons and
cans at the rear of aircraft were not tied down.
During the first two hours of our trip the
sky was clear. the remainder of the trip was
in between layers of cloud and on top of clouds.
approximately one hour out of Coral I heard
noises which sounded like ice hitting the wing.
We ~~up~~ ~~out~~ descending about one half hour out of
Coral. At Coral we made one circut and then came
in to land. The approach seemed normal but we hit
the runway fairly hard, and bounced quite high
shortly after the first bounce the aircraft seemed
to go out of control. The throttles were opened
and we began to tilt from side to side.
The port side wing hit the runway and at
this point we left the runway with the throttles
still open. We bounced across the ~~road~~ tundra a
few hundred yards, then there was a loud crash
in the cabin. At this point the port side propeller
came off and cut into the cabin a few yards beyond
this we came to a sudden halt. I remained in my
seat all this time.

Harold Stropp

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

101 2 1-56

Coral Harbour, N.W.T., October 17th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE

SUBJECT

Cra sh Landing of Aircraft CF-TET

Regional Controller of Cival Aviation,
Department of Transport,
General Post Office Building,
WINNIPEG, Manitoba.

I was a passenger on TransAir aircraft CF-TET that crashed landed a t Cora' Harbour September 25th, 1958. Following is My sta tement of the flight and crashi landing.

We depa rted Churchill atx approximately 10.30 am Sept 25th a nd during the first portion of the flight the sky was clear, however the last portion was mad e above and between cloud layers. The wings were wet and wha t was a ssumed to be ice was heard breaking off and hitting the fuselage. The let-down through clouds was ma de about one half hour out of Coral. We circled the Airport once, and made an approach to the runway flying north-west. I buckled on my sea t belt. There appea red to be a strong cross-wind and we approached the runway at a decided angle and rather fast.

The aircraft tou ched down very hard and bounced several feet into the a ir. The wings dipped back and forth until finally the port wing hit the runway and we veered off to the left. The engines s ounded like they were on full power by this time and we boumced along the muskeg ha lf flying a nd half on wheels. This continued until I hea rd the port p ropeller break off and smash into the fuselage. Immedia tely after, the aircraft p ancaked and swung half a round to the left and stopped. Most of the cargo was tied down, however some boxes and a ga soline can were loose in the rear and these struck me on the back, my shoes were wrenched off, and gasoline was spilling on the floor out of the can. I jumped to the door and opened it and met the pilot coming around the aircraft outside. He a sked if everyone was OK and I replied that I thought so. He told me he couldn't open the cockpit door so he left the aircraft via the hole torn in the fuselage by the propeller, behind him.

I personally suffered no serious injuries. However, I have since discovered tha t my glasses were cracked during the landing.

G.R. Connor

G.R. Connor, RT3.

MCD/LH

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8—57

OTTAWA, Ontario. October 31, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T5-20 (AIG)

SUBJECT: Accident - Douglas DC-3, Aircraft CF-TET
- September 25, 1958
- Coral Harbour, N.W.T.

(1) MEMORANDUM TO: C.I.G. Concur (H) WMW

1. The following are the salient points concerning the subject accident:

(a) DATE : September 25, 1958;

37599

(b) CASUALTIES : (i) crew - nil;
(ii) passengers - nil;

(c) DAMAGE : (i) aircraft - destroyed;
(ii) third party - nil;

(d) CAUSE : pilot error - pilot lost control of aircraft during crosswind landing through improper technique; crosswind component 90°/25 mph;

(e) INFRACTIONS : pending further investigation by Region;

(f) BLAME : not stated;

(g) PUBLIC INTEREST : not indicated;

(h) RECOMMENDATIONS : further investigation concerning the cause of the accident is not considered necessary;

(i) REMARKS : pilot allowed left wing to drop on attempted crosswind landing and lost control of the aircraft during the attempted overshoot and crashed. A perusal of M.C.A. Northern Wings and QuebecAir's manuals shows the maximum wind strength at 90° to the runway as 12, 15 and 17 M.P.H. respectively. It is suggested that you may wish to refer this matter to C.O.R. for information and necessary action.

(2) C O R
Item (i) please.
for WMW
C.I.G. 11 58

W. V. Gordon

(W. V. Gordon)
A.I.G.

112

LM/MD

OTTAWA, Ontario, November 6th, 1958.

5008-T5-20 5008-T5-20

Aircraft Accident - Douglas DC-3 September 25th, 1958.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Man.

1. Our records indicate that the above aircraft was involved in an accident on September 25, 1958, and possibly damaged beyond repair.

2. Will you kindly endeavour to determine if this aircraft is to be written-off and, if so, please have the Certificates of Registration and Airworthiness returned to this office for cancellation on the aircraft Register.

Director of Civil Aviation.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

PA Lr 2 / 113 / 31-1-56

Winnipeg 1, Manitoba, November 26th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
November 6th, 1958	5008-T-5-20	5008-T-5-20 (ARW)

SUBJECT

DOUGLAS DC-3 AIRCRAFT CF - T E T

TRANSPORT - RECORDS
File 5008-T-5-20

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

25299

Attention: Controller, Civil Air Operations & Regulations.

1. With reference to Headquarters' letter dated November 6th, 1958 concerning the above mentioned aircraft, this Office has been notified by TransAir Limited that as far as they were concerned the aircraft was considered a write-off. However, they will notify us in due course of the decision of the insurance company and the Certificates will be forwarded for cancellation.

Noted Lr
1.12.58

Regional Director, Air Services.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

P.A. 11,7 1-56

Winnipeg 1, Manitoba, December 11th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-T-5-20(ARW)

SUBJECT

DOUGLAS DC - 3 AIRCRAFT CF - T E T

TRANSPORT - RECORDS
DEC 15 A.M.
File 5008-T5-20

26900

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention:Controller, Civil Air Operations & Regulations.

1. Enclosed herewith you will find copy of letter dated December 8th,1958 from TransAir Limited owner of the above mentioned aircraft, together with the Certificate of Registration and Certificate of Airworthiness for cancellation on the Canadian Aircraft Register.

Regional Director, Air Services.

Encs.

Cooled Notified 15.12.58

CIG 10/11

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE [ ] 11C
COMMERCIAL [X]
STATE [ ]

NO. 14315

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF - T E T	Douglas Aircraft Company Inc. - Douglas DC3	1 3 3 9 3

(4) NAME OF OWNER TRANSAIR LIMITED

(5) ADDRESS OF OWNER P. O. Box 5, St. James, Manitoba.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE December 22nd, 1955.

SEAL

for SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

115
2462
2-56

SERIAL NO. 2098

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
T E T	Douglas Aircraft Company Inc., - Douglas DC - 3	13393

(4) CATEGORY: Commercial

LANDPLANE [x] SEAPLANE [ ] SKIPLANE [x]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER November 22nd, 1958.

DATE OF ISSUE March 6th, 1947.

SEAL

SEE REVERSE SIDE

Controller, Civil Air Regulations.

TransAir Limited

● HEAD OFFICE
No. 5 Hangar, Winnipeg Airport
Mailing Address
P.O. Box No. 5
St. James, Manitoba
Telephone SPruce 2-0381

114

December 8th, 1958.

Regional Controller, Civil Aviation,
Department of Transport,
706 Winnipeg General Post Office Bldg.,
Winnipeg, Manitoba.

Attention: Mr.D.P.Glen.

Dear Sir: Re: Aircraft CF TET - Douglas DC-3

We are now attaching hereto the following documents pertaining to aircraft, Douglas DC3, CF TET.-

C. of R. No.14315
C. of A. No.2098

This aircraft was a total write-off as a result of a mishap which occurred at the Airport at Coral Harbour, Southampton Island, N.W.T. on September 25th, 1958.

Yours very truly,

uswagner

per U.S.WAGNER, Assistant General Manager.

USW:b
Encl.

LW/MC

#3118

OTTAWA Ontario, March 9th, 1959.

5008-T5-20 5008-T5-20 (SRL)

Aircraft Accident - Douglas DC-3 aircraft, CF-TET, September 25, 1958.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. Further to our letter of November 6, 1958, concerning the subject accident, may we now be advised if it has been determined whether aircraft CF-TET is to be written off.

2. If this aircraft is a write off the Certificates of Registration and Airworthiness should be obtained from the owner and retained on your file for cancellation and this office advised accordingly in order that the registration mark may be deleted from the aircraft register.

Director of Civil Aviation.

DEPARTMENT OF TRANSPORT

MEMORANDUM

FILE 5008-TS-20

To Mr. Dykes

119

From W M Johnson

Re amended CF-TET No 825/54

	PREPARE REPLY FOR SIGNATURE		
	PREPARE MEMO TO:		
	INVESTIGATE & REPORT		ANSWER DIRECTLY
	SEE ME		FOR SIGNATURE
	FOR REQUIRED ACTION		FOR DISCUSSION
	NOTE & RETURN TO ME		NOTE & P. A.
	FOR PREVIOUS PAPERS		FOR .....APPROVAL
	FOR YOUR INFORMATION		PER YOUR REQUEST
	FILE & REFER TO:		

REMARKS

Please check cards & file to see that all entries Complete

WMJ

DATE Nov 10 19 54

61
6-56

ACL/BT

OTTAWA, Ontario. March 17th, 1959

5008-T5-20
~~5802-18905~~ (SRL)

Accident Report - October 23rd, 1958.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. Item 12 of the subject report indicated that further investigation was under way and that Headquarters would be advised of possible infractions and of any action taken on this matter.

2. May this Headquarters now be advised if the aforementioned investigation has been completed and the results thereof.

Director of Civil Aviation.

122

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
8—57

Winnipeg 1, Manitoba, March 31st, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
	5008-T-5-20(SRL)	5008-T-5-20(ARW)

SUBJECT

DOUGLAS DC - 3 AIRCRAFT CF - T E T

TRANSPORT - RECORDS
APR 2 AM
File 5008-T-5-20

218

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention:Controller, Civil Air Operations & Regulations.

1. With reference to your letter dated March 9th, 1959 concerning the above mentioned aircraft, enclosed herewith you will find a copy of our letter dated December 11th, 1958 in which we requested that registration markings CF - T E T be deleted from the Canadian Aircraft Register.

Enc.

J. B. Saunders
Regional Director, Air Services.

3. 4. 59.

[redacted]

[redacted]

[redacted]

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Comptroller, Civil Air Operations & Regulations.

1. Enclosed herewith you will find copy of letter dated December 6th, 1958 from Transaid Limited owner of the above mentioned aircraft, together with the Certificate of Registration and Certificate of Airworthiness for cancellation on the Canadian Aircraft Register.

/mb.
Encs.

Regional Director, Air Services.

Cordo Arnold

Records #3.

Please cancel

B.F. for 20/4/59.

noted 3/4

3.4.59.

S.R.L.

ACL/MD

12.4

OTTAWA, Ontario, May 1st, 1959.

5008-T5-20 (ARW)

5008-T5-20(SRL)
~~5008-10906~~

Accident Report - October 23rd, 1958.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. Further to our letter of March 17th, 1959, concerning the subject report, may this Headquarters now be advised, please, of the final outcome of your investigation.

Director of Civil Aviation.

125

OTTAWA, Ontario, June 1st, 1959.

~~5808-10908~~ (SRL)
5008-T5-20

Accident Report - October 23rd, 1958.

Regional Director, Air Services,
Department of Transport,
Winnipeg General Post Office,
Winnipeg 1, Manitoba.

1. Further to our letters of May 1st and March 17th, 1959, respectively, concerning the subject report, may this Headquarters, now be advised, please, of the final outcome of your investigation.

Director of Civil Aviation.

12 C 2 8-57

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

602 Wpg. Gen. Post Off. Bldg.,
266 Graham Ave., Wpg. 1, Man., June 19, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
June 1, 1959.	5802-18909(SRL) 5008-T-5-20	5802-3248 5008-T-5-20 (ARW)

SUBJECT

Accident Report - October 23rd, 1958, Aircraft CF-TET

TRANSPORT - RECORDS
JUN 24 A M
File 5008-T-5-20

Director General, Air Services,
Department of Transport,
OTTAWA, Ont.

12310

Attention: Director, Civil Aviation.

1. In reply to your letter of June 1, 1959, TransAir's investigation results have not been completed, however, this will advise that there are no apparent infractions of the Regulations or Air Navigation Orders.

COPY ON
5802-18908

for Regional Director, Air Services.

12

FILE No. 5008 - T 6 - 25 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM AUGUST, 1953
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE OF - TFY BRISTOL FREIGHTER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
MAR 25 1957	3284	ARL		GJ	APR 5 1957
5 1957		RFL			APR 8 1957
PR 8 1957		CAJ		APR 8 1957	

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

1
55

FILE No. 5008 - T 6 - 25 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM AUGUST, 1953
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF-TFY BRISTOL FREIGHTER

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

VOL. 1 5008 - T 6 - 25

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG 19 1955	32535	CAR.		G.J.	AUG 21 1953
AUG 21 1953	—	CAE.			AUG 21 1953
SEP 29 1953	41009	CAR		G.J.	SEP 29 1953
SEP 29 1953	—	CAE			SEP 30 1953
NOV 25 1953	51678	CAE			NOV 25 1953
DEC 14 1953	54687	CAR			DEC - 5 1953
DEC 17 1953	57635, 55357	CAR			JAN 25 1954
JAN 25 1954	—	CAE			JAN 26 1954
JAN 26 1954	—	RDL			JAN 26 1954
	—	CAJ			JAN 27 1954
FEB 11 1954	FEB 16 1954 14869	CAR			FEB 19 1954
	(5008-T-26) 16091	CAR			MAR 4 - 1954
OCT - 1 1954	15947	CAR			OCT - 4 1954
MAR 22 1955	37196	CAE			MAR 25 1955
MAR 24 1955	8409	ARL		G.J.	
JUN 14 1955	23584	ARC			JAN 11 1956
JAN - 9 1956	—	RFL			JAN 13 1956
JAN 13 1956	—	CAJ			JAN 16 1956
JAN 13 1956	Reg Miss Jones	ARL	15.2.56		FEB 2 1956
FEB - 9 1956	BH 10/2/56	RFL			FEB 9 1956
FEB 23 1956	27026	CAE			FEB 29 1956
MAR 14 1956	BH 15/3/56	ARL			MAR 14 1956
MAR 26 1956	29530	CAE			APR 4 1956
AUG 1 1956	W Linden 15229	ARL			AUG 23 1956
	Miss Jones 15229	ARL	25.9.56		AUG 23 1956
SEP 24 1956	BH 26/9/56	ARC			SEP 27 1956

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT
OTTAWA

Form #2405

FILE: 5008-T6-25

32535

TRANSPORT - RECORDS
AUG 19 A.M. 1953
File 5008-T6-25

Certificate of Registration and Airworthiness of Aircraft for Purpose of Delivery Flight from Points Outside Canada

A.

1. Name of Owner **Trans-Canada Airlines**
2. Address of Owner **Montreal Airport, Dorval, Que.**
3. Nationality of Owner **Canadian**

B. Aircraft

1. Nationality and Registration Marks **CF-TFY**
2. Manufacturer's Designation of Aircraft **Bristol Freighter**
3. Aircraft Serial Number. **13138**

C. Whereas it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been temporarily entered on the Register of Canada in accordance with International Civil Aviation Organization Document 6988 C/182, and The Air Regulations.

D. This Certificate is valid for flight of the herein described aircraft from **Bristol, England** to **Montreal Airport, CANADA**, and shall be not valid after **11th October, 1953.**

E. Special conditions:

1. ~~This Certificate is conditional on the issue of a Domestic Certificate of Airworthiness by the State in which the aircraft is manufactured and to submission of this document to the Department of Transport, Canada.~~
2. The carriage of commercial passengers or goods is prohibited.
3. This Certificate does not include permission to operate radio equipment installed in the aircraft.
4. **This Certificate is conditional on the issue of a Domestic Certificate of Airworthiness by the state in which the aircraft is manufactured and to submission of this document to the Department of Transport, Canada.**

District Superintendent, Air Regulations.

Date **August 12th, 1953.**

tb

c.c. HQ
DCAS
RADIO - Montreal
RADIO - OTTAWA

Director of Customs,
Excise Inspection,
Dept. of National Revenue,
Customs & Excise,
OTTAWA 2, Ont.

Mr. Bousquet,
Officer in Charge,
Customs Division,
Montreal Airport,
DORVAL, Que.

Bristol Aeroplane Co.
of Canada Ltd, Montreal

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT
OTTAWA

Form #2445

FILE: 5008-T6-25

41009

DEPARTMENT - RECORDS
SEP 29 A.M. 1953
File 5008-T6-25

Certificate of Registration and Airworthiness of Aircraft for Purpose of Delivery Flight from Points Outside Canada

EXTENSION of Previous Certificate dated August 12th, 1953.

A.

1. Name of Owner **Trans-Canada Airlines**
2. Address of Owner **Montreal Airport, Dorval, Que.**
3. Nationality of Owner **Canadian**

B. Aircraft

1. Nationality and Registration Marks **CF-TFT**
2. Manufacturer's Designation of Aircraft **Bristol Freighter**
3. Aircraft Serial Number. **13138**

C. Whereas it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been temporarily entered on the Register of Canada in accordance with International Civil Aviation Organization Document 6988 C/~~182~~ 812, and The Air Regulations.

D. This Certificate is valid for flight of the herein described aircraft from ..Bristol, England..... to ..Montreal Airport, CANADA..... and shall be not valid after ..11th November, 1953.....

E. Special conditions:

1. [redacted]

2. The carriage of commercial passengers or goods is prohibited.

3. This Certificate does not include permission to operate radio equipment installed in the aircraft.

4. **This Certificate is conditional on the issue of a Domestic Certificate of Airworthiness by the state in which the aircraft is manufactured and to submission of this document to the Department of Transport, Canada.**

District Superintendent, Air Regulations.

Date ..September 28th, 1953.

c.c. HQ
DCAS
RADIO - Montreal
RADIO - Ottawa

Director of Customs
Excise Inspection,
Dept. of National Revenue,
Customs & Excise,
OTTAWA 2, Ont.

Mr. Bousquet,
Officer in Charge,
Customs Division,
Montreal Airport,
DORVAL, Que.

tb c.c. The Bristol Aeroplane Co. of Canada Ltd.,
223 International Aviation Bldg.,
Montreal, P.Q.

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT
OTTAWA

Form #2445

Certificate of Registration and Airworthiness of Aircraft for Purpose of Delivery Flight from Points Outside Canada

EXTENSION of previous Certificate dated August 12th, 1953.

A.

1. Name of Owner **Trans-Canada Airlines**
2. Address of Owner **Montreal Airport, Dorval, P.Q.**
3. Nationality of Owner **Canadian**

B. Aircraft

1. Nationality and Registration Marks **CF-TFZ**
2. Manufacturer's Designation of Aircraft **Bristol Freighter**
3. Aircraft Serial Number. **13139**

C. Whereas it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been temporarily entered on the Register of Canada in accordance with International Civil Aviation Organization Document 6988 C/~~162~~ 812, and The Air Regulations.

D. This Certificate is valid for flight of the herein described aircraft from **Bristol, England** to **Montreal Airport, CANADA** and shall be not valid after **November 11th, 1953.**

E. Special conditions:

1. [redacted]
2. The carriage of commercial passengers or goods is prohibited.
3. This Certificate does not include permission to operate radio equipment installed in the aircraft.
4. **This Certificate is conditional on the issue of a Domestic Certificate of Airworthiness by the state in which the aircraft is manufactured and to submission of this document to the Department of Transport, Canada.**

District Superintendent, Air Regulations.

Date **September 28th, 1953.**

c.c. HQ
DGAS
RADIO - Mtl
RADIO - HQ

Directof of Customs
Excise Inspection
Dept. of Natl Revenue
Customs & Excise
OTTAWA 2 (Ont)

Mr. Bousquet
Officer in Charge
Customs Division
Montreal Airport
DORVAL, P.Q.

Bristol Aeroplane Co.
of Candda Ltd.

5008-T6-25
3A

COPY

55499

ORIGINAL ON FILE 5008-T6-24

COPY FOR FILE 5008-T6-24

FROM: THE HIGH COMMISSIONER FOR CANADA, LONDON, ENGLAND.

TO: THE SECRETARY OF STATE FOR EXTERNAL AFFAIRS, CANADA

Date September 23, 1953.

Subject;

FOLLOWING FOR INFORMATION DEPARTMENT TRANSPORT?

BEGINS:

BRITAVIA LIMITED DELIVERING TWO BRISTOL FREIGHTERS FOR T C A TO MONTREAL VIA KEFLAVIK BLUIE WEST 1 AND GOOSE BAY. FIRST DELIVERY FLIGHT AIRCRAFT CF-TFX DEPARTS PRESTWICK SEPTEMBER 29th ARRIVING BLUIE WEST 1 AND GOOSE BAY APPROXIMATELY SEPTEMBER 30th/OCTOBER 1st. SECOND FLIGHT AIRCRAFT CF-TFY DEPARTS PRESTWICK OCTOBER 6th ARRIVING BLUIE WEST 1 AND GOOSE BAY APPROXIMATELY OCTOBER 7th/8th. CAPTAIN J W HACKETT PLUS ONE AND CAPTAIN DAMON PLUS ONE WILL BE IN CHARGE OF RESPECTIVE AIRCRAFT. ENDS.

ENTERED ON CARDS
No. 3 Bldg.

PA

5008-T6-25
3B

COPY

55497

ORIGINAL ON FILE 5008-T6024

COPY FOR FILE 5008-T6-25

FROM THE HIGH COMMISSIONER FOR CANADA LONDON ENGLAND

TO: THE SECRETARY OF STATE FOR EXTERNAL AFFAIRS CANADA

Date September 25, 1953.

Reference: Our telegram No. 1612 of September 23.

Subject:

FOR CONTROLLER, CIVIL AVIATION, DEPARTMENT OF TRANSPORT, BEGINS:
PLEASE AUTHORIZE QUICKLY AIRCRAFT CREWS HOLDING BRITISH A.L.T.P. LICENCES TO OPERATE CANADIAN REGISTERED AIRCRAFT ON FERRY FLIGHTS COMMENCING SEPTEMBER 29.

ENDS.

Apraction
see original
JH

ENTERED
ON CARDS
No. 3 Bldg.

8
5-52

TRANS - CANADA AIR LINES

INTERNATIONAL AVIATION BUILDING
MONTREAL
CANADA

TRANSPORT - RECORDS
NOV 24 P.M.
File 5008-T6-25

51678

November 23rd, 1953.
File:2410-1

Mr. H.S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
#3 Temporary Building,
Ottawa.

Dear Howe:

5008-T6-24

Further to our letter of November 2nd, we wish to advise you that we have written to the local DOT authorities applying for the Registration and Certificate of Airworthiness for our second Bristol Freighter, copy of which is attached herewith.

We will inform your office as the application is forwarded for the succeeding aircraft.

Yours very truly,

J.T. Dyment,
Director of Engineering.

Att.

ENTERED ON CARDS
No. 3 Bldg.

N. Rees

November 23rd, 1953.
File: 2410-1

Mr. J.P. Fournier,
Acting District Superintendent of Air Regulations,
Department of Transport,
Dorval, P.Q.

Subject: Registration and Certificate of Airworthiness
Bristol Type 170 Freighter

Dear Sir:

We are attaching our application for Registration and Certificate of Airworthiness along with copies of the Bill of Sale and the original and copies of the Ministry of Civil Aviation Certificate of Airworthiness for the second of three Bristol Type 170 Series 31 Freighters we are purchasing from the Bristol Aeroplane Company.

In accordance with the agreement indicated in a letter from Air Vice-Marshal A.T. Cowley, Director of Air Services, March 25th, 1953, may the registration letters CF-TFY be assigned to this aircraft.

The Ministry of Civil Aviation require the return of the original Certificate of Airworthiness issued by them and we would therefore appreciate its return to this office as soon as possible. The copies may be retained for your files.

The application for Radio Licence was forwarded to Mr. H.E. Fisher, District Superintendent of Radio, November 18th, 1953.

Our cheque in the amount of $10.00 covering the fees for Registration and Certificate of Airworthiness is attached.

Yours very truly,

JEH/ewm

J.T. Dyment,
Director of Engineering.

Att.

cc: Vice-President, Operations
General Manager, Operations,
Director of Mtce. & Overhaul (Att. Supvr. of Inspection)
F.T. Wood, Administrative Assistant to the President,
Controller, Montreal - Please issue a cheque in favour of Receiver-Gen
of Canada for $10.00 and forward to the undersigned for enclosure.
Charges in this case should be assessed to Formation 31-1000-11 (100
Expense Code 40571.

TRANSPORT - RECORDS
DEC 14 P.M. 1953
File 5008-T6-25

5008-T6-25

54687

HQ.

Montreal Airport,
Dorval, P.Q., December 10th, 1953.

Trans-Canada Air Lines,
1080 University Street,
Montreal, P.Q.

Dear Sirs-

This letter will constitute your temporary Certificates of Registration and Airworthiness, not valid after Feb. 9/54 for aircraft Bristol 170 CF-TFY registered as a commercial machine.

This authority is subject to aircraft being airworthy and to the conditions of Flight Manual as well as limitations of current Weight and Balance Report.

This letter does not give you permission for the operation of radio equipment which may be installed in this aircraft, unless a Radio Licence has been obtained from the Telecommunications Division of this Department.

Yours very truly,

J.L. BLONDEAU,
District Superintendent, Air Regulations.

jc

c.c. HQ
Radio
CR

KA

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

19 3 5-51

Montreal Airport, Dorval, Que.,
December 14th, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T6-25	Bristol 170 Aircraft CF-TFY	5008-T6-25

Director of Air Services,
Department of Transport,
OTTAWA, Ont.

55357

TRANSPORT - RECORDS
DEC 17 A.M 1953
File 5008-T6-25

Attention:- Superintendent, Air Regulations.

1. Please find attached the following documents regarding the subject aircraft:-

(a) Application for Certificates of Registration and Airworthiness as a commercial machine in the name of Trans-Canada Air Lines;

(b) Bill of Sale in favour of Trans-Canada Air Lines;

(c) Copy of Custom Entry Receipt No. 14575-H;

(d) Copy of United Kingdom Certificate of Airworthiness No. A.3622;

2. Registration fee of ten dollars ($10.00) has been paid and is covered by Official Receipt No. 187748.

3. Please hold issuance of documents pending receipt at Headquarters of form 2443 and Weight and Balance Report.

for District Controller, Air Services.

JPF:tb
encls.

CF-TFY

16 2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

OR 187748
10cc

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....
For Trans-Canada Air Lines

Date of Application.....November 23rd, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TRANS-CANADA AIR LINES	1080 University Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
G.R. McGREGOR	Chairman & President	Montreal	Canadian
WILFRID GAGNON	Director	Montreal	Canadian
DONALD GORDON	Director	Montreal	Canadian
J.A. NORTHEY	Director	Toronto	Canadian
H.J. SYMINGTON, Q.C.	Director	Montreal	Canadian
C.P. EDWARDS	Director	Ottawa	Canadian
R.A.C. HENRY	Director	Montreal	Canadian
* see below			

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....
Freight

Usual Station.....Montreal

Date of manufacture or reconstruction.....1953 Bristol, England

Crew required.....Pilot & Co-Pilot

Accommodation for what number of passengers.....Removable seats with safety belts can be installed to accommodate up to 9 persons

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

* F.M. ROSS	Director	Vancouver	Canadian
W.J. PARKER	Director	Winnipeg	Canadian

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Bristol Aeroplane Company

Type Bristol 170 Mark 31 Maker's No. 13138

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	108 ft. 0 in.	same
Length o/a in feet	68 ft. 4 in.	same
Height o/a in feet	21 ft. 6 in.	same

Cubic Capacity (of Airship or Balloon) N/A

Weight equipped, but without load, fuel, or oil 3 copies of Weight Report will be submitted upon completion of modification program

Total weight authorized (fully loaded) in lbs. 44000 Air speed 166 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments See List No.1 attached
2. Gauges See List No.1 attached
3. Lights See List No.2 attached
4. Signals See List No.3 attached
5. Fire Extinguishers See List No.4 attached
6. Parachutes Nil
7. Tools See List No.5 attached
8. Other Equipment See List No.6 attached

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Bristol Hercules 734	same	N.A.	N.A.
Pusher or Tractor	Tractor	same		
Right or Left Hand	Left	same		
No. of Cylinders	14	same		
H.P.	1980	same		
Bore	5.75 in.	same		
Stroke	6.5 in.	same		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on See last paragraph - attached letter.

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions Please hold documents at Headquarters pending submission of form 2443 and Weight and Balance Report.

Date December 14th, 1953 Signature J. H. Laurence

Registration approved and Registration Mark C.F.-TFY allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

LIST 1 INSTRUMENTS - TRANSMITTERS AND GAUGES

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Part Number
Airspeed Indicator	2	Kollsman	586CK-1-0158
Altimeter	2	Kollsman	371P-1-01
Rate of Climb Indicator	2	Pioneer	1634-1M
Pitot Head	2	Smiths	6A/731
Gyro Horizon	2	Pioneer	15901-1B-B1
Turn and Bank Indicator	2	Pioneer	3906-1H
Clock	2	Elgin	2144
Pitot Heat Indicator	6	General Electric	DN4-AAB-201
Engine Speed Indicator	2	Smiths	78RV
Engine Speed Generator	2	Smiths	54RV
Cylinder Temperature Gauge	2	Smiths	77MV
Oil Temperature Gauge	2	Smiths	54MV
Oil Pressure Gauge	2	Smiths	261PG
Oil Pressure Transmitter	2	Smiths	288PG
Fuel Pressure Gauge	2	Smiths	274PG
Fuel Pressure Transmitter	2	Smiths	266PG
Fuel Contents Gauge	2	Smiths	1166FG
Fuel Contents Gauge	2	Smiths	1263FG
Fuel Contents Gauge	2	Smiths	1469FG
Fuel Contents Transmitter	2	Smiths	887FG
Fuel Contents Transmitter	2	Smiths	1262FG
Fuel Contents Transmitter	2	Smiths	1468FG
De-Icer Contents Gauge	1	Smiths	1637FG
De-Icer Contents	1	Smiths	1636FG

(continued)

LIST 1 -INSTRUMENTS - TRANSMITTERS AND GAUGES - (continued.)

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Part Number
Pneumatic Triple Pressure Gauge	1	Smiths	258PG
Flap Position Indicator	1	Smiths	201FL
Flap Position Transmitter	1	Smiths	135FL
Voltammeter	2	General Electric	DW53-BBH-4
Voltmeter - A.C.	1	General Electric	8AW43-VAA-1
Power Failure Warning Indicator	1	Pioneer	36200-1B
Oil Cooler Flap Position Indicator	1	Smiths	145FL
Oil Cooler Flap Position Transmitter	1	Smiths	132FL
Outside Air Temperature Gauge	1	Weston	727T58Y
Induction Air Temperature Gauge	2	Weston	727T58Y
Heater Temperature Gauge	1	Weston	841T2Y2
Pitot Head - Auto Coarse Pitch	4	Smiths	6A/2176
Radio Magnetic Indicator	3	Pioneer	36105-1K-16-31
Omni Magnetic Bearing Indicator	2	Pioneer	MB97B
Gyrosin Compass System	2	Sperry	Type C4
Fuel Pressure Warning Unit	2	Smiths	156PG
Boost Gauge	2	Smiths	82BG
Magnetic Compass	1	Smiths	V1024

October 2nd, 1953.

LIST 2 - LIGHTS

BRISTOL 170 MK. 31

Unit		Quantity	Manufacturer	Type
Navigation	Fuselage Upper	1	Grimes	B2115-24AR
Navigation	Fuselage Lower	1	Grimes	B2115-24AR
Navigation	Tail Upper	1	Grimes	A1943-3
Navigation	Tail Lower	1	Grimes	A1943R-3
Navigation	Wing Port	1	Grimes	5C/492
Navigation	Wing Starboard	1	Grimes	5C/496
Landing	Port	1	Butler	5C/1515
Landing	Starboard	1	Butler	5C/1515
Taxying	Port	1	Butler	5C/3863
Taxying	Starboard	1	Butler	5C/3863

October 2nd, 1953.

LIST 3 - SIGNALS

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Type
Power Plant Fire Warning Light	2	Rotax	D-7304
Heater Fire Warning Light	1	Korry	BP204
Door Warning Light	1	Korry	130 SGL
Battery Disconnect Warning Light	1	Korry	130 ARL
Auto Pitch Coarsening Warning Light	2	Korry	130 ARL
Emerg. A.C. Power Warning Light	1	Korry	130 SAL
Ground Power Warning Light	1	Korry	130 ARL
Fuel Pressure Warning Light	2	Rotax	2804
Ice Warning Light	1	Rotax	2802
Starter Relay Operating Warning Light	2	Rotax	2802
Feathering Relay Operating Warning Light	2	Rotax	2802

October 2nd, 1953.

LIST 4 - FIRE EXTINGUISHERS

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Type
1.4 lb CO_2 Cylinder (Heater)	1	Walter Kidde	870038
2 lb CO_2 Hand Type (Flight Comp't. and Freight Comp't.)	3	Walter Kidde	2TB-1
Water Type Hand Extinguisher (Freight Comp't.)	3	York	1 Qt. Size
12 lb Methyl Bromide Cylinder (Engines)	4	Graviner (Type 5A)	157/BL
6 lb Methyl Bromide Cylinder (Air Intake)	6	Graviner (Type 4A)	1136/EL

October 2nd, 1953.

LIST 5 - TOOLS

BRISTOL 170 MK. 31

Unit	Quantity
Engine Tool Kit	1
Propeller Tool Kit	1

October 2nd, 1953.

LIST 6 - OTHER EQUIPMENT

BRISTOL 170 MK. 31

Unit	Quantity
Axes	2
Oxygen Masks	7
Portable Oxygen Cylinder	4
Smoke Mask	1
Portable Oxygen Cylinder - Smoke	1
First Aid Kit	1
Flashlights	2
Fire Extinguishers (Hand)	6 (See List 4)
Maps	1 Set
Control Locks	1 Set
Escape Ladder	1

SPECIAL OVERWATER EMERGENCY EQUIPMENT

Drift Recorder	1
Gibson Girl HF Transmitter Bendix AN/CRT-3	1 (In Life Raft)
Emergency VHF Transmitter Receiver Bendix MRT-4AA	1 (In Life Raft)
Life Jackets	2 (Crew) 2 (Spares) 1 (For each additional person carried)
Life Raft (15 man)	1

(continued)

10

LIST 6 - OTHER EQUIPMENT - (continued.)

The life raft includes:

a)	Inflation gear	1 per raft
b)	Raft lanyard	1 per raft
c)	Sea anchor	1 per raft
d)	Canopy	1 per raft
e)	Heaving line and buoy	1 per raft
f)	Paddles	2 per raft
g)	Accessory case tie-down	1 per raft
h)	Repair clamps	4 per raft
i)	Bailing bucket	1 per raft
j)	Knife and holder	1 per raft
k)	Police whistle	1 per raft
l)	Pump (manual)	1 per raft
m)	Life raft accessory package	1 per raft

The life raft accessory package contains:

a)	Water container	1 per package
b)	Emergency rations (Charm Candy Co.)	8 per package
c)	Water-proof flashlight	1 per package
d)	One star projector (Van Kerner Chem.)	6 per package
e)	Signal mirror	1 per package
f)	Fishing kit	1 per package
g)	Snare wire	2 per package
h)	Water tight match container	1 per package
i)	Bible	1 per package
j)	Instruction booklet	1 per package
k)	Sea marker (UK-M9 Van Kerner)	2 per package
l)	Smoke generator (UK-M6 Van Kerner)	2 per package
m)	Shark repellent (R5148 Amer. Cyanamide)	1 per package
n)	Sun still	1 per package
o)	First aid kit	1 per package

The first aid kit in the above package contains:

a)	Foille for burns (tubes)	6 per kit
b)	Sulphathiazole tablets 7½ gr.	18 per kit
c)	Sulphadiazine powder (1 oz.)	1 per kit
d)	Unguentine (tubes)	6 per kit
e)	Ammonia inhalants	10 per kit
f)	Paper cups	10 per kit
g)	4" x 6 yds. gauze bandage	1 per kit
h)	Wire splint	1 per kit
i)	4" compress bandages	3 per kit
j)	2" compress bandages	4 per kit
k)	1" adhesive compresses	20 per kit
l)	Morphine Ampules of Morph.Sul.15 mg.¼gr.1C.C.	5 per kit
m)	Mild tincture of iodine swabs	10 per kit
n)	40" triangular bandage	1 per kit

October 2nd, 1953.

9

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: Bristol Aeroplane Co. Limited

MODEL: Type 170 MK31

MANUFACTURER'S SERIAL NO.: 13138

D.O.T. IDENTIFICATION MARK: CF-TFY

MANUFACTURER OF ENGINE: Bristol Aeroplane Co. Limited

MODEL: Hercules 734

SERIAL NO.: P. H181110
S. H181109

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows: non-applicable

Nil
..... in the sum of $ ..... in favor of
(Mortgage, mechanic's lien, etc.)
.....whose address is
.....

For and in consideration of the sum of ..$.264,121.50..... dollars. Bristol Aeroplane Co. of Canada Ltd.... the undersigned, whose
(Seller)
address is 223 International Aviation Bldg... Montreal 3. Que.... does this .27th day of October.., 1953.., sell, grant, transfer, and deliver all of his above-described right, title and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto Trans-Canada Air Lines
(Purchaser)
.....
whose address is International Aviation Building, Montreal, Que. and to ...its..... executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, .we.. have set ..our.. hand and seal this ..27th.. day of October....., 1953..

BRISTOL AEROPLANE CO. OF CANADA LTD.

J. D. Joyce
.....
(Witness)

.....
(Seller's Signature) (SEAL)

B. 1
D.N.R. APPROVED
NO. 92
25/6/52

Port of MONTREAL, Que., Oct. 13/53

Arriving per Air Frery

Imported by Bristol Aeroplane Co. of Can.Ltd.,

Exporters' names and addresses The Bristol Aeroplane Co. Ltd.,

England.

NOTE: IF SEVERAL EXPORTERS ARE INVOLVED IN THE ONE ENTRY, COMPLETE SECTION PROVIDED ON E 59½ F.38M)

G. M. PATRY LIMITED MONTREAL AIRPORT, DORVAL - MElrose 1-3534★
MEMBER, DOMINION CHARTERED CUSTOMS HOUSE BROKERS ASSOCIATION.

SENDING PORT NUMBERS OF MANIFESTS
Ferry

GOODS EXPORTED TO CANADA DIRECT FROM
England.

VIA
Dir.
(COUNTRY THROUGH WHICH CARRIED IN TRANSIT, IF ANY.)

CUSTOMS, CANADA
ENTRY FOR HOME CONSUMPTION

THROUGH BILL OF LADING PRODUCED — INITIALS

THROUGH BILL OF LADING ATTACHED TO ENTRY — INITIALS

REPORT NO.

ENTRY NO. 1457[illegible]/5[illegible]
OUTPORT

PORT

G.M.Patry Lt[illegible]

MARKS AND NUMBERS	NO. OF PKGS.	DESCRIPTION OF GOODS	QUANTITY	VALUE FOR DUTY IN DOLLARS	RATE OF DUTY OR FREE	TOTAL CUSTOMS DUTY $	TOTAL CUSTOMS DUTY ¢	DUTY PAID VALUE $	DUTY PAID VALUE ¢	SALES TAX $	SALES TAX ¢	RATE OF EXCISE TAX	EXCISE TAX $	EXCISE TAX ¢	TARIFF ITEM APPLIED
	1	Bristol Type 170 MK 31 Aeroplane.		203442.00	Free	Nil		203442.00							440-L-1
		Aircraft and complete parts thereof, nop not including engines under such regulations as the Minister may prescribe (1) When of types and sizes not made in Can.													
		Engines. CF-TFY		4505.00	Free	Nil		4505.00							440Ni
		Engines, when imported for use only in the equipment of aircraft (1) When of types and sizes not made in Canada.						207,947.00		20794.70					

SUBJECT TO AMENDMENT

RATE OF EXCHANGE FOR DUTY PURPOSES ON 75,617.01

COPY

WE HEREBY CERTIFY THAT THE GOODS DESCRIBED ABOVE WILL BE USED AS SUCH UNDER PROVISION OF THE TARIFF ITEMS QUOTED AND WILL NOT BE USED FOR ANY OTHER PURPOSE. SIGN.

WE CERTIFY THAT THE ARTICLES DESCRIBED ABOVE ARE TO BE USED DIRECTLY IN THE PROCESS OF MANUFACTURE OR PRODUCTION OF GOODS. SIGN.

(SPACE RESERVED FOR OTHER DECLARATIONS)

WE HEREBY CERTIFY THAT THE GOODS COVERED BY THIS ENTRY ARE TO BE USED IN, WROUGHT INTO, OR ATTACHED TO TAXABLE ARTICLES MANUFACTURED FOR RESALE.

SALES TAX LICENCE NO. [illegible]

WE HEREBY CERTIFY THAT THE WITHIN MENTIONED ARTICLES ARE FOR RE SALE.

POWER OF ATTORNEY NO. 500
WHICH HAS BEEN CHECKED BY ME AGAINST THIS ENTRY IS REGISTERED IN THE NAME OF THE IMPORTER.

CUSTOMS-EXCISE CLERK

THE SPACE BELOW THIS LINE IS RESERVED FOR CUSTOMS EXCISE OFFICERS' USE ONLY, AND MUST NOT BE FILLED IN BY THE IMPORTER.

LANDING WAITER HOLD _____ PKGS.

COMPUTING CLERK

EXAMINE _____ PKGS.

DIV. 1	DIV. 2	DIV. 3	DIV. 4	DIV. 5	DIV. 6

CARTAGE

INITIALS		
	DUTY	Nil
	SALES TAX	20794.70
	EXCISE TAX	
	TOTAL	20794.70

I _____ of Montreal in the province of Quebec, agree to be bound by the certificate and undertaking set out in form 1 (1 or 2 as the case may be) endorsed hereon, and do solemnly declare:-

1. I am the owner or consignee of the goods described in the above bill of entry (or the agent of the owner or of the consignee, as the case may be).
2. That to the best of my knowledge and belief the particulars set out in the above bill of entry are true, correct and complete.
3. That I have withheld no information required by the Customs Act or any other Act relating to the revenue. AND I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the Canada Evidence Act.

Sign. _____

Declared before me at the port of Montreal in the province of Quebec, this 13 day of Oct. 1953

Collector of Customs and Excise

FORM 4

Oath or Affirmation of importer or agent prescribed to be made and subscribed before a Collector of Customs and Excise or a Notary Public or a Commissioner for taking affidavits, on entry of goods at a lower rate of duty or free for manufacturing purposes.

I, _____ the undersigned importer of the (2)_____ mentioned in this entry, do solemnly (3)_____ affirm that such (4)_____ are imported by me for the manufacture of (5)_____ in my own factory situated at (6)_____ and that no portion of the same will be used for any other purpose or disposed of until so manufactured.

Sign. _____

Affirmed before me this _____ day of _____ 19____

Collector or Title of Official authorized to Administer Oaths.

SPEEDISET-PATENTED-MOORE BUSINESS FORMS LTD.
CUSTOMS IMPORT ENTRY SET

1

In this document wherever the expressions "Minister of Civil Aviation" or "Ministry of Civil Aviation" occur, they are to be read as if the expressions had been "Minister of Transport and Civil Aviation" and "Ministry of Transport and Civil Aviation" respectively.

M.C.A. Form No. 958

KINGDOM

COPY

MINISTRY OF CIVIL AVIATION

CERTIFICATE OF AIRWORTHINESS

No. A 3622

NATIONALITY AND REGISTRATION MARKS	CONSTRUCTOR AND CONSTRUCTOR'S DESIGNATION OF AIRCRAFT	AIRCRAFT SERIAL No. (CONSTRUCTOR'S No.)
CF-TFY	The Bristol Aeroplane Co. Ltd. Bristol. Type 170. Series 31	13138

CATEGORY: Normal

SUBDIVISION: (a) Public transport for passengers
(b) Public transport for mails
(c) Public transport for goods
(d) Private (e) Aerial Work
(h) Demonstration (i) Crew familiarisation

This Certificate of Airworthiness is issued pursuant to the Convention on International Civil Aviation dated 7th December, 1944, and the Air Navigation Order, 1949, the Air Navigation (General) Regulations, 1949, and the Air Navigation (Radio) Regulations, 1949, in respect of the above-mentioned aircraft, which is considered to be airworthy when maintained and operated in accordance with the requirements of the above-mentioned Order and Regulations, and the pertinent Flight Manual.

COPY

Date 17th October, 1953. ..... by authority of the Minister of Civil Aviation.

This certificate is valid for the period(s) shewn below		Signature, Official Stamp and Date
From 9th October, 1953.	to 8th October, 1954.	
From	to	
From	to	
From	to	
From	to	

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorised for the purpose by the Minister of Civil Aviation.

If this Certificate is lost, the Secretary, Ministry of Civil Aviation (O.S.1b) should be informed at once, the Certificate Number being quoted.

Any person finding this Certificate should forward it immediately to the Secretary, Ministry of Civil Aviation (O.S.1b), Ariel House, Theobalds Road, London, W.C.1.

(11400) Wt. 41440/1.1906 900 3/53 C. & Co. 745(8)

24

FORM No. 2443

CERTIFICATION OF AIRCRAFT IMPORTED COMPLETE

Aircraft Registration CF-TFI Serial No. 13138
Aircraft Type - Bristol Type ~~Type Approval No. C.A.A. Spec. No.~~ AD/1029/45
Name of Importer - 170 MK31 from country of origin (or equivalent document)
Trans-Canada Airlines

I hereby certify that I have inspected this aircraft and that no damage has been incurred during transit, and that all special Canadian requirements as outlined in the relevant Information Circulars, if applicable, have been complied with, and that the aircraft conforms to the Type Approval or other document noted above.

Signed _____
"A" and "C" Engineer
Cert. No. ULM-5 "B"

Date December 10th, 1953

I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot

Date Dec. 15/53

The above information has been checked and confirmed. The aircraft is acceptable for the issue of Certificate of Airworthiness and Registration.

Signed _____
District Aircraft Inspector

Date Dec 21 - 53

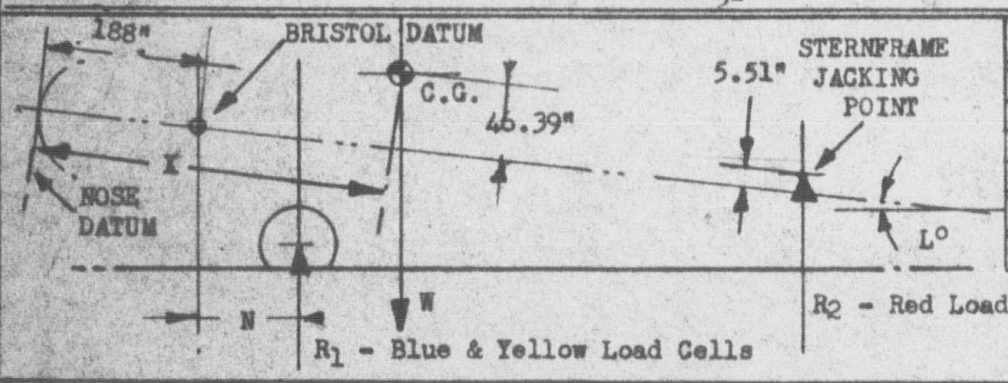
TCA 895C
Engineering
Department.

TRANS-CANADA AIR LINES
WEIGHING FORM

ACFT. NO. 23 502
ACFT. REGIST. CF- TFY

BRISTOL
TYPE 170 FREIGHTER
MARK 31

Date Dec. 14, 19 53



ANGLE OF INCLINATION
L° = 6° 50'
sin L° = 0.11898
tan Lo = 0.11983
sec L° = 1.00715
MEASUREMENT
N = 26.35 inches

WEIGHT RECORDINGS *

JACKING POINTS	SYMBOLS	CELLS	WEIGHT READING	ZERO SHIFT	CORRECTION	NET WEIGHTS
Left Main Wheel	R1	B	12,620	20	10	12,630
Right Main Wheel	R1	Y	13,100	40	20	13,120
Sternframe	R2	R	3,400	20	10	3,410
Aircraft Weight, as weighed					W =	29,160

* - Electric Weighing Kit Error

C.G. DETERMINATION

NUMERICAL CONSTANTS 535.83" 188.00

5.51 tan L_o = 5.51 x (0.11983) = + 0.66

N sec L^o = (26.35)x(1.00715) = - 26.54

(R2/W) x (509.95) = (3400 /29,160)x(509.95) = + 59.46

N = 26.35

46.39 sin L^o = 46.39x(0.11898) = - 5.52

sec Lo (20.83) = (1.00715)x(20.83) = + 20.98

X = C.G. Location, in Inches, aft of Nose Datum = 268.44

CORRECTION TO ICAN WEIGHT EMPTY

ITEMS	WEIGHTS	ARMS	MOMENTS
Net Weight of Acft., as weighed = W -	29,160	268.44	7,827,710
Less Total Usable Oil (Ref. page 1)	- 378	214.00	- 80,892
Standard Tire Correction (Ref. page 1)	0		0
ICAN Equip. "F" Correction (Ref. page 2)	- 66		- 19,275
ICAN Equip. "E" Correction (Ref. page 2)	5		1,150
Less Miscellaneous Equipment (Ref. page 1)	80		6,020
Anti-icer Fluid (Ref. page 1)	- 613	260.2	- 159,525
Cabin Seats (Ref. page 1)	0		0
ICAN WEIGHT EMPTY, ARM & MOMENT	28,188	268.74	7,575,188
ICAN WEIGHT EMPTY CENTRE OF GRAVITY, in %MAC = (268.74 - 233.00)/1.648 =			21.70 %MAC

Weighed by W G Chamberlain

Computed by Dataugue

Dated Dec. 15, 1953

Approved by Dataugue
Weight Control Engineer

Approved by A. E. Carlson
asst Director of Engineering

Form
TCA 895C
Engineering Department.

TRANS-CANADA AIR LINES

CHECK LIST
BRISTOL
TYPE 170 FREIGHTER
MARK 31

22

ACFT No. 502
ACFT.REGIST.CF- TFY
Date Dec. 14 19 53

C O R R E C T I O N S - F L U I D S

OPERATING OIL				
	Dipstick Qty.		Nose Arms	Moments
	Imp.Gal.	Pounds		
Left Eng. Tank	21.0	- 189	214.00	- 40,446
Right Eng. Tank	21.0	- 189	214.00	- 40,446
NET CORRECTION	-	378		- 80,892

Oil Weight: 9 lbs./Imp. Gals.

ANTI-ICER FLUID				
	Qty.on Board		Nose Arms	Moments
	Gals	Pounds		
Cockpit Tank	1.3	14	142.00	- 1,988
Main Tank	54.0	599	263.00	157,537
NET CORRECTION	-	613	260.24	- 159,525

ANTI-ICER Fluid Weight: 11.1 lbs./Imp.Gals.

C O R R E C T I O N S - E Q U I P M E N T

T I R E S						
Location	Tires Installed		Std. Tire Weights 1/	Weight Correc.	Nose Arms	Moments
	Type	Weight				
Left Main Wheel	Dunlop 48-18.00	176	176	Nil	223.00"	NIL
Right Main Wheel	" 48-18.00	176	176	Nil	223.00"	Nil
Tail Wheel	" 9.75 x 8	28	28	Nil	776.00"	Nil
NET CORRECTION				Nil		Nil

1/ Refers to: Main Wheels , DUNLOP 48x18.00/18
Tail Wheel , DUNLOP 9.75 x 8

REAR CABIN SEATS				
Titles	OnBoard	Weights	Nose Arms	Moments
Row 1 - Single Seat 23 lb	Nil		497.50"	
Row 1 - Double Seat 34 lb	Nil		506.50"	
Row 2 - Double Seat 34 lb	Nil		538.50"	
Row 3 - Double Seat 34 lb	Nil		568.00"	
Row 3 - 2 Single Seats 21 lb	Nil		567.00"	
NET CORRECTION		Nil		Nil

21

TRANS-CANADA AIR LINES BRISTOL 170 MARK 31 FREIGHTER ACFT. NO. 502

ICAN E Q U I P M E N T "F" and "E" C H E C K L I S T

	Equipment Items	No. Req.	No. on Board	Equip. Type	Unit Weight	Station Arms	Equip.Corrections			
							Equip."F"		Equip."E"	
							Wt.	Mom.	Wt.	Mom.
COCKPIT	Oxygen Masks	3	2	F	0.44	279.00	0.9	251		
	Smoke Masks	1	1	F	2.30	137.00	2.3	315		
	Flash Lights	2	Nil	F	1.20	137.00				
	Aircraft Log Book	1	Nil	F	2.40	340.00				
	Pilots Manual	1	Nil	F	0.75	137.00				
	Maps	1 set	Nil	F	2.00	137.00				
	Oxygen Bottle(s)Portable	3	2	F	5.50	142.00	11.0	1,562		
	Glare Curtain	1	Nil	F	3.80	150.00				
	Blind Flying Curtain	1	Nil	F	1.30	200.00				
	Axe	1	Nil	E	2.50	138.00			2.5	345
	Thermos 2 Quarts each	3	Nil	F	4.00	180.00				
	Thermos Carrier	1	Nil	F	2.80	180.00				
CABIN	Axes	1	Nil	E	2.50	322.00			2.5	805
	First Aid Kit	1	1	F	4.20	482.00	4.2	2,024		
	Fire Extinguisher CO_2	3	3	F	7.50	240.00	22.5	5,400		
	" " Water Glycol	3	3	F	6.50	334.00	19.5	6,513		
	Loading Ramp & Supp. Jacks		Nil	*						
	Cargo Winch		Nil	*						
	Propeller Tool Kit		Nil	*						
	Engine Tool Kit		Nil	*						
	Control Locks(Grd.Equip.)		Nil	*						
	Oxygen Masks		Nil	*						
	Oxygen Bottles(Portable)		1	*	5.50	582.00	5.5	3,210		
	Engine Crank		Nil	*						
	Canvas Cover-Main Spar	1	1	E						
	Toilet Screen	1	1	E	1.00	662.00				
	Aft Bulkhead Screen	1	1	E						
	Web Gate - Zone 1(Partition)	1	Nil	F	119.30	111.45				
	Web Gate - Zone 2(")	1	Nil	F	40.40	182.00				
	Web Gate - Zone 3(")	1	Nil	F	39.90	242.00				
	Web Gate - Zone 4(Partition)	1	Nil	F	41.70	322.00				
	Web Gate - Zone 5(")	1	Nil	F	41.10	402.00				
	Web Gate - Zone 6(")	1	Nil	F	39.40	482.00				
	Tie-Down Net, Zone 1	1	Nil	F	12.00	147.40				
	Tie-Down Net, Zone 2	1	Nil	F	12.00	212.00				
	Tie-Down Net, Zone 3	1	Nil	F	12.00	282.00				
	Tie-Down Net, Zone 4	1	Nil	F	12.00	362.00				
	Tie-Down Net, Zone 5	1	Nil	F	12.00	442.00				
	Cargo Net, Zone 6	1	Nil	F	12.00	532.00				
	Magnesium Hand Cart			F*						
	Fueling Ladder			F*						
	Rotary Pump (for de-icer fld)			F*						
	Rubber Hose (25 feet)			F*						
	Sash Cord (18 feet) #8 Type			F*						
	Spark Arrester			F*						
	Dolly Lever or Pry-bar			F*						
	Rollers (3 on each aircraft)			F*						
	Loadset Weblock Straps			F*						
	Loadset Weblock Straps			F*						
	* Non Standard Equipment									
	NET CORRECTIONS						65.9	19,275	5.0	1,150
							MINUS		PLUS	

MISCELLANEOUS WEIGHT & BALANCE STATEMENT

TRANS-CANADA AIR LINES ACFT. TYPE Bristol 170 Freighter MK 31 ACFT. NO. 502

Titles	Weight Pounds	Nose Arms	Moments
Equipment not on board when weighed			
Forward Cabin Insulation estimated	12.0	70.00	840
2 Control Units - Heating System	32.0	25.00	800
Miscl. Heater Parts & Ducting	8.0	25.00	200
1 Observers Seat (Jump Seat)	22.5	168.00	3,780
Windshield De-Misting Units	5.0	80.00	400
NET TOTALS, Weight, Arm and Moment	79.5	75.72	6,020

26. **FREQUENCIES**

Licensed	Crystal Controlled (Yes or no)	Active (Yes or no)	Type of emission	Power output Watts	Stations worked each channel
All TCA domestic service frequencies					

27. TRANSMITTER(S) Make, type, Freq. range power output
(1) Bendix RTA-1C 2.5-13.0 Mc/s 50W (Mod.)
(2) " TA-18BB 118.0-135.95 Mc/s. 25W
(3)

28. Radar, Radio Altimeter, DME or similar devices, describe
" MN-53B Marker Receiver 75 Mc/s.

29. RECEIVER(S) Make, type, Frequency Range
(1) " RTA-1C 2.5-13.0 Mc/s.
(2) Collins 51-R-3 108.0-135.95 Mc/s.
(3)

30. LORAN

31. Direction finders Make, type Manual or automatic.
(1) Bendix MN-31C (MN-26B & MN-26S) ADF Dual
(2) Collins 51-R-3 VOR (2)
(3)

32. Emergency radio equipment, including that for survival craft.

33. Blind approach equipment Collins 51-V-2 G.S. Collins 51-R-3 Localizer (describe)

34. Aerial(s) (1) Foremast to fin (2) 2 ADF loops (3) 2 sense (describe) (4) VHF (5) Omni

35. Types of Compasses Magnetic & Gyrosyn Marker, Glide Slope

36. Compass error due (*a*) Earphones - (*b*) Receiver - (*c*) Transmitter -

37. Compass heading at time of check 265

38. Weight of Radio equipment, Trans. Recv'r Misc'l Total 680

39. Aircraft battery capacity (*a*) ampere-hours 67 (*b*) Voltage 24

40. Have radio direction finders been checked for (i) function? Yes
(ii) accuracy? Yes

41. Is interference to radio reception within tolerable limits? Yes

42. Are you satisfied the radio equipment complies with airworthiness standards? Yes

Date and place inspection made (if made in the presence of Civil Aviation Inspector state whom)
December 15, 1953, Dorval, Que.

REMARKS: Temporary authority to operate radio equipment issued.
Only one VOR receiver installed at time of inspection.

W.B. Elliott
Signature of Radio Inspector.

cc DCAS

(IF MORE SPACE REQUIRED USE EXTRA SHEET) W.B. Elliott

6252-59 Ruby 5008-CAC

19A 6252-120

DEPARTMENT OF TRANSPORT
TELECOMMUNICATIONS DIVISION

2131 4-51

DEC 29 P.M. 1953

INSPECTION REPORT ..... AIRCRAFT STATIONS

56589

File 5008-T6-25

1. Aircraft registration markings CF-TFY
2. Make Bristol Type 170 No. 13138
3. Registered Owner (Name and Address) Trans-Canada Air Lines, Montreal Airport, Dorval, Que.
4. If Aircraft operated by other than registered owner (Name and Address)
5. Licensee of aircraft radio station (Name and Address) Trans-Canada Air Lines, 1080 University St., Montreal, Que.
6. Where is aircraft normally maintained? Dorval Based? Dorval
7. Class of service performed Scheduled (Scheduled / Non-Scheduled / Private)
8. Certificate of Registration No. Date
9. Certificate of airworthiness Temporary. Letter Dated December 10, 1953 valid till Feb. 9, 1954 Date of expiration
10. Operating Certificate No.
11. Do radio communication facilities comply with Departmental requirements? Yes (Yes or No)
12. Radio Licence No. 19 19 Is copy kept in aircraft?
13. If no radio station licence, state:
    (a) Has application been filed? Yes
    (b) Date radio installed December 13, 1953
    (c) Has radio been operated since April 1st?
14. Radio Installation drawings: TCA 75-9020, 75-9022, 75-9026, 75-9027, 75-9033,
    (a) Indentification 75-9038, 75-9039, 75-9115, 75-9127, 75-9131, 75-9142, 75-9143, 75-9162, 75-9181
    (b) Have they been submitted for approval? Yes
    (c) Have they been approved by (i) Radio Div.? Yes
    (ii) Civil Av. Eng.? Not required
15. Was aircraft imported with radio incorporated?
16. Was radio installed by aircraft manufacturer?
17. Was radio installation made by radio technicians? Trans-Canada Air Lines (Give name of firm or individual)
18. Are radio components positioned in accordance with drawings? Yes
19. Have modifications or repairs been made to the radio installation since the last radio inspection or as indicated in the aircraft journey log book? New aircraft (Full particulars to be attached)
20. Is any radio equipment or associated wiring considered to be a fire hazard? No (Yes or No)
21. Is aircraft radio station log being kept? (Yes or No)
22. Will documents carried meet requirements? (Yes or No)
23. Radio Operator(s) Cert. No. Grade
    Cert. No. Grade
24. Is radio operator employed in a dual capacity? Pilot and/or Co-Pilot (If so, give details)
25. Is aircraft equipped for Instrument Flight? Day Night Yes
    Visual Flight? Night

25

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3
5-51

Montreal Airport, Dorval, P.Q., December 29th, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170 Aircraft CF-TFY	5008-T6-25

CAR

57635

TRANSPORT RECORDS
JAN 4 A.M. 1954
5008-T6-25
File

Director of Air Services
Department of Transport
No.3 Temporary Building
OTTAWA (Ont)

Attention: Superintendent, Air Regulations.

1. Further to our letter of December 14th, 1953, please find attached completed Form 2443 and two copies of Weight and Balance Report for the above mentioned aircraft.

2. This application for registration appears to be complete and issuance of Certificates is recommended.

for District Controller,
Air Services.

Encls.

12618 (R)
4263 (A)
2 airscrew logbooks

25A

COPY

TRANSPORT - RECORDS
JAN 26 P.M.
File 5008-T6-25

ORIGINAL ON FILE 5010-10-119

COPY FOR FILE 5008-T6-24
-T6-25
-T6-26

LEJG.

MINISTRY OF TRANSPORT
AND CIVIL AVIATION,
BERKELEY SQUARE HOUSE,
LONDON, W.1.

13955

SG.2/5/017/ACS1(b)

BY AIR MAIL

14th January, 1954.

Sir,

Bristol 170 Series 31 Aircraft - Flight Manual

I am directed to forward herewith for onward transmission to the present owners seven copies of amendment No. G/8 for Bristol 170 Series 31 Flight Manual for aircraft previously registered in the United Kingdom as G-AINN, G-AINO, G-AINP and G-AMRU, also for CF-TFX, CF-TFY and CF-TFZ.

In each case the existing pages 5, 25/26, 29/30, 31/32, 33/34 and 45/46 should be extracted and be replaced by the revised pages forwarded herewith. New pages 79 to 88 are also enclosed for insertion, and the pages in Section VI should be appropriately renumbered.

An additional copy is forwarded for amendment of the specimen Flight Manual held in your Department for record purposes.

I am, Sir,
Your obedient Servant,

(Sgd) D. Hale

The Controller of Civil Aviation,
Department of Transport,
Wellington Street,
Ottawa,
Canada.

ENTERED ON CARDS
No. 3 Bldg.

8
3-53

29

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12618

NATIONALITY AND REGISTRATION MARKS CF-TFY

1. Type and description	Bristol 170
2. Name and address of constructor	The Bristol Aeroplane Co. Limited, Bristol, England
3. Constructor's serial number	13138
4. Name of owner	Trans-Canada AirLines
5. Address of owner	1080 University St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal, P.Q.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of October, 1953., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-TFY and is of Canadian nationality.

Given at Ottawa this 14th day of January, 1954.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

30

A[illegible]ICES
CIVIL A[illegible]ON DIVISION

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-T6-25

REGISTERED

Ottawa, Ontario
January 21st, 1954.

Trans-Canada Air Lines,
1080 University Street,
MONTREAL, P.Q.

Dear Sir/s-

Enclosed are Certificate of Registration No. 12618 and Certificate of Airworthiness No. 4263, together with Engine and Journey and Aircraft Log Books, for your Bristol 170 aircraft, CF-TFY, Serial No. 13138.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The endorsement on Page 3, Section D, paragraph 3, of the Certificate of Airworthiness is brought to your attention, and it is the responsibility of the owner of the aircraft to ensure that this endorsement is fulfilled in its entirety, otherwise the Certificate of Airworthiness will be considered invalid.

The Certificate of Airworthiness is valid until October 9, 1954.

Your attention is drawn to the Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

cc: Montreal

(C.T. Travers),
Superintendent, Air Regulations.

JJP

P.S. Propeller Log Book(s) enclosed. Yes X No
AC-5-95

31

ZDF/mmm

OTTAWA, Ontario, January 28, 1954.

Bristol 170 Series 31 aircraft
Amendment 0/8 to Flight Manual

~~5010-10-119~~
~~5008-T6-24~~
5008-T6-25 ✓
~~5008-T6-26~~

District Controller of Air Services,
Trans-Atlantic Bldg.,
Montreal Airport,
DORVAL, Que.

Attention: District Superintendent, Air Regulations.

1. Enclosed are Amendments No. 0/8 for Bristol 170 Series 31 Flight Manuals covering CF-EVX, CF-EVY and CF-EVZ owned by Trans-Canada Air Lines 1000 University Street, Montreal, P.Q.

2. These new pages should be forwarded to the owners and the existing pages 5, 25/26, 29/30, 31/32, 33/34 and 45/46 should be withdrawn, destroyed and replaced by the revised pages forwarded herewith. New pages 79 to 88 are also enclosed for insertion, and the pages in Section VI should be appropriately renumbered.

3. Forwarded for your information and onward transmission to the owners.

(W. T. Travers),
Superintendent, Air Regulations.

Encls.

32

COPY

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
FEB 11 A.M.
File 5008-T6-25

ORIGINAL ON FILE 5008-T6-24 14869

COPY FOR FILE 5008-T6-25
-T6-26

LEJG.

Montreal Airport, Dorval, P.Q. February 5th, 1954.

Bristol 170 Series 31 aircraft
Amendment G/8 to Flight Manual

Our File
5008-T6-24
5008-T6-25
5008-T6-26
5010-1-70

Director of Air Services,
Department of Transport,
No. 3, Temporary Building,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to your memorandum of January 28th, regarding the above-mentioned amendment, please be advised that only amendments for CF-TFX, and CF-TFY were received with your covering letter.

2. Please forward the missing amendment for CF-TFZ at your earliest convenience for transmission to the operator.

(Sgd)---------?
for District Controller,
Air Services.

8
3-53

JCF/JM

33

OTTAWA, Ontario, February 16, 1954.

Bristol 170 Series 31 aircraft
Amendment G/8 to Flight Manual

[redacted]
5008-T6-24
5008-T6-25
5008-T6-26

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, P.Q.

Attention: Superintendent, Air Regulations.

1. Your letter 5010-1-70, dated February 5th, 1954, informing Headquarters that you did not receive Amendment G/8 to the Flight Manual for CF-TFZ, is acknowledged.

2. Since receipt of your letter a careful check has been carried out in C.A.E. Section, the Stenographic Pool Record Section and the Mail Room, and we have been unable to locate this Amendment.

3. Our Stenographic Pool and the Mail Room have a record of three (3) enclosures with the letter and the Mail Room noted the registration marks on the file copy as being enclosed.

4. As we are unable to locate this Amendment we therefore request that a further check be carried out in your office.

(G. T. Travers)
Superintendent, Air Regulations.

COPY

17156 33A.

ORIGINAL ON FILE 5010-10-119

COPY FOR FILE 5008-T6-24
~~-T6-25~~
-T6-26

Ministry of Transport
and Civil Aviation

BY AIR MAIL 2nd March, 1954

Sir,

Bristol 170 Series 31 Aircraft - Flight Manual

I am directed to forward herewith for onward transmission to the present owners seven copies of amendment No. G/9 for Bristol 170 Series 31 Flight Manual for Aircraft previously registered in the United Kingdom as G-AINN, G/AINO, G-AINP and G-AMRU, also for CF-TFX, CF-TFY and CF-TFZ.

In each case the existing pages 5 and 17/18 should be extracted and be replaced by the revised pages forwarded herewith.

An additional copy as forwarded for amendment of the specimen Flight Manual held in your Department for record purposes.

I am, Sir,
Your obedient Servant,

D. HALE

D. Hale

The Controller of Civil Aviation,
Department of Transport,
Wellington Street,
Ottawa,
Canada.

ENTERED
ON CARDS
No. 3 Bldg.

for authorization
see original
W.

8
3-53

JCF/SEB.

34

OTTAWA, Ontario, March 19th, 1954.

5010-1-70 Bristol 170 Series 31 Aircraft
Amendment 6/9 to Flight Manual

~~5010-10-119~~
~~5008-T6-25~~
5008-T6-25 ✓
~~5008-T6-26~~

REGISTERED

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, Que.

Attention: District Superintendent, Air Regulations.

1. Enclosed are Amendments No. 6/9 for Bristol 170 Series 31 Flight Manuals covering CF-TFI, CF-TFY and CF-TFZ owned by Trans-Canada Air Lines, 108 University Street, Montreal, P.Q.

2. These new pages should be forwarded to the owners and the existing pages 5 and 17/18 should be replaced by the revised pages forwarded herewith.

3. Forwarded for your information and onward transmission to the owners.

(J.F. Travers)
Superintendent, Air Regulations.

Encls.

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. AVC-10-25

DUPLICATE - DIST. FILE NO.

TRANSPORT - RECORDS
OCT 1 A.M.
File 5008-T6-25

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T F Y 2. Old C of R No. 15947 ...

3. New C of R No. ..... Date .....

4. C of A No. 4263 ..... Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines ..... Citizen of .....
   Christian name ....
8. Address of owner 1080 University St., Montreal, P.Q. .....
   .....
   Change of address to .....
9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐
   Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from October 9, 1954 ..... to October 9, 1955 .....
    Temporary authority from ..... to .....

M E Lauck
(D.W. Saunders)

Sept. 30, 1954
Date ..... District Superintendent Air Re[illegible]

COPY

36

ORIGINAL ON FILE.....

COPY FOR FILE.....

In view of the wide variations that have occurred to the dates associated with Mod. 1247, we ask your approval of the following suggested programme:-

Aircraft	A/C Time at March 1st.	Bristol Deadline Time	Approx. Dates A/C out of Service for Mod.	Estimated A/C Time when Removed from Service for Mod.
501 CF-TFX	1895	2145	March 17-27	1980
505 CF-TFZ	1758	2008	May 5-25	1933
502 CF-TFY	1803	2053	May 16-26	2269

We do not know whether it was the ARB or the Bristol Company who established the compliance procedures in the various Modification Instruction Leaflets. If the ARB, we would appreciate it very much if you would bring to their attention the fact that practical problems in the accomplishment of modifications should be considered when establishing the procedure. In this particular instance, whoever originated the procedure has been very unrealistic. Because we believe that there is a greater likelihood that the compliance procedure was originated by the Bristol Company, TCA will bring this situation to their attention.

Yours sincerely,

(Sgd) Jack
J.T. Dyment
Director of Engineering.

Copy: Mr. S. Haggett
General Mgr
MacDonald Bros Aircraft Ltd
Stevenson Field
Winnipeg
Man.

8
3-53

COPY 31

ORIGINAL ON FILE.....

COPY FOR FILE.....

Although TCA has repeatedly requested from Bristol copies of their Defect Investigation Report covering the troubles leading up to Mod. 1247, we have neither been able to obtain a copy nor been given the reasons why the mod. was initiated. We can only presume from the kicking around of the compliance dates that there is not sufficient reason to ground airplanes with the accumulated times considerably less than 4000 hours as have our three Freighters.

Although the majority of the instructions on how to do the job had been received by TCA in the early part of February, the instructions to us were not completed until March 4th.

In view of the compliance date being two years away, so far as we knew previous to March 3rd, it is only a matter of luck that we do have the parts available for the mod. at the present time. TCA had obtained the parts as soon as we had been informed that Mod. 1247 was mandatory in order to permit us to accomplish the modification at the most convenient time during the next year or so. It must be remembered that with only three airplanes, to take an airplane out of service longer than a routine check costs us loss of schedule protection and generally loss of revenue.

It will be noted that as the Modification Instructions now stand from the Bristol Company, the mod. would have to be incorporated during the next 250 hours regardless of whether an airplane has accumulated 10 hours or 3999 hours but if the airplane has 4001 hours it must be grounded and the mod. accomplished immediately. These hypothetical airplanes would thus have to have the mod. accomplished on a mandatory basis before they reached 260 hours, 4249 hours, and 4001 hours, respectively. This does not seem very rational.

TCA has studied the possibility of complying with the Bristol Instructions and find that, short of taking an airplane out of revenue service, plus involving additional checks, plus sending additional work crews to Toronto, all of which will cost several thousand dollars, we cannot completely comply with the current Bristol instructions.

At considerable inconvenience and some cost, (although not as much as above), we can modify two airplanes within the 250 hour deadline but the third airplane requires a concession of an additional 275 hours.

s
3-53

(Cont'd)

COPY

TRANS-CANADA AIR LINES

TRANSPORT RECORDS
MAR 22 A.M.
File 5008-T6-25

ORIGINAL ON FILE 7150-6

COPY FOR FILE 5008-T6-24
5008-T6-25
5008-T6-26

Room 315
March 18, 1955
File: 2410-4

Mr. H.S. Rees
Chief Aeronautical Engineer
Civil Aviation Division
Department of Transport
Ottawa
Ont.

37196

Dear Howie:

Subject: Bristol 170 Freighter Modification #1247

Some time ago the Bristol Company instigated Mandatory Modification 1247 for our Bristol 170 Freighter wing. This modification requires the reinforcement of the centre plane and outer wing spar web joints and involves around 400 manhours of labour time.

The original Bristol Modification Instruction, dated August 22, 1954, required that Mod. 1247 be incorporated within the ensuing twelve months or at the renewal of the C. of A.

Notice of Amendment #3 to Mod. Instruction 1247, dated December 31, 1954, was received January 5th, this year, and the actual Amendment #3 was received February 7th. This Amendment stated that--for aircraft with less than 5000 hours at October 22, 1954, Mod. 1247 must be incorporated within two years of that date. For aircraft with more than 5000 hours at October 22, 1954, the modification had to be incorporated within one year. All three TCA airplanes had until October 22, 1956, to comply.

On March 3rd of this year, we were informed by a letter from Bristol, dated March 1st, that Mod. 1247 must be incorporated on aircraft with less than 4000 hours within 250 hours from March 1st. If the aircraft had accumulated more than 4000 hours by March 1st the modification had to be incorporated immediately.

As of March 1st our three Bristol Freighters, CF-TFX, CF-TFY and CF-[illegible] had accumulated 1895 hours, 1758 hours, and 1803 hours, respectively.

ENTERED ON CARDS
No. 3 Bldg.

8
3-53

(Cont'd)

HEAD, AC'D

39

5008-T6-25
5008-T6-26
5008-T6-24
7150-6

Ottawa, Ontario,
March 24, 1955.

Mr. J.T. Dymond,
Director of Engineering,
Trans-Canada Air Lines,
International Aviation Building,
Montreal, Quebec.

Dear Jack:

Subject: Bristol 170 Freighter Modification #1247

1. This will acknowledge receipt of your letter of March 18th, 1955, regarding Bristol 170 Modification #1247. Your programme of implementing this Modification to the 3 aircraft of your fleet is satisfactory and hereby approved.

2. You will remember we discussed this on the telephone when you stated that you would institute an inspection programme for these aircraft until such time as the modification had been completed. Frankly, I don't know what you should inspect for (and apparently neither do Bristol's Canadian representatives, who discussed this with me several days ago), so the best I can do is suggest that you watch for fatigue cracks and rivet failures.

Yours very truly,

(H.S. Rees),
Chief Aeronautical Engineer.

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T6-25

DUPLICATE - DIST. FILE NO.

TRANSPORT - RECORDS
JUN 14 A.M.
File 5008-T6-25

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T F Y 8409 2. Old C of R No.

3. New C of R No. ..... Date .....

4. C of A No. 4263 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines Citizen of .....
Christian name ....

8. Address of owner 1080 University St., Montreal, P.Q.
.....
Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Endorsed re validity of C. of A. as per Instructions
Amendment not .....
H.Q. letter file No. 7150-6, dated May 13, 1955.
otherwise covered .....
.....
.....

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

(D.W. Saunders)
District Superintendent Air Regulations

Date June 13, 1955

Ottawa, Ontario, June 24th, 1955. 41

Bristol 170 Series 31 Aircraft
Flight Manual Amendment 6/10.

~~5008-26-24~~
~~5008-26-25~~
5008-26-25 ✓
~~5008-26-26~~

REGISTERED

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, P. Q.

Attention: District Superintendent, Air Regulations.

1. Enclosed are copies of Amendment 6/10 for Bristol 170 Series 31 Flight Manuals covering CF-TFX, CF-TFY and CF-TFZ owned by Trans-Canada Air Lines, 108 University St., Montreal, P. Q.

2. The page affected is shown in the revised page 5 (General Amendment Record Sheet) on which the amendment is described and which provides for signature and date at the time of incorporation.

3. Forwarded for your information and onward transmission to the owners.

(J. T. Travers),
Superintendent, Air Regulations.

Encl.

92

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12618

NATIONALITY AND REGISTRATION MARKS CF-TFY

1. Type and description	Bristol 170
2. Name and address of constructor	The Bristol Aeroplane Co. Limited, Bristol, England
3. Constructor's serial number	13138
4. Name of owner	Trans-Canada Air Lines
5. Address of owner	1080 University St., Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal, P.Q.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of October, 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-TFY and is of Canadian nationality.

Given at Ottawa this 14th day of January, 1954.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):

(a) Landplane	lbs.
(b) Seaplane	lbs.
(c) Skiplane	lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	lbs.
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	lbs.
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
28. Weight allowed for crew	lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	lbs.
32. Maximum total weight authorized	lbs.
Landplane	lbs.
Seaplane	lbs.
Skiplane	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated October 9/1953 in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 14th day of January, 19 54.

.....
Superintendent, Air Regulations.

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 2462

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

CENTRAL NORTHERN AIRWAYS LIMITED (30.12.55)

1. Surname of owner (or name of Company) ~~Trans-Canada Air Lines~~
2. Christian name
3. Address P.O. Box 5, St. James, Manitoba ~~1009 University St., Montreal, P.Q.~~
4. Nationality ~~Canadian~~

NAME OF CONSTRUCTOR

5. Name The Bristol Aeroplane Co. Limited.

NATIONALITY AND REGISTRATION MARKS

6. CF-TFY

DESCRIPTION OF AIRCRAFT

7. Type Bristol 170 Series 31 Constructor's No. 13138
8. Place and year of construction of aircraft Bristol, England 1953

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) See Aircraft Type Approval #25.

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision A, B, C, D & E
15. Maximum span (in flying position) 108' 0"
16. Maximum length (in flying position) 68' 4"
17. Total height (with and without trolley in case of seaplanes) 21' 6"

27
44

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		October 9/1954.	
		October 9, 1955	
		December 27, 1955	
		December 26, 1956	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge
Landing Lights

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

AIRPLANE FLIGHT MANUAL, AIRCRAFT TYPE APPROVAL #25, WEIGHT AND BALANCE REPORT WITH AMENDMENTS, FORM PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT.

Note: This certificate is subject to Air Regulations [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

4C

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 14320

NATIONALITY AND REGISTRATION MARKS CF - TFT

1. Type and description	Bristol 170
2. Name and address of constructor	Britol Aeroplane Co. Ltd. Bristol, England.
3. Constructor's serial number	13138
4. Name of owner	Central Northern Airways Ltd.
5. Address of owner	P. O. Box 5, St. James, Man.
6. Nationality of owner	British
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 30th day of December 1955, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF - TFT and is of Canadian nationality.

Given at Winnipeg this 6th day of January 1956

Original Signed by
J. D. C. CRATON
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. T6-25
DUPLICATE - DIST. FILE NO. 5008-T6-25

TRANSPORT RECORDS
JAN 9 P.M. 57
File 5008-T6-25

TO: S. S. OTTAWA
ATTENTION: S. A. R.

AIRCRAFT LICENSING RECORDS

23584

1. Registration mark CF- TFY 2. Old C of R No. 12618 (Attached .....

3. New C of R No. ..14320..... Date ..December 30th, 1955.....

4. C of A No. 4263.....Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane Seaplane [ ] Skiplane [ ]

6. Classification Changes: State [ ] to Commercial [x] to Private [ ]
Commercial [ ] to State [ ] to Private [ ]
Private [ ] to Commercial [ ] to State [ ]

Valid for Day [ ] Night [ ]

7. Surname of owner ..Central Northern Airways Ltd..... Citizen of ..British....

Christian name ....

8. Address of owner ....P.O.Box 5, St. James, Man.....

.....

Change of address to .....

9. Aircraft based at .....Winnipeg, Manitoba.....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew	2	Maximum passengers	44	Pass with freight

12 Wt. and balance report [ ] Date Copy attached [ ]

Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not Item. 4. Canadian. deleted. and. British. inserted.. Page. 4:"This. Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada. Airlines. and. is. maintained. in. accordance. with. their. system of continuous maintenance and inspection approved by the otherwise covered . Minister.. Deleted.....

.....

13. C of A valid from .....December. 27th,. 1955..... to ..December. 26th,. 1956.....

Temporary authority from ....December. 30th,. 1955to .....January. 29th,. 1956.

Date .January. 6th,. 1956.....

District Superintendent Air Regulations

48

Mr. H.S. Rees, February 21, 1956.

We request from you, permission to change the compliance date as follows (to be carried out at the next engine change:

The reasons for the request are:

Firstly, it will be necessary to ferry the aircraft a considerable distance to have the work done and due to the time loss and flying commitments, it would be inconvenient to remove the aircraft from service on March 1st.

Secondly, the parts required must be imported from England and may not be received by the compliance date.

Thirdly, the difficulty that would be encountered in carrying out the modification with engines installed.

Should it not be possible to have the compliance date at engine change, would it be possible to change the date from March 1st, to June 1st.

Yours very truly,

CENTRAL NORTHERN AIRWAYS LTD.

Donald Smith

Donald Smith
Superintendent of Maintenance

DS/ms

CENTRAL NORTHERN AIRWAYS LTD.

WINGS OF THE NORTH

AIR BASES

ONTARIO—
SIOUX LOOKOUT
PICKLE LAKE
RED LAKE

MANITOBA—
WINNIPEG
LAC DU BONNET
FLIN FLON
SHERRIDON
SNOW LAKE
NORWAY HOUSE
ILFORD
LYNN LAKE

HEAD OFFICE
NO. 1 HANGAR, WINNIPEG AIRPORT
MAILING ADDRESS
P.O. BOX NO. 5
ST. JAMES, MANITOBA
TELEPHONE 6-3367

TRAFFIC OFFICE
ST. REGIS HOTEL
WINNIPEG
CANADA
TELEPHONE 92-2310

Original on 5010-10-109

27026

TRANSPORT - RECORDS
FEB 22 P.M.
File 5008-16-33

February 21, 1956.

Mr. H.S. Rees,
Aeronautical Engineer,
Civil Aviation Division,
Department of Transport,
No. 3 Temporary Building,
Ottawa, Canada.

Dear Sir:

In reviewing the modification status of the Bristol Aircraft - CF-TFY and CF-TFX recently purchased by Central Northern Airways Ltd., from Trans-Canada Airlines, it has been noted that Bristol Special Recommendation Maintenance #67, has not been complied with and that the compliance date is March 1st, 1956.

Briefly, the recommendation consists of the removal of Part No. K43591 followed by magnaflux inspection and reworking and reinstallation. If cracks are found and they are within specified limits, the cracks can be ground out and the fitting recontoured. If the cracks are beyond limits, a new fitting - No. 520956 must be installed.

In order to carry out the modification, it is necessary to support the aircraft on jacks - the engine must be supported and also the undercarriage before fittings can be removed. In view of the risk of distortion when the parts are removed in this manner, it is felt that it would be much more satisfactory to do the work with the engine removed.

The approximate times since overhaul on the engines as at December 21st, 1955, are as follows:

TFX -	Port	- 403 hours
	Starboard	- 7 hours
TFY -	Port	- 200 hours
	Starboard	- 388 hours

Total time on Airframe:
TFX - approximately 3126:06
TFY - approximately 2957:30

cont'd - 2 -

X

5010-10-119
5008-T6-21
5008-T6-25

February 28, 56

C.P.T.

OTTAWA, ONTARIO

PACIFIC WESTERN AIRLINES
EDMONTON, ALBERTA

ATTENTION: MR. MCLAUGHLIN, SUPERINTENDENT OF MAINTENANCE

CAE26 REUNTIL FEBRUARY 28. MAY DEFER BRISTOL SNM NUMBER 67 UNTIL NEXT ENGINE CHANGE AT 750 HOURS OR MAY 31 WHICHEVER OCCURS FIRST.

(H.S. REES)
CHIEF AERONAUTICAL ENGINEER

CC: DAI EDMONTON

CCA-273

51

NSR:AC'D

X

5010-10-119
5008-16-24
5008-16-25

February 28, 56

C.P.T.

Ottawa, Ontario

CENTRAL NORTHERN AIRWAYS LTD
ST. JAMES, MANITOBA

ATTENTION: D. SMITH, SUPERINTENDENT OF MAINTENANCE

CAR27 MEURLET FEBRUARY 21. MAY DEFER BRISTOL SHM NUMBER 67 UNTIL NEXT ENGINE CHANGE AT 750 HOURS OR MAY 31 WHICHEVER OCCURS FIRST.

(H.S. [illegible])
CHIEF AERONAUTICAL ENGINEER.

CC: DAI WINNIPEG

CCA-273

orig on - 5010-10-119
5708-T6-2452
5708-T6-25
CAE 52

27610

CANADIAN PACIFIC TELEGRAPHS · 679

1970 FEB 20 AM 8 57

CPTWAA7 63/60 NL 3 EX SIG

FD EDMONTONALTA 27

H S REES DEPARTMENT OF TRANSPORT

CIVIL AVIATION DIV NO3 TEMP BLDG OTTAWA ONT

WE WOULD APPRECIATE YOUR RULING WITH REGARDS TO BRISTOL 170 INSPECTION NUMBER 67 AS WE ARE IN THE SAME POSITION AS CENTRAL NORTHERN FOR PART PROCUREMENT FROM ENGLAND STOP WE PROPOSE VISUAL INSPECTION OF SUBJECT FITTINGS TO ASCERTAIN SERVICEABILITY AND DEFERMENT OF MARCH FIRST DATE TO ENGINE CHANGE ON JUNE FIRST STOP ADVISE BY WIRE PLEASE STOP

MCLAUGHLIN SUPERINTENDENT OF MAINTENANCE PACIFIC WESTERN AIRLINES

170 57

855A(M) FEB 28TH

FOR ACTION SEE ORIGINAL SDD OFFICE SERVICES

CENTRAL NORTHERN AIRWAYS LTD.

WINGS OF THE NORTH

AIR BASES

ONTARIO—
SIOUX LOOKOUT
PICKLE LAKE
RED LAKE

MANITOBA—
WINNIPEG
LAC DU BONNET
FLIN FLON
SHERRIDON
SNOW LAKE
NORWAY HOUSE
ILFORD
LYNN LAKE

TRANSPORT - RECORDS
MAR 5 A.M.
5128-T6-25
File

HEAD OFFICE
HANGAR, WINNIPEG AIRPORT
MAILING ADDRESS
P.O. BOX NO. 5
ST. JAMES, MANITOBA
TELEPHONE 6-2307

TRAFFIC OFFICE
ST. REGIS HOTEL
WINNIPEG
CANADA
TELEPHONE 92-2310

27772

February 29th, 1956.

Mr. H. S. Rees,
Aeronautical Engineer,
Department of Transport,
Ottawa, Ont.

Dear Sir:

Reference your telegram of February 28th regarding Bristol modification No: 67.

Your wire states we may defer Bristol SRM No: 67 until next engine change at 750 hours or May 31st, whichever occurs first.

We appreciate your consideration in this matter very much; however, we would like to point out one feature for your consideration, which may have been overlooked. The engines now installed are from Trans Canada Airlines and are cleared by the Department of Transport to 1000 hours. These engines, plus the ones we have in reserve are all cleared to 1000 hours according to our understanding. Then, when these engines have expired, we return to the 750 hours operating time.

With this in mind, would you please clarify if the modification must be done at 750 hours or 1000 hours on these motors.

We have completed a thorough inspection of these mounts and they appear to be in excellent condition. However, if the modification must be done at 750 hours, this will be done.

OFFICE SERVICES

lc

Yours very truly,

CENTRAL NORTHERN AIRWAYS LTD.,

G. W. Northcott,
Assistant General Manager.

ENTERED ON CARDS
No. 3 Bldg.

[illegible]

5010-10-119
5008-T6-2h
5008-T6-25

Ottawa, Ontario,
March 6, 1956.

Central Northern Airways Ltd.,
P.O. Box 5,
St. James, Manitoba.

Attention: Mr. C.W. Northcott, Assistant General Manager.

Dear Sirs:

1. In reply to your letter of February 29, 1956, please be advised that when aircraft change hands the engine overhaul time reverts either to the basic time, or to such time as the new operator may have approved for such engines.

2. In explanation of this policy, it must be remembered that our approval of engine overhaul and extensions is based not only on the condition of the engine at overhaul, but is also governed by the nature of the operation and engine maintenance. Consequently, the overhaul times of your Bristol engines must revert to 750 hours between overhauls, regardless of any increases that Trans-Canada Air Lines had attained for their operation. This will apply not only to the engines in service, but to your spare engines as well until such time as you have attained approved extensions for your own type of operation.

Yours very truly,

(H.S. Rees),
Chief Aeronautical Engineer.

cc: DAI Winnipeg

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

56 2

511 Power Building,
Winnipeg 1, Manitoba, March 22, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Structural Failure Report - CF-TFY	5008-T6-25

29520

TRANSPORT · RECORDS
MAR 26 P.M.
File 5008-T6-25

Director of Air Services,
Department of Transport,
O T T A W A, Ontario.

Attention: Chief Aeronautical Engineer

1. For your information, we are attaching hereto, a Structural Failure Report, covering a Bristol Hercules 734 Engine, Serial No. 181113, recently removed from CF-TFY, operated by Central Northern Airways Ltd.

R C Smith

for District Controller of Air Services.

Enc.

55

CENTRAL NORTHERN AIRWAYS LTD.

STRUCTURAL FAILURE REPORT

(ENGINE OR AIRFRAME)

(TO BE COMPLETED IN TRIPLICATE)

To comply with Department of Transport Air Regulations and Engineering and Inspection Manual Part I, Chap. V, Paragraph 5.4

COMPLETE ALL ITEMS IN THE FOLLOWING TABLE

ITEM	MAKE & MODEL	SERIAL NO.	REGISTRATION	HOURS SINCE O/H	HOURS SINCE NEW
AIRCRAFT	BRISTOL 170		CF- TFY	136:25	3093
ENGINE	BRISTOL HERCULES 734	181113		61:45	1871
PROPELLOR	PD-122/446/1 DH Hydromatic	4A423175		91:50	

DATE FAILURE OCCURRED March 11,1956 | PLACE FAILURE OCCURRED(Nearest) Churchill

SPECIFIC PART WHICH CAUSED FAILURE

NAME OF PART	PART NO.

Describe in detail the failed part or difficulty and the circumstances under which it occurred. (Attach separate sheet if insufficient space; also sketch or photograph.

Port engine reported running rough on take-off. Oil pressure dropped from 100 to 70 psi. Oil temperature 70° C. CHT 170° C. Engine feathered. Inspection of oil seavenge filter revealed a large quantity of ferrous and non-ferrous metal. Parts of sleeve crank - sleeve crank bearing and bearing retainer also a section of a piston land was removed from the main sump.

State probable cause of failure and recommendations to prevent recurrence.

Engine failure attributed to partial sleeve seizure during take-off power with resultant sleeve crank and bearing failure.
Probable cause of failure due to high RPM with diluted oil.
It is recommended that pilots and ground crews ensure complete burn-off prior to opening up engine to take-off RPM.

Report Submitted by	Occupation	License No.	Date of Report
S. Marsh	Superintendent, Maintenance, Churchill	QMM-53	March 16, 1956.

7. Number of persons (a) killed **Nil** (b) seriously injured **Nil**

8. Nature of accident **Aircraft dropped through ice after landing run was completed and was taxiing.**

9. Type of flying (Private, non-scheduled, ferry, etc.)

10. Opinion as to the cause of the accident
(Use ICAO Manual of Accident Investigation) **Ice gave way.**

11. Damage **Propeller bent- nose doors twisted before aircraft sank.**

12. Infractions of: (a) The Air Regulations **N/A**

(b) Air Navigation Orders

13. Disciplinary action proposed taken **N/A**

14. Remarks

Aircraft considered write off.

15. Sketch

.....
C. District Controller, Air Services

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

MB

2448

DEWLINE AIRLIFT
Date:- Aug. 14, 1956.

District File No. 5008-T-6-25

57

AIRCRAFT ACCIDENT REPORT

CANADA
TRANSPORT - RECORDS
AUG 20 A.M.
File 5008-T-6-25

To: Director of Air Services
Department of Transport
Ottawa, Ontario

15229

Winnipeg District

Attention: Superintendent, Air Regulations

1. (a) Date June 18, 1956. (b) Time (standard): Use 24-hour clock 13:34 CST.

2. (a) Type of Aircraft Bristol 170 (b) Nationality and Registration Marks CF-TFY

(c) C. of A. Valid to Dec. 26, 1956. (d) C. of R. Valid Yes (X) No ( )

3. Name of Owner, Operator or Hirer Central Northern Airways.

4. (a) Crew information

Name	Duty	Age	Licences & Ratings			Experience		
			Type	No	Expiry date	Total	On type	
							Total	Within 90 days
R. Lidgren	Capt.		ATL	WGA-706	Nov. 1/56	2981	289	256
L. Lavoie	Co-Pilot		Comm.	WGC-7012	Nov. 23/56.	2020	30	305

(b) Now enrolled in Approved School Yes ( ) No ( ) Approved School graduate Yes ( ) No ( )

(c) Name and location of school

(d) Instructor's name Category

(e) Instructor's name who recommended issue of pilot's licence N / A Category

(f) Instructor's name who conducted flight test Category

5. (a) Last point of departure Churchill, Man.

(b) Intended destination Povungnituk

6. (a) Place of accident Latitude 60 o01½ 'N. Longitude 77 o18 'W. Altitude ASL SL

(b) Terrain: Mountain ( ) Prairie ( ) Arctic (X) Maritime ( ) Bush ( ) Inter-city -populated or semi-populated areas-( )

(c) Weather:

Ceiling

Visibility CAVU

Wind Speed and direction SW 10

Were icing conditions encountered? Yes ( ) No ( ) N/A

Dew point Not known

Temperature

Turbulence: light ( ) medium ( ) heavy ( )

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

COPY ON
5802-21320

Write Ft (?) Certs

Entered on Accident Cards
AUG 22 1956

(d) Did pilot obtain weather forecast or attend a meteorological briefing? Yes ( ) No ( ) N/A

(Over)

GJ/SEK

Ottawa, Ontario, 25th September, 1956.

5008-T6-25 5008-T6-25

Bristol 170 Aircraft, CF-TFY.

District Controller of Air Services,
608 Power Building,
WINNIPEG, Manitoba.

Attention: District Superintendent, Air Regulations.

1. We have not received the Certificates of Registration and Airworthiness for the above-mentioned aircraft, which was reported destroyed in an accident on June 18, 1956.

2. If you can locate these Certificates, please forward them to this office for cancellation on the Aircraft Register.

Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

72 2

Winnipeg 1, Manitoba, March 22n, 1957.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170, CF - T F Y	5008-T-6-25

TRANSPORT - RECORDS
MAR 25 P.M.
File 5008-T-6-25

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

32864

Attention: Controller, Civil Air Regulations.

1. Enclosed herewith are Certificates of Registration No. 14320, and Airworthiness No. 4263, covering the above mentioned aircraft in order that they may be cancelled on the Aircraft Register.

L. C. Baton
District Director, Air Services.

Encs.

-311

71

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 14320

NATIONALITY AND REGISTRATION MARKS CF - TFY

1. Type and description	Bristol 170
2. Name and address of constructor	Britol Aeroplane Co. Ltd. Bristol, England.
3. Constructor's serial number	13138
4. Name of owner	Central Northern Airways Ltd.
5. Address of owner	P. O. Box 5, St. James, Man.
6. Nationality of owner	British
7. Usual station of aircraft	Winnipeg, Manitoba.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 30th day of December 1955, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF - TFY and is of Canadian nationality.

Given at ~~Ottawa~~ Winnipeg this 6th day of January 1956.

D. B. Slater
for Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. ~~Number installed~~.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	lbs.
	(b) Seaplane	lbs.
	(c) Skiplane	lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	lbs.
(a) Number of tanks	
(b) Capacity of tanks.....Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	lbs.
(a) Number of tanks	
(b) Capacity of tanks.....Imp. gals.	
28. Weight allowed for crew	lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	lbs.
32. Maximum total weight authorized	lbs.
Landplane	lbs.
Seaplane	lbs.
Skiplane	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.

40. ~~The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.~~

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated October 9/1953 in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 14th day of January, 19 54.

.....
Superintendent, Air Regulations.

70

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 4263

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Central Northern Airways Ltd. ~~Trans-Canada Air Lines~~
2. Christian name
3. Address P.O.Box 5, Wpg.12,Man. ~~1080 University St., Montreal, P.Q.~~
4. Nationality ~~Canadian~~ British

NAME OF CONSTRUCTOR

5. Name The Bristol Aeroplane Co. Limited.

NATIONALITY AND REGISTRATION MARKS

6. CF-TFY

DESCRIPTION OF AIRCRAFT

7. Type Bristol 170 Series 31 Constructor's No. 13138
8. Place and year of construction of aircraft Bristol, England 1953

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) See Aircraft Type Approval #25.

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision A, B, C, D & E
15. Maximum span (in flying position) 108' 0"
16. Maximum length (in flying position) 68' 4"
17. Total height (with and without trolley in case of seaplanes) 21' 6"

C4

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
OTTAWA, CANADA

25 Issue 3
Bristol Type 170
Mark 31

AIRCRAFT TYPE APPROVAL — March 6, 1953

Manufacturer: The Bristol Aeroplane Company Limited, Bristol, England.

1. Model: Type 170, Mark 31.

Engines: 2 Bristol Hercules 734.

Fuel: Aviation Gasoline, Octane 100/130.
Maximum Lead Content - 5.5 mls T.E.L./Imp. gal.

Engine Limits:

	Alt.	RPM	MP
Take-off (5 min.)	S.L.	2800	+13 lb./sq.in.
Maximum Continuous		2500	+8 1/2lb./sq.in.
Maximum Weak Mixture		2400	+3 1/2lb./sq.in.

Restricted Speed Range - The engines shall not be operated continuously within the range 2550 to 2650 RPM.

Maximum Overspeed Conditions - Overspeeds of up to 3000 RPM are permissible for periods not exceeding 20 seconds.

Airspeed Limits:

V_c	(Maximum cruising)		156 knots airspeed indicator reading
V_{ne}	(Never exceed)		207 knots airspeed indicator reading
V_p	(Manoeuvring)		120 knots airspeed indicator reading
V_f	(Flaps down)	30°	124 knots airspeed indicator reading
		60°	116 knots airspeed indicator reading
$V_{automatic\ pilot}$			140 knots airspeed indicator reading

Maximum Weights:

Landing & Take-off	44,000 lb.	(with items 201(a) and 205(a)) (See Note 4)
	42,000 lb.	(with items 201(b) and 205(b))
Zero fuel and oil(usable)	41,640 lb.	(See Note 4)

Datum: 54 in. forward of Station "0" and
72 in. below rigging datum line.

Levelling Means: Longitudinal and Lateral - Two pegs on starboard side and two pegs on port side at Station 360 in. and 440 in. respectively inside fuselage.

C.G. Range:

Aft. C.G.	90.5 in. aft of datum at 44,000 lb. 93.5 in. aft of datum at 42,000 lb. with linear variation between.
Fwd. C.G.	90.5 in. aft of datum at 44,000 lb. or less.

..... 2

Minimum Crew: 2 - Pilot and co-pilot

No. of Seats: 47 including 3 crew, in accordance with drawings approved by the Department. (See Weight and Balance Sheet for approved loading instructions.)

Cargo Hold Capacity: See Note 2.

Compartment	Distance from C.G. Datum - In.	Maximum Permissible Load - lb.	Maximum Permissible Intensity - lb./sq.ft.
Main Hold			
Bay No. 1	-66 (forward)	4475	200
Bay No. 2	-26 (forward)	4475	200
Bay No. 3	+14 (aft)	4475	200
Bay No. 4	+64 (aft)	6700	200
Bay No. 5	+114 (aft)	4475	200
Bay No. 6	+154 (aft)	4475	200
Bay No. 7	+194 (aft)	4475	200
Bay No. 8	+234 (aft)	4475	200
Bay No. 9	+274 (aft)	4475	200
Lobby			
Bay No. 10	+325 (aft)	2300	70
Bay No. 11	+375 (aft)	1250	70

Fuel Capacity:

Tank No. 1 port (inner)	350 Imp. gal.
Tank No. 1 stbd. (inner)	350 Imp. gal.
Tank No. 2 port	136 Imp. gal.
Tank No. 2 stbd.	136 Imp. gal.
Tank No. 3 port (outer)	100 Imp. gal.
Tank No. 3 stbd. (outer)	100 Imp. gal.

Oil Capacity: 22 Imp. gal. in each nacelle. (See Note 3).

De-icing Fluid Tank Capacities:

Windscreen	1.24 Imp. gal.
Propeller, Wings, Tail and Fin	54 Imp. gal.

Control Surface Movement:

Ailerons	Up 19°	$^{+1}_{-0}$° 1/2°	Down 14°	$^{+3/4°}_{-0}$
Aileron Trim Tab (port)	Up 15°	±1°	Down 15°	±1°
Aileron Follow-up Tab (port and stbd.)	Up 12 1/2°	±1°	Down 17°	±1°
Elevators (measured on stbd. side)	Up 27°	±1/2°	Down 17 1/2°	±1/2°
Elevator Trim Tab (stbd.)	Up 15°	±1°	Down 15°	±1°
Elevator Spring Tab (port)	Up 16°	±1°	Down 16°	±1°
Rudder	Port 28 1/2°	±1°	Stbd. 28 1/2°	±1°

.....3

67

Control Surface Movement: (Cont'd.)

Rudder Trim and Follow-up Tab (upper)	Port 8°	+21°	Trim ±1°
	Stbd. 8°	+21°	Trim ±1°
Rudder Spring Tab (lower)	Port 20°	±1°	
	Stbd. 20°	±1°	

Serial Nos. Eligible: As per Br. C. of A.

Approval Basis: Aircraft Type Approval No. 25 (Transport Category, complying with ARB Normal Category, sub-divisions (a), (b), (c), (d), (e), (h) and (i) - Br. C. of A. for export for each individual aircraft.

Required Equipment: See Manufacturer's List of Principal Proprietary Components contained in Bristol Type 170 Mark 31 Maintenance Manual dated February 2, 1952.

Equipment: Items included in required lists pertinent to individual models may not be removed unless replaced by equivalent items.

PROPELLERS AND PROPELLER ACCESSORIES (EXCEPT DE-ICING EQUIPMENT)

(1) 2 DeHavilland Aircraft Co. Ltd. Hydromatic non-braking constant speed L.H. Tractor, Type PD122/446-1 or 2, Diameter 14 ft. 0 in., 4 bladed metal.
Pitch settings at 42 in. Station.
Basic (indexing) 26° - 102°
Fine 26°. feather 95°

(2) 2 DeHavilland Aircraft Co. Ltd. propeller governors, PAY 6200.

(3) 2 DeHavilland Aircraft Co. Ltd. Spinner Fan assemblies, PPS 4465054.

ENGINES AND ENGINE ACCESSORIES - FUEL AND OIL SYSTEMS

101. 2 Bristol Hercules 734

LANDING GEAR

201(a) 2 Main Wheel Tires, Dunlop DR 5311

201(b) 2 Main Wheel Tires, Dunlop HOD R.14N.48X18 - 18 heavy (61 lb./sq. in.)

202. 2 Main Wheel Tubes, Dunlop HOD 8.

203. 1 Tail Wheel Tire, Dunlop NB16, 9.75 in. X 8 heavy (70 lb./sq.in.)

204. 1 Tail Wheel Tube, Dunlop NB2.

205.(a) 2 Main Wheel Brake Assemblies - Main Wheels - Dunlop AH9761

205.(b) 2 Main Wheel Brake Assemblies - Main Wheels - Dunlop AH 9504.

.....4

66

INTERIOR EQUIPMENT

401. Approved Flight Manual.

403. Auto Control (relay) Unit: Smith's Model 12D1.

405. Instrument List (See List of Principal Proprietary Components in Bristol Type 170 Mark 31 Maintenance Manual dated February 2, 1952.

DE-ICING EQUIPMENT

501. Wings, Fin and Tailplane - TKS system using fluid TKS-R328 or D.T.D. 406A.

Windscreen - Fluid Specification B.S.S.3.D.9

Propellers - Fluid Specification TKS-R328 or D.T.D. 406A.

NOTE 1. Current weight and balance report, including list of equipment included in certificated weight, must be in each aircraft at the time of the original certification of that aircraft.

NOTE 2. The aircraft must always be loaded within the C.G. limits stated in this Type Approval. For a description of the interior arrangement of the freight hold, allowable loadings and strength of attachments refer to Bristol Maintenance Manual for Type 170 Aircraft, Mark 31, Section 2, Chapter 3.

NOTE 3. The aircraft shall be operated in compliance with the operating limitations specified in the approved Aeroplane Flight Manual (with the exception of minimum crew, which shall be as detailed in this Type Certificate).

NOTE 4. The zero fuel and oil weight is defined as the maximum permissible gross weight with zero usable fuel and zero usable oil in the aircraft. All weight in excess of 41,640 pounds must consist of usable fuel and usable oil, the usable fuel to be in tanks in the outer wing

(H.S. Rees),
Chief Aeronautical Engineer,
Department of Transport.

TCA 697
9-45

☑ Removable Equip. F
☐ Fix Equip. E

TRANS-CANADA AIR LINES

ICAN EQUIPMENT "F" LIST

(ICAN - International Commiss. for Aerial Nav.)

MODEL AIRCRAFT: Bristol 170-31
A/C 502

LIST, Issue 5

DATE July 6 1954

Item No.	ITEMS	UNIT WT.	QTY. REQ.	WEIGHT	NOSE ARM	MOMENTS
	Sub-Total brought forward from Sheet					
1.	Aircraft Log Book	2.40	1	2. 4	340.00	816
2.	Blind Flying Curtain	1.30	1	1. 3	200.00	260
3.	Flash Lights	1.20	2	2. 4	137.00	329
4.	Glare Curtain	3.80	1	3. 8	150.00	570
5.	Oxygen Masks	0.44	3	1. 3	279.00	363
6.	Pilot's Manual	0.75	1	0. 8	137.00	103
7.	Pilot's Maps	2.00	1set	2. 0	137.00	274
8.	Smoke Mask	2.30	1	2. 3	137.00	315
9.	Oxygen Bottles, Portable (Small)	5.50	2	11. 0	142.00	1,562
10.	Oxygen Bottles, Portable (Large)	8.30	1	8. 3	142.00	1,179
11.	Fuel Dipsticks (3) & Glycol(1)	.30	4	1. 2	170.00	204
12.	Rudder Lock	35.0	1	35. 0	600.00	21,000
13.	First Aid Kit (TCA Std.)	4.20	1	4. 2	142.00	596
14.	Fire Extinguisher CO2	7.50	3	22. 5	240.00	5,400
15.	Fire Extinguisher, Water Glycol	6.50	3	19. 5	334.00	6,513
16.	Tie-Down Cargo Nets- Cargo Zones	12.00	6	72. 0	329.60	23,729
17.	Web Gate Partitions		6	322. 0	246.10	79,247
18.	Magnesium Hand Cart *	22.0	1		82.00	
19.	Fueling Ladder *	31.0	1		432.00	
20.	Pumps & Hose, De-Icing *	33.3	1set		620.00	
21.	T.C.A. Tool Box *		1		620.00	
22.	Oil Cooler Air Intake Muff *		2			
23.	Air Cleaner Intake Blanking Plate *		2			
24.	Dolley Lever or Pry-bar *		1			
25.	Spark Arrester(when available) *		1			
26.	Loadset Weblock Straps 20'2" *	3.0	14		622.00	
27.	Loadset Weblock Straps 12'2" *	1.8	4		622.00	
28.	Wheel Chocks *	36.0	2		532.00	
29.	Pitot Head Covers *	1.3	6		622.00	
30.	Adjustable Cables Toggle & Beaded End *	2.4	28	67. 2		
31.	8'extension cables with open hook *	1.15	6	6. 9		
32.	6'extension cables with open hook *	.95	20	19. 0		
33.	4'extension cables with open hook *	.83	6	4. 9		
34.	2'extension cables with open hook *	.68	6	4. 1		
	* Items marked thus will be treated as Cargo until further notice. Station dimensions shown in column entitled "Nose arm" are tentative and can be neglected until proper stowages have been designed and installed.					
	Sub-Totals - Carried forward to Sheet					
	TOTALS, WEIGHTS, ARMS, & MOMENTS			512	284.00	1121

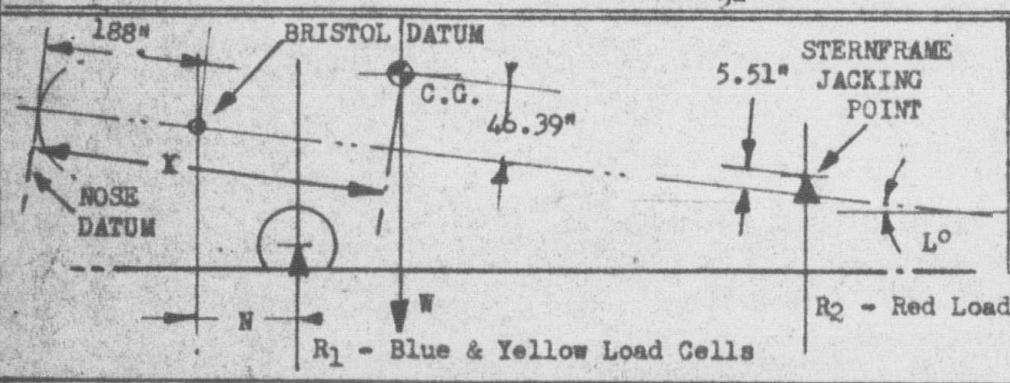
TCA 895C
Engineering
Department.

TRANS-CANADA AIR LINES
WEIGHING FORM

ACFT. NO. 64 502
ACFT. REGIST. CF- TFY

BRISTOL
TYPE 170 FREIGHTER
MARK 31

Date Dec. 14, 19 53



ANGLE OF INCLINATION
L^o = 6° 50'
sin L^o = 0.11898
tan L^o = 0.11983
sec L^o = 1.00715
MEASUREMENT
N = 26.35 inches

WEIGHT RECORDINGS

JACKING POINTS	SYMBOLS	CELLS	WEIGHT READING	ZERO SHIFT	CORRECTION	NET WEIGHTS
Left Main Wheel	R1	B	12,620	20	10	12,630
Right Main Wheel	R1	Y	13,100	40	20	13,120
Sternframe	R2	R	3,400	20	10	3,410
Aircraft Weight, as weighed					W =	29,160

* - Electric Weighing Kit Error

C.G. DETERMINATION

NUMERICAL CONSTANTS 535.83" 188.00

5.51 tan L_o = 5.51 x (0.11983) = + 0.66

N sec L^o = (26.35)x(1.00715) = - 26.54

(R2/W) x (509.95) = (3400 /29,160)x(509.95) = + 59.46

N = 26.35

46.39 sin L^o = 46.39x(0.11898) = - 5.52

sec Lo (20.83) = (1.00715)x(20.83) = + 20.98

X = C.G.Location, in Inches, aft of Nose Datum ---------- = 268.44

CORRECTION TO ICAN WEIGHT EMPTY

ITEMS	WEIGHTS	ARMS	MOMENTS
Net Weight of Acft., as weighed = W -	29,160	268.44	7,827,710
Less Total Usable Oil (Ref. page 1)	- 378	214.00	- 80,892
Standard Tire Correction (Ref. page 1)	0		0
ICAN Equip. "F" Correction (Ref. page 2)	- 66		- 19,275
ICAN Equip. "E" Correction (Ref. page 2)	5		1,150
Less Miscellaneous Equipment (Ref. page 1)	80		6,020
Anti-icer Fluid (Ref. page 1)	- 613	260.24	- 159,525
Cabin Seats (Ref. page 1)	0		0
ICAN WEIGHT EMPTY, ARM & MOMENT	28,188	268.74	7,575,188
ICAN WEIGHT EMPTY CENTRE OF GRAVITY, in %MAC = (268.74 - 233.00)/1.648 =			21.70 %MAC

Weighed by W O Blanchaer

Computed by Dstrayne

Dated Dec. 15, 19 53

Approved by Dstrayne
Weight Control Engineer

Approved by A E Allen
asst Director of Engineering

Form
CA 895G
Engineering Department.

TRANS-CANADA AIR LINES

CHECK LIST
BRISTOL
TYPE 170 FREIGHTER
MARK 31

ACFT No. 502
ACFT.REGIST.CF- TFY
Date Dec. 14 19 53

C O R R E C T I O N S - F L U I D S

OPERATING OIL				
	Dipstick Qty.		Nose Arms	Moments
	Imp.Gal.	Pounds		
Left Eng. Tank	21.0	- 189	214.00	- 40,446
Right Eng. Tank	21.0	- 189	214.00	- 40,446
NET CORRECTION	-	378		- 80,892

Oil Weight: 9 lbs./Imp. Gals.

ANTI-ICER FLUID				
	Qty.on Board		Nose Arms	Moments
	Gals	Pounds		
Cockpit Tank	1.3	14	142.00	- 1,988
Main Tank	54.0	599	263.00	157,537
NET CORRECTION	-	613	260.24	- 159,525

ANTI-ICER Fluid Weight: 11.1 lbs./Imp.Gals.

C O R R E C T I O N S - E Q U I P M E N T

T I R E S						
Location	Tires Installed		Std. Tire Weights 1/	Weight Correc	Nose Arms	Moments
	Type	Weight				
Left Main Wheel	Dunlop 48-18.00	176	176	Nil	223.00"	NIL
Right Main Wheel	" 48-18.00	176	176	Nil	223.00"	Nil
Tail Wheel	" 9.75 x 8	28	28	Nil	776.00"	Nil
NET CORRECTION				Nil		Nil

1/ Refers to: Main Wheels , DUNLOP 48-18.00/18
Tail Wheel , DUNLOP 9.75 x 8

REAR CABIN SEATS				
Titles	OnBoard	Weights	Nose Arms	Moments
Row 1 - Single Seat 23 lb	Nil		497.50"	
Row 1 - Double Seat 34 lb	Nil		506.50"	
Row 2 - Double Seat 34 lb	Nil		538.50"	
Row 3 - Double Seat 34 lb	Nil		568.00"	
Row 3 - 2 Single Seats 21 lb	Nil		567.00"	
NET CORRECTION		Nil		Nil

TRANS-CANADA AIR LINES BRISTOL 170 MARK 31 FREIGHTER ACFT. NO. 502

TCAN EQUIPMENT "F" and "E" CHECK LIST

	Equipment Items	No. Req.	No. on Board	Equip. Type	Unit Weight	Station Arms	Equip.Corrections Equip."F" Wt.	Equip."F" Mom.	Equip."E" Wt.	Equip."E" Mom.
COCKPIT	Oxygen Masks	3	2	F	0.44	279.00	0.9	251		
	Smoke Masks	1	1	F	2.30	137.00	2.3	315		
	Flash Lights	2	Nil	F	1.20	137.00				
	Aircraft Log Book	1	Nil	F	2.40	340.00				
	Pilots Manual	1	Nil	F	0.75	137.00				
	Maps	1 set	Nil	F	2.00	137.00				
	Oxygen Bottle(s)Portable	3	2	F	5.50	142.00	11.0	1,562		
	Glare Curtain	1	Nil	F	3.80	150.00				
	Blind Flying Curtain	1	Nil	F	1.30	200.00				
	Axe	1	Nil	E	2.50	138.00			2.5	345
	Thermos 2 Quarts each	3	Nil	F	4.00	180.00				
	Thermos Carrier	1	Nil	F	2.80	180.00				
CABIN	Axes	1	Nil	E	2.50	322.00			2.5	805
	First Aid Kit	1	1	F	4.20	482.00	4.2	2,024		
	Fire Extinguisher CO_2	3	3	F	7.50	240.00	22.5	5,400		
	" " Water Glycol	3	3	F	6.50	334.00	19.5	6,513		
	Loading Ramp & Supp. Jacks		Nil	*						
	Cargo Winch		Nil	*						
	Propeller Tool Kit		Nil	*						
	Engine Tool Kit		Nil	*						
	Control Locks(Grd.Equip.)		Nil	*						
	Oxygen Masks		Nil	*						
	Oxygen Bottles(Portable)		1	*	5.50	582.00	5.5	3,210		
	Engine Crank		Nil	*						
	Canvas Cover-Main Spar	1	1	E						
	Toilet Screen	1	1	E	1.00	662.00				
	Aft Bulkhead Screen	1	1	E						
	Web Gate - Zone 1(Partition)	1	Nil	F	119.30	111.45				
	Web Gate - Zone 2(")	1	Nil	F	40.40	182.00				
	Web Gate - Zone 3(")	1	Nil	F	39.90	242.00				
	Web Gate - Zone 4(Partition)	1	Nil	F	41.70	322.00				
	Web Gate - Zone 5(")	1	Nil	F	41.10	402.00				
	Web Gate - Zone 6(")	1	Nil	F	39.40	482.00				
	Tie-Down Net, Zone 1	1	Nil	F	12.00	147.40				
	Tie-Down Net, Zone 2	1	Nil	F	12.00	212.00				
	Tie-Down Net, Zone 3	1	Nil	F	12.00	282.00				
	Tie-Down Net, Zone 4	1	Nil	F	12.00	362.00				
	Tie-Down Net, Zone 5	1	Nil	F	12.00	442.00				
	Cargo Net, Zone 6	1	Nil	F	12.00	532.00				
	Magnesium Hand Cart			F*						
	Fueling Ladder			F*						
	Rotary Pump (for de-icer fld)			F*						
	Rubber Hose (25 feet)			F*						
	Sash Cord (18 feet) #8 Type			F*						
	Spark Arrester			F*						
	Dolly Lever or Pry-bar			F*						
	Rollers (3 on each aircraft)			F*						
	Loadset Weblock Straps			F*						
	Loadset Weblock Straps			F*						
	* Non Standard Equipment									
	NET CORRECTIONS						65.9 MINUS	19,275 MINUS	5.0 PLUS	1,150 PLUS

61

MISCELLANEOUS WEIGHT & BALANCE STATEMENT

TRANS-CANADA AIR LINES ACFT. TYPE Bristol 170 Freighter MK 31 ACFT. NO. 502

Titles	Weight Pounds	Nose Arms	Moments
Equipment not on board when weighed			
Forward Cabin Insulation estimated	12.0	70.00	840
2 Control Units - Heating System	32.0	25.00	800
Miscl. Heater Parts & Ducting	8.0	25.00	200
1 Observers Seat (Jump Seat)	22.5	168.00	3,780
Windshield De-Misting Units	5.0	80.00	400
NET TOTALS, Weight, Arm and Moment	79.5	75.72	6,020

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

54

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge
Landi ng Lights

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

AIRPLANE FLIGHT MANUAL, AIRCRAFT TYPE APPROVAL #25, WEIGHT AND BALANCE REPORT WITH AMENDMENTS, FORM PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT.

Note: This certificate is subject to Air Regulations, 1938, ~~as amended~~, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		October 9/1954.	
September 30, 1954 Malton, Ont.	Airworthy	October 9, 1955	

~~"This certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister.~~

~~District Superintendent, Air Regulations."~~
~~Toronto.~~

~~June 13, 1955.~~

DEC 26 1956

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

FILE No. 5008 - T 6 - 26 VOLUME No. 1

VOL. 1 5008 - T 6 - 26

DEPARTMENT OF TRANSPORT

FROM AUGUST, 1953

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF-TFZ BRISTOL FREIGHTER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 17 1956	26549	CAE		R.	FEB 21 1956
FEB 23 1956	27007	CAE		L.M.	FEB 24 1956
JUN - 1956	W.V. Gordon 8300	ARR			JUN - 3 1956
JUN 26 1956	W.V. Gordon 0710	ARR			JUN 28 1956
AUG 14 1956	14684	CAE		L.M.	AUG 16 1956
AUG 31 1956	16164	CAE		mbx	SEP 24 1956
OCT 24 1957	W.V. Gordon 20125	ARR		mbx	OCT 25 1957
		AKL		BJ	OCT 25 1957
OCT 25 1957		RFL		9Z	OCT 29 1957

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER SECTION

8-54

FILE No. 5008 - T 6 - 26 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM AUGUST, 1953
TO

VOL 1
5008 - T 6 - 26

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF-TFZ BRISTOL FREIGHTER

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG 19 1953	32536	CAR		GJ	AUG 21 1953
AUG 21 1953	—	CAE			AUG 21 1953
NOV 3 1953	47499	CAE			NOV 4 1953
DEC 3 1953	52919	CAE			DEC 3 1953
	26865	CAE		2M.	DEC 9 1953
DEC 17 1953	55348	CAR		GJ	FEB 16 1954
16 1954	—	CAE			FEB 17 1954
	14824; 14218	CAR		GJ	FEB 16 1954
FEB 17 1954	—	RFL		WM	FEB 18 1954
FEB 18 1954	—	CAI			FEB 23 1954
EB 24 1954	14040	CAE			FEB 24 1954
MAR 4 1954	16091	CAR			MAR 4 1954
MAR 4 1954	16091	HUNTER Mail Room			MAR 4 1954
AUG 6 1954	13324	CAE			AUG 10 1954
OCT 15 1954	16763	CAE			OCT 18 1954
OCT 22 1954	17265	CAR		GJ	OCT 25 1954
FEB 26 1955	Reg Miss Jones	CAI			FEB 28 1955
MAR 22 1955	37196	CAE			MAR 25 1955
JUN 22 1956	9379	ARL		GJ	JUN 1956
JAN 16 1956	24090	ARL		GJ	JAN 23 1956
JAN 16 1956	24091	ARL		GJ	JAN 23 1956
23 1956		RFL	10/1/56		JAN 23 1956
JAN 23 1956		CAI			JAN 24 1956
	(525-63) 24282	ARL		MMB	JAN 26 1956
JAN 19 1956	Minister on 24282	Records		MMB	JAN 27 1956
JAN 31 1956	25130	ARL		GJ	FEB 2 1956
FEB 3 1956	25388	CAE			FEB 1956
FEB 9 1956	9/2/56 MP BF 10/2/56	RFL			FEB 1956

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT
OTTAWA

Form #2445

TRANSPORT - I.L.C. CIDS
AUG 19 A.M. 1953
File 5008-T6-26

FILE: 5008-T6-26

32536

Certificate of Registration and Airworthiness of Aircraft for Purpose of Delivery Flight from Points Outside Canada

A.

1. Name of Owner **Trans-Canada Airlines**
2. Address of Owner **Montreal Airport, Dorval, Que.**
3. Nationality of Owner **Canadian**

B. Aircraft

1. Nationality and Registration Marks **CF-EPZ**
2. Manufacturer's Designation of Aircraft **Bristol Freighter**
3. Aircraft Serial Number, **13139**

C. Whereas it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been temporarily entered on the Register of Canada in accordance with International Civil Aviation Organization Document 6988 C/182, and The Air Regulations,

D. This Certificate is valid for flight of the herein described aircraft from **Bristol, England** to **Montreal Airport, CANADA** and shall be not valid after **11th October, 1953.**

E. Special conditions:

1. [redacted]
2. The carriage of commercial passengers or goods is prohibited,
3. This Certificate does not include permission to operate radio equipment installed in the aircraft,
4. **This Certificate is conditional on the issue of a Domestic Certificate of Airworthiness by the state in which the aircraft is manufactured and to submission of this document to the Department of Transport, Canada.**

District Superintendent, Air Regulations.

c.c. HQ
DCAS
RADIO - Montreal
RADIO - Ottawa

Director of Customs,
Excise Inspection,
Dept. of National Revenue,
Customs & Excise,
OTTAWA 2, Ont.

Mr. Bousquet,
Officer in Charge,
Customs Division,
Montreal Airport,
DORVAL, Que.

Bristol Aeroplane Co. of Canada Ltd, Montreal.

Date **August 12th, 1953.**

tb

COPY 47499

TRANSPORT - RECORDS
NOV 3 A.M 1953
File 5008-T6-26

ORIGINAL ON FILE 5010-10-119

COPY FOR FILE 5008-T6-26

LEJG.

TRANSPORT AND
MINISTRY OF/CIVIL AVIATION,
ARIEL HOUSE,
THEOBALDS ROAD,
LONDON, W.C.I.

30th October, 1953.

RefL SG.2/5/017/OS1B

Sir,

Bristol 170, Series 31, Flight Manual

I am directed to forward herewith one copy of Amendment No.P/6 for inclusion in the Supplementary Flight Manual for the above-named type aircraft, held by you for record purposes.

This amendment has been included in the Flight Manual for CF TFZ and in the event of Bristol Modifications Nos. 1134 and PP.124 being incorporated in any other Bristol 170, Series 31, aircraft on the Canadian Register of Aircraft, further copies of Amendment P/6 will be forwarded on request.

I am, Sir,

Your obedient Servant,

(Miss) D. Hale,

The Controller of Civil Aviation,
Department of Transport,
Wellington Street,
Ottawa,
Canada.

ENTERED
ON CARDS
No. 3 Bldg.

8
5-52

52919

TRANSPORT - RECORDS
DEC 2 P.M.
File 5008-T6-26

TRANS - CANADA AIR LINES
INTERNATIONAL AVIATION BUILDING
MONTREAL
CANADA

November 30th, 1953.
File: 2410-1

Mr. H.S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
#3 Temporary Building,
Ottawa, Ontario.

5008-T6-24 5008-T3-25.

Dear Howe:

Further to our letters of November 2nd and 23rd, this will advise you that we have now applied to the local DOT Authorities for Registration Certificate of Airworthiness for our third and last Bristol Freighter. A copy of the covering letter is attached.

Yours very truly,

J.T. Dyment,
Director of Engineering.

Att.

ENTERED ON CARDS
No. 3 Bldg.

3

November 30th, 1953.
File:2410-1

Mr. J.P. Fournier,
Acting District Superintendent of Air Regulations,
Department of Transport,
Dorval, P.Q.

Subject: Registration and Certificate of Airworthiness
Bristol Type 170 Freighter

Dear Sir:

We are attaching our application for Registration and Certificate of Airworthiness along with copies of the Bill of Sale and the original and copies of the Ministry of Civil Aviation Certificate of Airworthiness for the third and last Bristol Type 170 Series 31 Freighters we are purchasing from the Bristol Aeroplane Company.

In accordance with the agreement indicated in a letter from Air Vice-Marshal A.T. Cowley, Director of Air Services, March 25th, 1953, may the registration letters CF-TPZ be assigned to this aircraft.

The Ministry of Civil Aviation require the return of the original Certificate of Airworthiness issued by them and we would therefore appreciate its return to this office as soon as possible. The copies may be retained for your files.

The application for Radio Licence was forwarded to Mr. H.B. Fisher, District Superintendent of Radio, November 18th, 1953.

Our cheque in the amount of $10.00 covering the fees for Registration and Certificate of Airworthiness is attached.

Yours very truly,

J.T. Dyment,
Director of Engineering.

Attache.

JEH/ewm
cc: Vice-President, Operations,
General Manager, Operations,
Director of Mtce. & Overhaul (Att. Supvr. of Inspection)
F.T. Wood, Administrative Assistant to the President,
Controller, Montreal - Please issue a cheque in favour of Receiver-General of Canada for $10.00 and forward to the undersigned for enclosure. Charges in this case should be assessed to Formation 31-1000-11 (100) Expense Code 4871

5

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

pitch. Therefore, after an engine failure the "Press to Coarse Pitch" button must be operated which automatically selects the correct engine to be coarsened.

The amendment to the A.R.B. Flight Manual for CF-TFZ shows that with auto selective coarsening there is a penalty of approximately 150 feet on take-off distance required but no reduction in take-off weight. The 150 feet runway penalty results from the A.R.B.'s requirement for a 3-second delay before the initiation of coarsening by operation of the coarse pitch push button.

It is our considered opinion that the auto selective coarsening system is safer than the standard auto coarsening system. Unlike the standard system malfunctioning of the auto selective system will not automatically create the take-off emergencies which it is intended to avoid. With an engine failure warning, the pilot is given the opportunity of quickly checking his engine instruments and confirming the failure before operating the coarse pitch switch and continuing the coarsening cycle.

As far as circuit details are concerned, we are not pleased with the complexity of the A.R.B. approved auto selective pitch coarsening system. We are confident that with further study we can plan a much simpler system to achieve the same end result and intend to pursue this matter further. We feel however, that the present auto selective system is an improvement over the standard auto coarsening system and are fully satisfied that auto selective coarsening as installed in our three Freighters will in no way introduce an operational hazard.

To bring you up-to-date with our Bristol Freighter Modification Program we are attaching a copy of the latest Project List.

(S d) J. T. Dyment,
Director of Engineering.

HAR/ny
attach.

8
5-52

COPY

TRANSPORT - RECORDS
DEC 7 A.M.
File 5008-T6-26

ORIGINAL ON FILE 7150-6

COPY FOR FILE 5010-10-119
5008-T6-26

LE.JG.

TRANS - CANADA AIR LINES

Montreal Airport,
Dorval, Quebec,
26865 December 2nd, 1953.

File: F-1664
F-2410

Mr. H. S. Rees,
Chief Aeronautical Engineer,
Dept. of Transport,
Civil Aviation Board,
Ottawa, Ontario.

Subject: Auto Selective Propeller Pitch Coarsening-Bristol 170 Freighter

Dear Howie:

Reference is made to your letter of July 2nd requesting further information on our proposed change to the automatic propeller pitch coarsening system in the Bristol 170.

After studying the standard auto coarsening system provided the Mark 31 Freighter we wished to modify this system to eliminate as far as possible inadvertent coarsening through malfunctioning. This matter was investigated with Bristol with the result that they have obtained full A.R.B. approval for an "auto selective propeller pitch coarsening system". Our third Freighter, CF-TFZ, was delivered with the auto selective system and all our Freighters will be equipped with auto selective coarsening when they go into service.

The automatic selective pitch coarsening system is the same as the standard auto pitch coarsening system with the addition of two power loss warning lights, one for the left engine and one for the right engine, and a push button switch. The warning lights are located on the centre instrument panel immediately above their respective engine instruments and the push button is installed on the Captain's control wheel convenient to the thumb position of the left hand grip.

ENTERED ON CARDS
Bldg.

This system gives an indication of engine failure by illumination of the appropriate warning light and when the push button is operated the propeller baldes of whichever engine has failed are moved into coarse

8
5-52

.....

19

3
5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Dorval, Que.,
December 14th, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T6-26	Bristol 170 Aircraft - CF-TFZ	5008-T6-26

TRANSPORT - RECORDS
DEC 17 A.M. 1953
File 5008-T6-26

Director of Air Services,
Department of Transport,
OTTAWA, Ont.

55348

Attention:- Superintendent, Air Regulations.

1. Please find attached the following documents regarding the subject aircraft:-

(a) Application for Certificates of Registration and Airworthiness as a commercial machine in the name of Trans-Canada Air Lines;

(b) Bill of Sale in favour of Trans-Canada Air Lines;

(c) Copy of Custom Entry Receipt No. 16571 H;

(d) Copy of United Kingdom Certificate of Airworthiness A 3623.

2. Registration fee of ten dollars ($10.00) has been paid and is covered by Official Receipt No. 187772.

3. Kindly hold issuance of documents pending receipt at Headquarters of duly completed form 2443 and Weight and Balance Report.

for District Controller, Air Services.

JPF:tb
encls.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Bristol Aeroplane Company

Type Bristol 170 Mark 31 Maker's No. 13139

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	108 ft. 0 in.	same
Length o/a in feet	68 ft. 4 in.	same
Height o/a in feet	21 ft. 6 in.	same

Cubic Capacity (of Airship or Balloon) N/A

Weight equipped, but without load, fuel, or oil 3 copies of Weight Report will be submitted upon completion of modification programme

Total weight authorized (fully loaded) in lbs 44000 Air speed 166 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments See List No. 1 attached
2. Gauges See List No. 1 attached
3. Lights See List No. 2 attached
4. Signals See List No. 3 attached
5. Fire Extinguishers See List No. 4 attached
6. Parachutes Nil
7. Tools See List No. 5 attached
8. Other Equipment See List No. 6 attached

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	~~Bristol~~ Hercules 734	same	N.A.	N.A.
Pusher or Tractor	Tractor	same		
Right or Left Hand	Left	same		
No. of Cylinders	14	same		
H.P.	1980	same		
Bore	5.75 in.	same		
Stroke	6.5 in.	same		

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions See last paragraph - attached letter.

Date December 14th, 1953 Signature

Registration approved and Registration Mark C.F. - TFZ allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

CF-TFL

18

3413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

#18772
OR. ~~15772~~
$10.00

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... For Trans-Canada Air Lines

Date of Application.....November 30th, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Trans-Canada Air Lines	1080 University Street, Montreal, P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
G.R. McGREGOR	Chairman & President	Montreal	Canadian
WILFRID GAGNON	Director	Montreal	Canadian
DONALD GORDON	Director	Montreal	Canadian
J.A. NORTHEY	Director	Toronto	Canadian
H.J. SYMINGTON, Q.C.	Director	Montreal	Canadian
C.P. EDWARDS	Director	Ottawa	Canadian
R.A.C. HENRY	Director	Montreal	Canadian
* see below			

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ~~Freight~~ Commercial

Usual Station Montreal

Date of manufacture or reconstruction 1953 Bristol, England

Crew required Pilot & Co-Pilot

Accommodation for what number of passengers Removable seats with safety belts can be installed to accommodate up to 9 persons

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

* F.M. ROSS	Director	Vancouver	Canadian
W.J. PARKER	Director	Winnipeg	Canadian

LIST 1 INSTRUMENTS - TRANSMITTERS AND GAUGES

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Part Number
Airspeed Indicator	2	Kollsman	586CK-1-0158
Altimeter	2	Kollsman	371P-1-01
Rate of Climb Indicator	2	Pioneer	1634-1M
Pitot Head	2	Smiths	6A/731
Gyro Horizon	2	Pioneer	15901-1B-B1
Turn and Bank Indicator	2	Pioneer	3906-1H
Clock	2	Elgin	2144
Pitot Heat Indicator	6	General Electric	DN4-AAB-201
Engine Speed Indicator	2	Smiths	78RV
Engine Speed Generator	2	Smiths	54RV
Cylinder Temperature Gauge	2	Smiths	77MV
Oil Temperature Gauge	2	Smiths	54MV
Oil Pressure Gauge	2	Smiths	261PG
Oil Pressure Transmitter	2	Smiths	288PG
Fuel Pressure Gauge	2	Smiths	274PG
Fuel Pressure Transmitter	2	Smiths	266PG
Fuel Contents Gauge	2	Smiths	1166FG
Fuel Contents Gauge	2	Smiths	1263FG
Fuel Contents Gauge	2	Smiths	1469FG
Fuel Contents Transmitter	2	Smiths	887FG
Fuel Contents Transmitter	2	Smiths	1262FG
Fuel Contents Transmitter	2	Smiths	1468FG
De-Icer Contents Gauge	1	Smiths	1637FG
De-Icer Contents	1	Smiths	1636FG

(continued)

LIST 1 -INSTRUMENTS - TRANSMITTERS AND GAUGES - (continued.)

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Part Number
Pneumatic Triple Pressure Gauge	1	Smiths	258PG
Flap Position Indicator	1	Smiths	201FL
Flap Position Transmitter	1	Smiths	135FL
Voltammeter	2	General Electric	DW53-BBH-4
Voltmeter - A.C.	1	General Electric	8AW43-VAA-1
Power Failure Warning Indicator	1	Pioneer	36200-1B
Oil Cooler Flap Position Indicator	1	Smiths	145FL
Oil Cooler Flap Position Transmitter	1	Smiths	132FL
Outside Air Temperature Gauge	1	Weston	727T58Y
Induction Air Temperature Gauge	2	Weston	727T58Y
Heater Temperature Gauge	1	Weston	841T2Y2
Pitot Head - Auto Coarse Pitch	4	Smiths	6A/2176
Radio Magnetic Indicator	3	Pioneer	36105-1K-16-31
Omni Magnetic Bearing Indicator	2	Pioneer	MF97B
Gyrosin Compass System	2	Sperry	Type C4
Fuel Pressure Warning Unit	2	Smiths	156PG
Boost Gauge	2	Smiths	82BG
Magnetic Compass	1	Smiths	V1024

October 2nd, 1953.

LIST 2 - LIGHTS

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Type
Navigation Fuselage Upper	1	Grimes	B2115-24AR
Navigation Fuselage Lower	1	Grimes	B2115-24AR
Navigation Tail Upper	1	Grimes	A1943-3
Navigation Tail Lower	1	Grimes	A1943R-3
Navigation Wing Port	1	Grimes	50/492
Navigation Wing Starboard	1	Grimes	50/496
Landing Port	1	Butler	50/1515
Landing Starboard	1	Butler	50/1515
Taxying Port	1	Butler	50/3863
Taxying Starboard	1	Butler	50/3863

October 2nd, 1953.

LIST 3 - SIGNALS

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Type
Power Plant Fire Warning Light	2	Rotax	D-7304
Heater Fire Warning Light	1	Korry	BP204
Door Warning Light	1	Korry	130 SGL
Battery Disconnect Warning Light	1	Korry	130 ARL
Auto Pitch Coarsening Warning Light	2	Korry	130 ARL
Emerg. A.C. Power Warning Light	1	Korry	130 SAL
Ground Power Warning Light	1	Korry	130 ARL
Fuel Pressure Warning Light	2	Rotax	2804
Ice Warning Light	1	Rotax	2802
Starter Relay Operating Warning Light	2	Rotax	2802
Feathering Relay Operating Warning Light	2	Rotax	2802

October 2nd, 1953.

LIST 4 - FIRE EXTINGUISHERS

BRISTOL 170 MK. 31

Unit	Quantity	Manufacturer	Type
1.4 lb CO_2 Cylinder (Heater)	1	Walter Kidde	870038
2 lb CO_2 Hand Type (Flight Comp't. and Freight Comp't.)	3	Walter Kidde	2TB-1
Water Type Hand Extinguisher (Freight Comp't.)	3	York	1 Qt. Size
12 lb Methyl Bromide Cylinder (Engines)	4	Graviner (Type 5A)	157/BL
6 lb Methyl Bromide Cylinder (Air Intake)	6	Graviner (Type 4A)	1136/EL

October 2nd, 1953.

LIST 5 - TOOLS

BRISTOL 170 MK. 31

Unit	Quantity
Engine Tool Kit	1
Propeller Tool Kit	1

October 2nd, 1953.

LIST 6 - OTHER EQUIPMENT

BRISTOL 170 MK. 31

Unit	Quantity
Axes	2
Oxygen Masks	7
Portable Oxygen Cylinder	4
Smoke Mask	1
Portable Oxygen Cylinder - Smoke	1
First Aid Kit	1
Flashlights	2
Fire Extinguishers (Hand)	6 (See List 4)
Maps	1 Set
Control Locks	1 Set
Escape Ladder	1

SPECIAL OVERWATER EMERGENCY EQUIPMENT

Drift Recorder	1
Gibson Girl HF Transmitter Bendix AN/CRT-3	1 (In Life Raft)
Emergency VHF Transmitter Receiver Bendix MRT-4AA	1 (In Life Raft)
Life Jackets	2 (Crew) 2 (Spares) 1 (For each additional person carried)
Life Raft (15 man)	1

(continued)

10

LIST 6 - OTHER EQUIPMENT - (continued.)

The life raft includes:

a)	Inflation gear	1 per raft
b)	Raft lanyard	1 per raft
c)	Sea anchor	1 per raft
d)	Canopy	1 per raft
e)	Heaving line and buoy	1 per raft
f)	Paddles	2 per raft
g)	Accessory case tie-down	1 per raft
h)	Repair clamps	4 per raft
i)	Bailing bucket	1 per raft
j)	Knife and holder	1 per raft
k)	Police whistle	1 per raft
l)	Pump (manual)	1 per raft
m)	Life raft accessory package	1 per raft

The life raft accessory package contains:

a)	Water container	1 per package
b)	Emergency rations (Charm Candy Co.)	8 per package
c)	Water-proof flashlight	1 per package
d)	One star projector (Van Kerner Chem.)	6 per package
e)	Signal mirror	1 per package
f)	Fishing kit	1 per package
g)	Snare wire	2 per package
h)	Water tight match container	1 per package
i)	Bible	1 per package
j)	Instruction booklet	1 per package
k)	Sea marker (UK-M9 Van Kerner)	2 per package
l)	Smoke generator (UK-M6 Van Kerner)	2 per package
m)	Shark repellent (R5148 Amer. Cyanamide)	1 per package
n)	Sun still	1 per package
o)	First aid kit	1 per package

The first aid kit in the above package contains:

a)	Foille for burns (tubes)	6 per kit
b)	Sulphathiazole tablets 7½ gr.	18 per kit
c)	Sulphadiazine powder (1 oz.)	1 per kit
d)	Unguentine (tubes)	6 per kit
e)	Ammonia inhalants	10 per kit
f)	Paper cups	10 per kit
g)	4" x 6 yds. gauze bandage	1 per kit
h)	Wire splint	1 per kit
i)	4" compress bandages	3 per kit
j)	2" compress bandages	4 per kit
k)	1" adhesive compresses	20 per kit
l)	Morphine Ampules of Morph.Sul.15 mg.¼gr.IC.Co.	5 per kit
m)	Mild tincture of iodine swabs	10 per kit
n)	40" triangular bandage	1 per kit

October 2nd, 1953.

9

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS: That the undersigned is the owner of the full legal and beneficial title to the following aircraft:

MANUFACTURER OF AIRCRAFT: The Bristol Aeroplane Co.

MODEL: 170 Mk 31

MANUFACTURER'S SERIAL NO.: 13139

MANUFACTURER OF ENGINE: The Bristol Aeroplane Co.

MODEL: 734

SERIAL NO.: P.H-181114
S.H-181115

D.O.T. IDENTIFICATION MARK: CF-TFZ

That such title to said aircraft is not subject to any mortgage, or other encumbrance, except as follows:

.....nil..... in the sum of $ ..... in favor of
(Mortgage, mechanic's lien, etc.)
.....whose address is
.....

For and in consideration of the sum of ...$264,121.50..... dollars. The Bristol Aeroplane Co. of Canada, Ltd. (Seller) the undersigned, whose address is .....223 International Aviation Building, Montreal, Que. does this 18th day of November, 19 53., sell, grant, transfer, and deliver all of his above-described right, title and interest in and to the above-described aircraft, together with such equipment installed therein, subject, however, to any encumbrances enumerated above, unto ..... (Purchaser) .....Trans-Canada Air Lines..... whose address is International Aviation Bldg., Montreal, Que., and to ....its..... executors, administrators, and assigns, to have and to hold all and singular, the said aircraft forever.

IN TESTIMONY WHEREOF, ...we..... have set ....our..... hand and seal this .....18th..... day of November....., 19 53.

BRISTOL AEROPLANE CO. OF CANADA LTD.

Lilly M. Deckson
(Witness)

.....(SEAL)
(Seller's Signature)

B. 1
D.N.R. APPROVED
NO. 92
25/8/52

Port of MONTREAL, Que., NOVEMBER 2/53

Arriving per FERRY

Imported by THE BRISTOL AEROPLANE CO. OF CANADA LTD.

Exporters' names and addresses THE BRISTOL AEROPLANE CO. LTD.

U.K.

NOTE: IF SEVERAL EXPORTERS ARE INVOLVED IN THE ONE ENTRY, COMPLETE SECTION PROVIDED ON E.39½ FORM)

G. M. PATRY LIMITED MONTREAL AIRPORT, DORVAL - MElrose 1-3534
MEMBER, DOMINION CHARTERED CUSTOMS HOUSE BROKERS ASSOCIATION.

SENDING PORT NUMBERS OF MANIFESTS

ORDER NO. SC 267
GOODS EXPORTED TO CANADA DIRECT FROM UK
VIA DIRECT
(COUNTRY THROUGH WHICH CARRIED IN TRANSIT, IF ANY.)

CUSTOMS, CANADA
ENTRY FOR HOME CONSUMPTION

THROUGH BILL OF LADING PRODUCED — INITIALS

THROUGH BILL OF LADING ATTACHED TO ENTRY — INITIALS

REPORT NO.

ENTRY NO. 16571 H NOV.
OUTPORT

PORT

MARKS AND NUMBERS	NO. OF PKGS.	DESCRIPTION OF GOODS	QUANTITY	VALUE FOR DUTY IN DOLLARS	RATE OF DUTY OR FREE	TOTAL CUSTOMS DUTY $	¢	DUTY PAID VALUE $	¢	SALES TAX $	¢	RATE OF EXCISE TAX	EXCISE TAX $	¢	TARIFF ITEM APPLIED
NO9A/562	1	17 C MK 31 AEROPLANE		45288.00	FREE	NIL									440N1
BC 267		ENGINES WHEM IMPORTED FOR USE ONLY IN THE													
REG # CF-TFR		EQUIPMENT OF AIRCRAFT													
	(1)	WHEN OF TYPES AND SIZES NOT MADE IN CANADA.													
		ENGINE		163565.00	FREE	NIL		208793.00		20879.30					440L1
		AIRCRAFT AND COMPLETE PARTS THEREOF NOP NOT INCLUDING ENGINES, UNDER SUCH REGULATIONS AS THE MINISTER MAY PRESCRIBE (1) WHEN OF TYPES AND SIZES NOT MADE IN CANADA.													
		SUBJECT TO AMENDMENT RATE OF EXCHANGE FOR DUTY PURPOSES 2.7612 ON		275,617.01											

COPY

I G.M. PATRY LTD. of Montreal in the province of Quebec, agree to be bound by the certificate and undertaking set out in form ONE (1 or 2 as the case may be) endorsed hereon, and do solemnly declare:-

1. I am the owner or consignee of the goods described in the above bill of entry (or the agent of the owner or of the consignee, as the case may be).
2. That to the best of my knowledge and belief the particulars set out in the above bill of entry are true, correct and complete.
3. That I have withheld no information required by the Customs Act or any other Act relating to the revenue. AND I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the Canada Evidence Act.

Sign.

Declared before me at the port of Montreal in the province of Quebec, this 2ND day of NOVEMBER 53

Collector of Customs and Excise

FORM 4

Oath or Affirmation of importer or agent prescribed to be made and subscribed before a Collector of Customs and Excise or a Notary Public or a Commissioner for taking affidavits, on entry of goods at a lower rate of duty or free for manufacturing purposes.

I, the undersigned importer of the (2) mentioned in this entry, do solemnly (3) affirm that such (4) are imported by me for the manufacture of (5) in my own factory situated at (6) and that no portion of the same will be used for any other purpose or disposed of until so manufactured.

Sign.

Affirmed before me this day of 19

Collector or Title of Official authorized to Administer Oaths.

WE HEREBY CERTIFY THAT THE GOODS DESCRIBED ABOVE WILL BE USED AS SUCH UNDER PROVISION OF THE TARIFF ITEMS QUOTED AND WILL NOT BE USED FOR ANY OTHER PURPOSE. SIGN.

WE CERTIFY THAT THE ARTICLES DESCRIBED ABOVE ARE TO BE USED DIRECTLY IN THE PROCESS OF MANUFACTURE OR PRODUCTION OF GOODS. SIGN.

(SPACE RESERVED FOR OTHER DECLARATIONS)

WE HEREBY CERTIFY THAT THE GOODS COVERED BY THIS ENTRY ARE TO BE USED IN, WROUGHT INTO, OR ATTACHED TO TAXABLE ARTICLES MANUFACTURED FOR RESALE.

SALES TAX LICENCE NO.

WE HEREBY CERTIFY THAT THE WITHIN MENTIONED ARTICLES ARE FOR RE SALE.

POWER OF ATTORNEY NO. 500 WHICH HAS BEEN CHECKED BY ME AGAINST THIS ENTRY IS REGISTERED IN THE NAME OF THE IMPORTER.

CUSTOMS-EXCISE CLERK

THE SPACE BELOW THIS LINE IS RESERVED FOR CUSTOMS EXCISE OFFICERS' USE ONLY, AND MUST NOT BE FILLED IN BY THE IMPORTER.

LANDING WAITER HOLD PKGS.

COMPUTING CLERK

EXAMINE

DIV. 1	DIV. 2	DIV. 3	DIV. 4	DIV. 5	DIV. 6

PKGS.

CARTAGE

INITIALS		
	DUTY	NIL
	SALES TAX	20879.30
	EXCISE TAX	
	TOTAL	20879.30

SPEEDISET-PATENTED-MOORE BUSINESS FORMS LTD. IMPORT ENTRY 8

M.C.A. Form No. 958

UNITED KINGDOM

MINISTRY OF CIVIL AVIATION

COPY

CERTIFICATE OF AIRWORTHINESS

No. A 3623

NATIONALITY AND REGISTRATION MARKS	CONSTRUCTOR AND CONSTRUCTOR'S DESIGNATION OF AIRCRAFT	AIRCRAFT SERIAL No. (CONSTRUCTOR'S No.)
CF-TFZ	The Bristol Aeroplane Co. Ltd. Bristol Type 170. Series 31	13139

CATEGORY : Normal

SUBDIVISION :
(a) Public transport for passengers
(b) Public transport for mails
(c) Public transport for goods
(d) Private (e) Aerial work
(h) Demonstration (i) Crew familiarisation

This Certificate of Airworthiness is issued pursuant to the Convention on International Civil Aviation dated 7th December, 1944, and the Air Navigation Order, 1949, the Air Navigation (General) Regulations, 1949, and the Air Navigation (Radio) Regulations, 1949, in respect of the above-mentioned aircraft, which is considered to be airworthy when maintained and operated in accordance with the requirements of the above-mentioned Order and Regulations, and the pertinent Flight Manual.

Date 4th November 1953.

COPY

by authority of the Minister of Civil Aviation.

This certificate is valid for the period(s) shewn below			Signature, Official Stamp and Date
From 28th October 1953	to	27th October 1954	MINISTRY OF CIVIL AVIATION
From	to		
From	to		
From	to		
From	to		

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorised for the purpose by the Minister of Civil Aviation.

If this Certificate is lost, the Secretary, Ministry of Civil Aviation (O.S.1b) should be informed at once, the Certificate Number being quoted.

Any person finding this Certificate should forward it immediately to the Secretary, Ministry of Civil Aviation (O.S.1b), Ariel House, Theobalds Road, London, W.C.1.

(11400) Wt. 41440/J.1906 900 3/53 C. & Co. 745(8)

20 -

COPY

TRANSPORT - RECORDS
JAN 26 P.M.
File 5008-TL-26

ORIGINAL ON FILE 5010-10-119

COPY FOR FILE 5008-TS-24
-TS-25
-TS-26

LEJG.

13955

MINISTRY OF TRANSPORT
AND CIVIL AVIATION,
BERKELEY SQUARE HOUSE,
LONDON, W.1.

SG.2/5/017/A081(b)

BY AIR MAIL

14th January, 1954.

Sir,

Bristol 170 Series 31 Aircraft - Flight Manual

I am directed to forward herewith for onward transmission to the present owners seven copies of amendment No. G/8 for Bristol 170 Series 31 Flight Manual for aircraft previously registered in the United Kingdom as G-AINN, G-AINO, G-AINP and G-AMRU, also for CF-TFX, CF-TFY and CF-TFZ.

In each case the existing pages 5, 25/26, 29/30, 31/32, 33/34 and 45/46 should be extracted and be replaced by the revised pages forwarded herewith. New pages 79 to 88 are also enclosed for insertion, and the pages in Section VI should be appropriately renumbered.

An additional copy is forwarded for amendment of the specimen Flight Manual held in your Department for record purposes.

I am, Sir,
Your obedient Servant,

(Sgd) D. Hale

action on original

The Controller of Civil Aviation,
Department of Transport,
Wellington Street,
Ottawa,
Canada.

ENTERED ON CARDS.
No. 3 Bldg.

CAR 17/12

21.

JUF/MMM

OTTAWA, Ontario, January 28, 1954.

Bristol 170 Series 31 aircraft
Amendment 6/8 to Flight Manual

5010-10-119
5008-T6-24
5008-T6-25
5008-T6-26

District Controller of Air Services,
Trans-Atlantic Bldg.,
Montreal Airport,
DORVAL, Que.

Attention: District Superintendent, Air Regulations.

1. Enclosed are Amendments No. 6/8 for Bristol 170 Series 31 Flight Manuals covering CF-TFX, CF-TFY and CF-TFZ owned by Trans-Canada Air Lines 1000 University Street, Montreal, P.Q.

2. These new pages should be forwarded to the owners and the existing pages 5, 25/26, 29/30, 31/32, 33/34 and 45/46 should be withdrawn, destroyed and replaced by the revised pages forwarded herewith. New pages 79 to 80 are also enclosed for insertion, and the pages in Section VI should be appropriately renumbered.

3. Forwarded for your information and onward transmission to the owners.

(C. T. Travers),
Superintendent, Air Regulations.

Encls.

26. **FREQUENCIES**

Licensed	Crystal Controlled (Yes or no)	Active (Yes or no)	Type of emission	Power output Watts	Stations worked each channel
All TCA domestic service frequencies					

27. TRANSMITTER(s) Make, type, Freq. range power output
(1) Bendix RTA-1C 2.5-13.0 Mc/s. 50W (Mod.)
(2) * TA-18BB 118.0-135.95 Mc/s. 25 W
(3)

28. Radar, Radio Altimeter, DME or similar devices, describe
* MN-53B Marker Receiver 75 Mc/s.

29. RECEIVER(s) Make, type, Frequency Range
(1) * RTA-1C 2.5-13.0 Mc/s.
(2) Collins 51-R-3 108.0-135.95 Mc/s.
(3)

30. LORAN

31. Direction finders Make, type Manual or automatic.
(1) Bendix MN-31C (MN-26L & MN-26S) ADF
(2) Collins 51-R-3 VOR (2) One receiver used as localizer when required.
(3)

32. Emergency radio equipment, including that for survival craft.

33. Blind approach equipment Collins 51V-2 G.S. Collins 51-R-3 Localizer (describe)

34. Aerial(s) (1) Forecast Fin (2) 2 ADF loops (3) 2 Sense (describe) (4) VHF (5) Omni
Marker, Glide Slope.

35. Types of Compasses Magnetic & Gyrosyn

36. Compass error due (*a*) Earphones - (*b*) Receiver - (*c*) Transmitter -

37. Compass heading at time of check 335

38. Weight of Radio equipment, Trans. Recv'r Misc'l Total 680

39. Aircraft battery capacity (*a*) ampere-hours 67 (*b*) Voltage 24

40. Have radio direction finders been checked for (i) function? Yes
(ii) accuracy? Yes

41. Is interference to radio reception within tolerable limits? Yes

42. Are you satisfied the radio equipment complies with airworthiness standards? Yes

Date and place inspection made (if made in the presence of Civil Aviation Inspector state whom)

January 25, 1954, Dorval, Que.

REMARKS: Radio Licence No. 1331 issued.

Glide Slope receiver not installed.

cc DCAS

W. B. Elliott
Signature of Radio Inspector.

(IF MORE SPACE REQUIRED USE EXTRA SHEET) W.B. Elliott

6252-59 Records 5008 AC

6252-120 2181 4-51

DEPARTMENT OF TRANSPORT

TELECOMMUNICATIONS DIVISION

INSPECTION REPORT ..... AIRCRAFT STATIONS

TRANSPORT - RECORDS
File 5008-F6-26

1. Aircraft registration markings CF-TFZ

14040

2. Make Bristol Type 170 No. 13199

3. Registered Owner (Name and Address) Trans-Canada Air Lines, Montreal Airport, Dorval, Que.

4. If Aircraft operated by other than registered owner (Name and Address)

5. Licensee of aircraft radio station (Name and Address) Trans-Canada Air Lines, 1080 University St., Montreal, Que.

6. Where is aircraft normally maintained? Dorval Based? Dorval

7. Class of service performed Scheduled (Scheduled / Non-Scheduled / Private)

8. Certificate of Registration No. Date

9. Certificate of airworthiness Date of expiration

10. Operating Certificate No.

11. Do radio communication facilities comply with Departmental requirements? Yes (Yes or No)

12. Radio Licence No. 1331 1953 1954 Is copy kept in aircraft?

13. If no radio station licence, state:

(a) Has application been filed?

(b) Date radio installed Jan. 22, 1954

(c) Has radio been operated since April 1st?

14. Radio Installation drawings: TCA 75-9020, 75-9022, 75-9026, 75-9027, 75-9033,

(a) Indentification 75-9038, 75-9039, 75-9115, 75-9127, 75-9131, 75-9142, 75-9143, 75-9162, 75-9181

(b) Have they been submitted for approval? Yes

(c) Have they been approved by (i) Radio Div.? Yes

(ii) Civil Av. Eng.? Not required

15. Was aircraft imported with radio incorporated?

16. Was radio installed by aircraft manufacturer?

17. Was radio installation made by radio technicians? Trans-Canada Air lines (Give name of firm or individual)

18. Are radio components positioned in accordance with drawings? Yes

19. Have modifications or repairs been made to the radio installation since the last radio inspection or as indicated in the aircraft journey log book? New aircraft (Full particulars to be attached)

20. Is any radio equipment or associated wiring considered to be a fire hazard? No (Yes or No)

21. Is aircraft radio station log being kept? (Yes or No)

22. Will documents carried meet requirements? (Yes or No)

23. Radio Operator(s) Cert. No. Grade

Cert. No. Grade

24. Is radio operator employed in a dual capacity? Pilot and/or Co-Pilot (If so, give details)

25. Is aircraft equipped for Instrument Flight? Day Night Yes

Visual Flight? Night

CAR

HQ

-23

5008-T6-26

14218

TRANSPORT - RECORDS
FEB 1 P.M.
File 5008-T6-26

Montreal Airport,
Dorval, P.Q., January 29th, 1954.

Trans-Canada Air Lines,
Montreal Airport,
Dorval, P.Q.

Dear Sir:-

This letter will constitute your temporary Certificates of Registration and Airworthiness, not valid after Mar.28/54 for aircraft Bristol 170CF-TFZ registered as a commercial machine.

This authority is subject to aircraft being airworthy and to the conditions of Flight Manual as well as limitations of current Weight and Balance Report.

This letter does not give you permission for the operation of radio equipment which may be installed in this aircraft, unless a Radio Licence has been obtained from the Telecommunications Division of this Department.

Yours very truly,

J.L. BLONDEAU,
District Superintendent, Air Regulations.

jc

c.c. HQ ✓
CR
RADIO

Noted

26

FORM No. 2443

CERTIFICATION OF AIRCRAFT IMPORTED COMPLETE

Aircraft Registration CF- TFZ Serial No. 13139
Aircraft Type Bristol Type 170 Mark 31 ~~C.A.R. Spec. No.~~
Name of Importer - **Type Approval No. from country of origin (or equivalent document)**
Trans-Canada Air Lines AD/1029/45

I hereby certify that I have inspected this aircraft and that no damage has been incurred during transit, and that all special Canadian requirements as outlined in the relevant Information Circulars, if applicable, have been complied with, **and that the aircraft conforms to the Type Approval or other document noted above.**

Signed _____
"A" and "C" Engineer
Cert. No. ULM-5 "B"

Date January 22,1954

I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed _____
Test Pilot

Date JAN. 30, 1954

The above information has been checked and confirmed. The aircraft is acceptable for the issue of Certificate of Airworthiness and Registration.

Signed _____
District Aircraft Inspector

Date Feb 3 - 1954

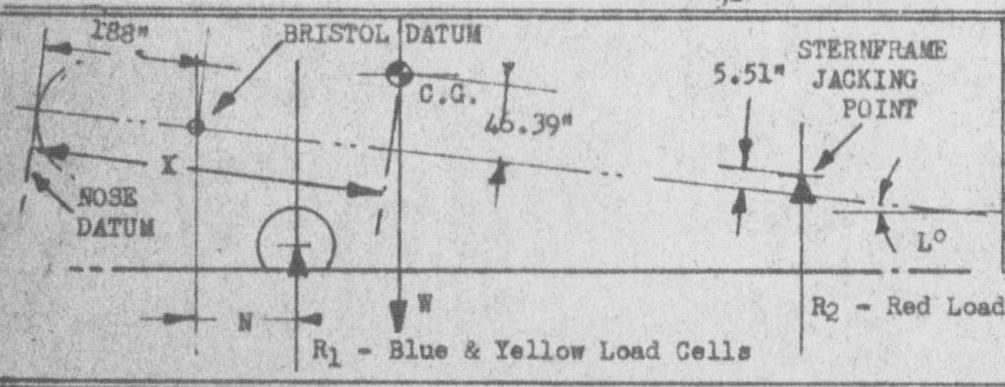
TCA 895C
Engineering
Department.

TRANS-CANADA AIR LINES
WEIGHING FORM

ACFT. NO. 503
ACFT. REGIST. CF- TFZ

BRISTOL
TYPE 170 FREIGHTER
MARK 31

Date Jan. 26 19 54



ANGLE OF INCLINATION
L° = 6°50'
sin L° = 0.11898
tan Lo = 0.11983
sec L° = 1.00715
MEASUREMENT
N = 26.95 inches

WEIGHT RECORDINGS *

JACKING POINTS	SYMBOLS	CELLS	WEIGHT READING	ZERO SHIFT	CORRECTION	NET WEIGHTS
Left Main Wheel	R1	B	12560	-10	-3	12547
Right Main Wheel	R1	Y	13040	-15	-2	13023
Sternframe	R2	R	3370	- 5	-0	3365
Aircraft Weight, as weighed						28935

* - Electric Weighing Kit Error

C.G. DETERMINATION

NUMERICAL CONSTANTS 535.83" 188.00

5.51 tan L_o = 5.51 x (0.11983) = + 0.66

N sec L^o = (26.95) x (1.00715) = - 27.14

(R2/W) x (509.35) = (3365 /28935) x (509.35) = + 59.24

N = 26.95

46.39 sin L^o = 46.39 x (0.11898) = - 5.52

sec Lo (21.43) = (1.00715) x (21.43) = + 21.58

X = C.G. Location, in Inches, aft of Nose Datum = 268.80

CORRECTION TO ICAN WEIGHT EMPTY

ITEMS		WEIGHTS	ARMS	MOMENTS
Net Weight of Acft., as weighed = W =		28935	268.8	7777728
Less Total Usable Oil (Ref. page 1)	-	378	214	80892
Standard Tire Correction (Ref. page 1)	-	0	0	0
ICAN Equip. "F" Correction (Ref. page 2)	-	76	303	23031
ICAN Equip. "E" Correction (Ref. page 2)		1	662	662
Less Miscellaneous Equipment (Ref. page 3)		207	222	46037
	-	491	260	127439
ICAN WEIGHT EMPTY, ARM & MOMENT		28198	269.28	7593065

ICAN WEIGHT EMPTY CENTRE OF GRAVITY, in %MAC = (269.28 - 233.00) / 1.648 = 22.02 %MAC

Weighed by W. Chamberlain

Computed by W. Chamberlin

Dated 23-1 / 19 54

Inspection _____
Supervisor of Inspection

Approved by _____
Weight Control Engineer

Approved by _____
Director of Engineering

Form
TCA 895C
Engineering Department.

TRANS-CANADA AIR LINES

CHECK LIST
BRISTOL
TYPE 170 FREIGHTER
MARK 31

24

ACFT No. 503
ACFT.REGIST.CF- TFZ
Date Jan.26 19 54

C O R R E C T I O N S - F L U I D S

OPERATING OIL				
	Dipstick Qty.		Nose Arms	Moments
	Imp.Gal.	Pounds		
Left Eng. Tank	21	189	214.00	40446
Right Eng. Tank	21	189	214.00	40446
NET CORRECTION -		378	214.00	- 80892

Oil Weight: 9 lbs./Imp. Gals.

ANTI-ICER FLUID				
	Qty.on Board		Nose Arms	Moments
	Gals	Pounds		
Cockpit Tank	1.3	14	142.00	1988
Main Tank	43	477	263.00	125451
NET CORRECTION -		491	259.55	127439

ANTI-ICER Fluid Weight: 11.1 lbs./Imp.Gals.

C O R R E C T I O N S - E Q U I P M E N T

T I R E S						
Location	Tires Installed		Std. Tire 1/ Weights	Weight Correc.	Nose Arms	Moments
	Type	Weight				
Left Main Wheel Dunlop	48.1800	176	176	NIL	223.00"	NIL
Right Main Wheel "	" "	176	176	NIL	223.00"	NIL
Tail Wheel "	9.75x8	28	28	NIL	776.00"	NIL
NET CORRECTION				NIL		NIL

1/ Refers to: Main Wheels , DUNLOP 48x18.00/18
Tail Wheel , DUNLOP 9.75 x 8

REAR CABIN SEATS				
Titles	OnBoard	Weights	Nose Arms	Moments
Row 1 - Single Seat 23 lb	NIL	NIL	497.50"	NIL
Row 1 - Double Seat 34 lb	NIL	NIL	506.50"	NIL
Row 2 - Double Seat 34 lb	NIL	NIL	538.50"	NIL
Row 3 - Double Seat 34 lb	NIL	NIL	568.00"	NIL
Row 3 - 2 Single Seats 21 lb	NIL	NIL	567.00"	NIL
NET CORRECTION		NIL		NIL

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

27

3
5-51

Montreal Airport, Dorval, P.Q. February 8th, 1954
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170 Aircraft CF-TFZ	5008-T6-26

CAR

14824

TRANSPORT - RECORDS
FEB 11 A.M.
File 5008-T6-26

Director of Air Services,
Department of Transport,
No. 3, Temporary Building,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to the last paragraph of our letter dated September 14th, 1953, please find attached completed form 2443 and two copies of Weight and Balance Report for the above-mentioned aircraft.

2. Issuance of Certificates is recommended.

for ... District Controller,
Air Services.

12678(R)
4288(A)
(2 airscrew logbooks)

28

COPY

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
FEB 11 A.M.

ORIGINAL ON FILE 5008-T6-24

COPY FOR FILE 5008-T6-25 14869 File 5008-T6-26
-T6-26

LEJG.

Montreal Airport, Dorval, P.Q. February 5th, 1954.

Bristol 170 Series 31 aircraft
Amendment G/8 to Flight Manual

Our File
5008-T6-24
5008-T6-25
5008-T6-26
5010-1-70

Director of Air Services,
Department of Transport,
No. 3, Temporary Building,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to your memorandum of January 28th, regarding the above-mentioned amendment, please be advised that only amendments for CF-TFX, and CF-TFY were received with your covering letter.

2. Please forward the missing amendment for CF-TFZ at your earliest convenience for transmission to the operator.

(Sgd)---------?
for District Controller,
Air Services.

8
3-53

29

OTTAWA, Ontario. February 16, 1954.

Bristol 170 Series 31 aircraft
Amendment 6/8 to Flight Manual

[redacted]
5008-T6-24
5008-T6-25
5008-T6-26

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, P.Q.

Attention: Superintendent, Air Regulations.

1. Your letter 5010-1-70, dated February 5th, 1954, informing Headquarters that you did not receive Amendment 6/8 to the Flight Manual for CF-TFZ, is acknowledged.

2. Since receipt of your letter a careful check has been carried out in C.A.E. Section, the Stenographic Pool Record Section and the Mail Room, and we have been unable to locate this Amendment.

3. Our Stenographic Pool and the Mail Room have a record of three (3) enclosures with the letter and the Mail Room noted the registration marks on the file copy as being enclosed.

4. As we are unable to locate this Amendment we therefore request that a further check be carried out in your office.

(G. T. Travers)
Superintendent, Air Regulations.

33

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12678

NATIONALITY AND REGISTRATION MARKS CF-TFZ

1. Type and description	Bristol 170 MK 31
2. Name and address of constructor	The Bristol Aeroplane Co. Ltd. Bristol, England.
3. Constructor's serial number	13139
4. Name of owner	Trans-Canada Air Lines
5. Address of owner	1080 University Street, Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 28th day of October 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-TFZ and is of Canadian nationality.

Given at Ottawa this 11th day of February, 1954.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators): (a) Landplane.....lbs. (b) Seaplane.....lbs. (c) Skiplane.....lbs.

WEIGHT OF FUEL AND OIL

26. Fuel.....lbs.
(at 7·2 lbs. per gallon)
(a) Number of tanks.....
(b) Capacity of tanks.....Imp. gals.

27. Oil.....lbs.
(at 9·0 lbs. per gallon)
(a) Number of tanks.....
(b) Capacity of tanks.....Imp. gals.

28. Weight allowed for crew.....lbs.

29. Weight allowed for equipment, excluding wireless apparatus.....lbs.

30. Weight of wireless apparatus.....lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....lbs.

32. Maximum total weight authorized.....lbs.
Landplane.....lbs.
Seaplane.....lbs.
Skiplane.....lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated October 28/1953 in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 11th day of February, 19 54.

.....
Superintendent, Air Regulations.

32

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 4288

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Trans-Canada Air Lines
2. Christian name
3. Address 1080 University Street, Montreal, P.Q.
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name The Bristol Aeroplane Co. Ltd.

NATIONALITY AND REGISTRATION MARKS

6. CF-TFZ

DESCRIPTION OF AIRCRAFT

7. Type Bristol 170 Series MK 31 Constructor's No. 13139
8. Place and year of construction of aircraft Bristol, England, 1953

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. Maximum number of persons to be carried (including crew) See Aircraft Type Approval #25

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision A,B,C,D&E
15. Maximum span (in flying position) 108' 0"
16. Maximum length (in flying position) 68' 4"
17. Total height (with and without trolley in case of seaplanes) 21' 6"

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		October 28/1954.	

30

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Navigation Lights
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge
Landing Lights

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

Airplane Flight Manual, Aircraft Type Approval #25, Weight and Balance Report with Amendments form part of this Certificate of Airworthiness and must be carried in the aircraft during flight.

Note: This certificate is subject to Air Regulations, [redacted] and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

JM

34

A SERVICES
CIVIL ATION DIVISION

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-71-26

REGISTERED

Ottawa, Ontario
February 15th, 1954.

Trans-Canada Air Lines,
1020 University Street,
Montreal, P.Q.

Dear Sir/s-

Enclosed are Certificate of Registration No. 12678 and Certificate of Airworthiness No. 4288, together with Engine and Journey and Aircraft Log Books, for your Bristol 170 aircraft, CF-TFZ, Serial No. 12139. MK 21

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The endorsement on Page 3, Section D, paragraph 3, of the Certificate of Airworthiness is brought to your attention, and it is the responsibility of the owner of the aircraft to ensure that this endorsement is fulfilled in its entirety, otherwise the Certificate of Airworthiness will be considered invalid.

The Certificate of Airworthiness is valid until October 28/1954.

Your attention is drawn to the Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

cc: Montreal

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book(s) enclosed. Yes X No
AC-5-95

35

3
5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Dorval, P.Q. February 25th, 1954
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170 Series 31 aircraft Amendment G/8 to Flight Manual	~~5010-1-70~~ ~~5008-T6-24~~ ~~5008-T6-25~~ ~~5008-T6-26~~

Director of Air Services,
Department of Transport,
No. 3, Temporary Building,
OTTAWA, Ontario.

16091

TRANSPORT - RECORDS
5008 T6-26
MAR 3 A.M.
~~5-010-10-119~~
File

Attention: Supt. Air Regulations.

1. With reference to your memorandum of February 16th, 1954, please be advised that Amendment G/8 to the Flight Manual for CF-TFZ has been located in our Central Registry Section.

2. From information available, it appears that this document was received loose. The Amendment has been forwarded to Trans-Canada Air Lines.

D Mr Hunter
For your information
JLG 3/3/54

Noted
4/3/54
D. Hunter
mail room

for .. District Controller,
Air Services.

COPY ON
~~5-108-T6-24~~
~~-T6-25~~
~~-T6-26~~

ENTERED
ON CARDS
No. 3 Bldg.

COPY 1/56

ORIGINAL ON FILE.....5010-10-119.....

COPY FOR FILE.....5008-T6-24
-T6-25
-T6-26

Ministry of Transport
and Civil Aviation

BY AIR MAIL 2nd March, 1954

Sir,

Bristol 170 Series 31 Aircraft - Flight Manual

I am directed to forward herewith for onward transmission to the present owners seven copies of amendment No. G/9 for Bristol 170 Series 31 Flight Manual for Aircraft previously registered in the United Kingdom as G-AINN, G/AINO, G-AINP and G-AMRU, also for CF-TFX, CF-TFY and CF-TFZ.

In each case the existing pages 5 and 17/18 should be extracted and be replaced by the revised pages forwarded herewith.

An additional copy as forwarded for amendment of the specimen Flight Manual held in your Department for record purposes.

I am, Sir,
Your obedient Servant,

D. HALE

D. Hale

The Controller of Civil Aviation,
Department of Transport,
Wellington Street,
Ottawa,
Canada.

ENTERED ON CARDS
No. 2 Bldg.

Reproduction of original

JCF/SEK

36

OTTAWA, Ontario, March 17th, 1954.

5010-1-70

Bristol 170 Series 31 Aircraft
Amendment C/9 to Flight Manual

~~5010-1C-119~~
~~5008-T6-26~~
~~5008-T6-25~~
5008-T6-26

DELIVERED

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, Que.

Attention: District Superintendent, Air Regulations.

1. Enclosed are Amendments No. C/9 for Bristol 170 Series 31 Flight Manuals covering CF-TFX, CF-TFY and CF-TFZ owned by Trans-Canada Air Lines, 100 University Street, Montreal, P.Q.

2. These new pages should be forwarded to the owners and the existing pages 5 and 17/18 should be replaced by the revised pages forwarded herewith.

3. Forwarded for your information and onward transmission to the owners.

Encls.

(C. F. Travers),
Superintendent, Air Regulations.

KA

39

TRANS - CANADA AIR LINES

12324

Aviation Bldg.,
Montreal, Que.
July 21st, 1954.

File: B-1633-2.

TRANSPORT - RECORDS
AUG 6
File 5008-T6-26

Mr. H. S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
Civil Aviation Board,
Ottawa, Ontario.

Dear Howie:

Further to our telephone conversation regarding the loss of the right hand fuselage forward emergency exit (window type) on Bristol Aircraft 503, Registration Nr. CF-TFZ, on Flight CGO 2012-13, the following is recorded for your information.

After discussing the incident with the Captain of the aircraft, it is estimated that the emergency exit door located in the right hand fuselage sidewall was lost in flight somewhere between Winnipeg and Fort William. The closest approximation that could be made by the pilot is that the incident occurred 10 to 15 minutes outside of Fort William enroute from Winnipeg. This would result in the door landing on Canadian territory.

A check has been made of the runway area at Winnipeg from which the aircraft took off since there was a slight possibility that the door could have become detached shortly after take-off. The search was fruitless.

The damage to the aircraft was slight. The right hand undercarriage strut fairing had a small dent, and in addition, there were 3 small dents along the right hand side of the fuselage.

ENTERED ON CARDS
NO. 3 Bldg.

Our fleet of Bristol Aircraft were immediately checked to determine whether or not the other emergency exits were installed satisfactorily. On 2 of the aircraft, it was found that the arms of the door operating mechanism which

COPY ON
7150-6

actuates the locking pins were bent. In one case the arms were bent sufficiently that one locking pin was not engaged, and the other not fully engaged.

In order to offset any recurrence of such an incident, the following action has been taken:

1. The use of the emergency exits is now restricted to emergency only. Apparently, these exit doors have been used on occasion to facilitate cargo handling.

2. Detailed instructions are in the process of being prepared for the proper installation of the doors.

3. We will incorporate paint marks on the locking pins to show that the pins are correctly installed and locked. The paint marks will be visible from inside the cabin and will be checked by Maintenance every Nr. 1 check or approximately every 25 hours.

4. The door operating handle will be wire-locked in the locked position (with breakable wire), and the wire sealed with a lead seal which if broken will immediately indicate that the door handle has been operated.

5. We are presently installing brackets around the handle of the right hand sidewall exits of all our Bristol Freighters to permanently seal this exit and to remove the exit signs at this location. The deletion of this exit will still leave six emergency exits in the Freighter which is considered adequate for the maximum number of twelve seats with safety belts which can be installed in this aircraft.

Yours very truly,

J. T. Dyment ea

J. T. Dyment.
Director of Engineering.

37

TCA-26

FAILURE OR IRREGULARITY REPORT

- C O P Y -

TO: Chief Pilot

Flight No. 2012-13 Date 13-7-54

Central Region

Location WG-CMX A/C. No. 503

DESCRIPTION:

Escape hatch cover #2 compartment came off in flight.

It has not been my custom to inspect this window when freight or aircraft equipment would have to be moved to do so. In some cases this would entail removal of webbing and partial unloading of the compartment.

In the case in question the window including the red handle and locking wire was so hidden by cargo and various pieces of cargo webbing with their associated webbing rods which had been placed against the wall and window on top of the cargo.

It is my assumption that when the rods and webbing were placed in that position the locking wire was broken which was the prime cause of the loss.

RECOMMENDATIONS:

It is suggested that this wire be protected as it is in the DC-3 and DC-4 by a metal plate or cover. Plastic covers in this aircraft would be subject to too much abuse.

CAPTAIN "J. H. BURFORD"

40

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

From the information obtained from the Flight Crew and after examining the door, it is concluded that the door operating handle was moved to the unlocked position probably by the settling of cargo on take-off at Houghton, Michigan. We employ athwartships separator gates in these aircraft to secure cargo against fore and aft movement and throw-over nets to prevent upward movement. As you will appreciate however, shifting of certain items of cargo is sometimes still possible to a very small degree, depending on the nature of the load, and it appears that it was sufficient in this case to operate the exit handle. Further examination of the particular door which was receivered showed no signs of damage orimproper installation as noted in our previous letter.

In view of the fact that this emergency exit will be sealed, we do not anticipate any further trouble.

Yours very truly,

J.T. DYMENT
J.T. Dyment,
Director of Engineering.

COPY

16763

TRANSPORT - RECORDS
OCT 14 P.M.
File 5'008-T6-26

41

ORIGINAL ON FILE 5008-T6-24

COPY FOR FILE 5008-T6-26
7150-6

TRANS - CANADA AIR LINES

Aviation Building,
Montreal, Quebec,
October 4, 1954.
File: B-1633-2

Mr. H.S. Rees,
Chief Aeronautical Engineer,
Department of Transport,
Civil Aviation Board,
Ottawa, Ontario.

Dear Howie:

Further to our telephone conversation and our last letter of July 21st ~~xx~~ regarding the loss of Bristol Freighter right-hand fuselage forward emergency exits, the following is forwarded for your information.

The second incident occurred on Aircraft 501, CF-TFX, Flight 2009-24 on the 24th of September. This particular flight was proceeding from Winnipeg when, due to weather, a landing was made at Houghton, Michigan. The flight was then cleared from Houghton, Michigan to the Lakehead. On landing at the Lakehead, it was discovered that the emergency exit door was missing. The unit was located on the runway at Houghton, Michigan.

A temporary repair was applied to the Aircraft, and it was flown to the Toronto Base. Similar to the previous incident on Bristol Aircraft 503, CF-TFZ, there was virtually no damage to the Aircraft.

ENTERED
ON CARDS
No. 3 Bldg.

All the modifications except Item 5 listed in our letter of July 21st had been applied to Aircraft 501, CF-TFX. Item 5, as you will recall, installs a permanent seal over the door operating handle which will definitely preclude its opening and its operation as an emergency exit. This latter modification is being completed on all Aircraft this week.

8
3-53

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO 5008-T6-26

DUPLICATE - DIST. FILE NO. 44

TRANSPORT - RECORDS
OCT 22 P.M.
File 5008-T6-26

AIRCRAFT LICENSING RECORDS

17265

1. Registration mark CF- T F Z 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 4288 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines ..... Citizen of .....

Christian name ....

8. Address of owner 1080 University St., Montreal, P.Q.

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date ..... Copy attached ☐

Wt. and balance amendment ☐ Date ..... Copy attached ☐

Amendment not .....

otherwise covered .....

.....

.....

13. C of A valid from Oct. 28, 1954 to Oct. 28, 1955

Temporary authority from ..... to .....

October 21, 1954
Date .....

for (D.W. Saunders)
District Superintendent Air Regulations

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

In view of the wide variations that have occurred to the dates associated with Mod. 1247, we ask your approval of the following suggested programme:-

Aircraft	A/C Time at March 1st.	Bristol Deadline Time	Approx. Dates A/C out of Service for Mod.	Estimated A/C Time when Removed from Service for Mod.
501 CF-TFX	1895	2145	March 17-27	1980
503 CF-TFZ	1758	2008	May 5-25	1933
502 CF-TFY	1803	2053	May 16-26	2269

We do not know whether it was the ARB or the Bristol Company who established the compliance procedures in the various Modification Instruction Leaflets. If the ARB, we would appreciate it very much if you would bring to their attention the fact that practical problems in the accomplishment of modifications should be considered when establishing the procedure. In this particular instance, whoever originated the procedure has been very unrealistic. Because we believe that there is a greater likelihood that the compliance procedure was originated by the Bristol Company, TCA will bring this situation to their attention.

Yours sincerely,

(Sgd) Jack
J.T. Dyment
Director of Engineering.

Copy: Mr. S. Haggett
General Mgr
MacDonald Bros Aircraft Ltd
Stevenson Field
Winnipeg
Man.

8
3-53

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

Although TCA has repeatedly requested from Bristol copies of their Defect Investigation Report covering the troubles leading up to Mod. 1247, we have neither been able to obtain a copy nor been given the reasons why the mod. was initiated. We can only presume from the kicking around of the compliance dates that there is not sufficient reason to ground airplanes with the accumulated times considerably less than 4000 hours as have our three Freighters.

Although the majority of the instructions on how to do the job had been received by TCA in the early part of February, the instructions to us were not completed until March 4th.

In view of the compliance date being two years away, so far as we knew previous to March 3rd, it is only a matter of luck that we do have the parts available for the mod. at the present time. TCA had obtained the parts as soon as we had been informed that Mod. 1247 was mandatory in order to permit us to accomplish the mddification at the most convenient time during the next year or so. It must be remembered that with only three airplanes, to take an airplane out of service longer than a routine check costs us loss of schedule protection and generally loss of revenue.

It will be noted that as the Modification Instructions now stand from the Bristol Company, the mod. would have to be incorporated during the next 250 hours regardless of whether an airplane has accumulated 10 hours or 3999 hours but if the airplane has 4001 hours it must be grounded and the mod. accomplished immediately. These hypothetical airplanes would thus have to have the mod. accomplished on a mandatory basis before they reached 260 hours, 4249 hours, and 4001 hours, respectively. This does not seem very rational.

TCA has studied the possibility of complying with the Bristol Instructions and find that, short of taking an airplane out of revenue service, plus involving additional checks, plus sending additional work crews to Toronto, all of which will cost several thousand dollars, we cannot completely comply with the current Bristol instructions.

At considerable inconvenience and some cost, (although not as much as above), we can modify two airplanes within the 250 hour deadline but the third airplane requires a concession of an additional 275 hours.

(Cont'd)

COPY

TRANS-CANADA AIR LINES

TRANSPORT RECORDS
MAR 22 A.M.
File 5008-T6-26

ORIGINAL ON FILE 7150-6

COPY FOR FILE 5008-T6-24
5008-T6-25
5008-T6-26

Room 315
March 18, 1955
File: 2410-4

Mr. H.S. Rees
Chief Aeronautical Engineer
Civil Aviation Division
Department of Transport
Ottawa
Ont.

37196

Dear Howie:

Subject: Bristol 170 Freighter Modification #1247

Some time ago the Bristol Company instigated Mandatory Modification 1247 for our Bristol 170 Freighter wing. This modification requires the reinforcement of the centre plane and outer wing spar web joints and involves around 400 manhours of labour time.

The original Bristol Modification Instruction, dated August 22, 1954, required that Mod. 1247 be incorporated within the ensuing twelve months or at the renewal of the C. of A.

Notice of Amendment #3 to Mod. Instruction 1247, dated December 31, 1954, was received January 5th, this year, and the actual Amendment #3 was received February 7th. This Amendment stated that--for aircraft with less than 5000 hours at October 22, 1954, Mod. 1247 must be incorporated within two years of that date. For aircraft with more than 5000 hours at October 22, 1954, the modification had to be incorporated within one year. All three TCA airplanes had until October 22, 1956, to comply.

On March 3rd of this year, we were informed by a letter from Bristol, dated March 1st, that Mod. 1247 must be incorporated on aircraft with less than 4000 hours within 250 hours from March 1st. If the aircraft had accumulated more than 4000 hours by March 1st the modification had to be incorporated immediately.

ENTERED
CARDS
No. 3 Bldg.

As of March 1st our three Bristol Freighters, CF-TFX, CF-TFY and CF-[illegible] had accumulated 1895 hours, 1758 hours, and 1803 hours, respectively

8
3-53

(Cont'd)

HSR/AO'D

5008-T6-25
5008-T6-26
5008-T6-24
7150-6

Ottawa, Ontario,
March 24, 1955.

Mr. J.T. Dyment,
Director of Engineering,
Trans-Canada Air Lines,
International Aviation Building,
Montreal, Quebec.

Dear Jack:

Subject: Bristol 170 Freighter Modification #1247

1. This will acknowledge receipt of your letter of March 18th, 1955, regarding Bristol 170 Modification #1247. Your programme of implementing this Modification to the 3 aircraft of your fleet is satisfactory and hereby approved.

2. You will remember we discussed this on the telephone when you stated that you would institute an inspection programme for these aircraft until such time as the modification had been completed. Frankly, I don't know what you should inspect for (and apparently neither do Bristol's Canadian representatives, who discussed this with me several days ago), so the best I can do is suggest that you watch for fatigue cracks and rivet failures.

Yours very truly,

(H.S. Rees),
Chief Aeronautical Engineer.

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE No. 5008-T6-26

DUPLICATE - DIST. FILE No.

TRANSPORT - RECORDS
JUN 22 A.M.
File 5008-T6-26

47

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- T F Z 9379 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 4288 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Trans-Canada Air Lines ..... Citizen of .....

Christian name ....

8. Address of owner 1080 University St., Montreal, P.Q.

.....

.....

Change of address to .....

9. Aircraft based at Montreal .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not Endorsed re validity of C. of A. as per Instructions .....

otherwise covered H.Q. letter file No. 7150-6, dated May 13, 1955. .....

.....

.....

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

(D.W. Saunders)

Date June 21, 1955 District Superintendent Air Regulations

48

Ottawa, Ontario, June 24th, 1955.

Bristol 170 Series 31 Aircraft
Flight Manual Amendment 9/10.

~~5016-10-119~~
~~5008-16-24~~
~~5008-16-25~~
5008-16-26.

REGISTERED

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
DORVAL, P. Q.

Attention: District Superintendent, Air Regulations.

1. Enclosed are copies of Amendment 9/10 for Bristol 170 Series 31 Flight Manuals covering CF-TFX, CF-TFY and CF-TFZ owned by Trans-Canada Air Lines, 108 University St., Montreal, P. Q.

2. The page affected is shown in the revised page 5 (General Amendment Record Sheet) on which the amendment is described and which provides for signature and date at the time of incorporation.

3. Forwarded for your information and onward transmission to the owners.

(A. T. Travers),
Superintendent, Air Regulations.

Encl.

94

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

5. It is noted that on page 4 of the Certificate of Airworthiness, there is an endorsement made by the D.S.A.R. Toronto, June 21st, 1955, and we quote:

"This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister."

With our Headquarters concurrence, we propose to cancel this special endorsement.

6. The aircraft under discussion, is to be leased and operated by Pacific Western Airlines and when the Lease Agreement, etc., is all in order, they desire preliminary authority be issued by this district office to permit them to operate the Bristol for crew training purposes pending the endorsement of their Operating Certificate for this new type of aircraft.

7. May we have your early reply please, in order that there will be no hold up in this instance and that we may reasonably well comply with Inspection Instruction 4.6.6.1.

(Sgd)K.G. Saunders
for District Controller of Air Services.

Enc.

8
3-55

COPY

DEPARTMENT OF TRANSPORT

ORIGINAL ON FILE 5258-63

COPY FOR FILE 5008-T6-26

LEJG.

Edmonton, Alta. 4 Jan., 1956.

Associated Airways Limited
Bristol CF-TFZ (Bristol 170 MK 31)

AIR EXPRESS

Director of Air Services,
Ottawa.

Attention: Supt., Air Regulations.

1. Reference to your letter of December 28th last, approving the Operations Manual for Bristol 170 as forwarded to Headquarters by Associated Airways Limited on December 16th, 1955.

2. As you are probably aware, Bristol CF-TFZ has been purchased from Trans Canada Airlines by Associated and we are in process of re-registering this aircraft in the name of Associated Airways Limited, and in this connection, we have received the enclosed Bristol Operations Manual as used by the Trans Canada Airlines.

3. It is brought to your attention that the Bristol as modified by Trans Canada Airlines, differs considerably to the standard Bristol 170 heretofore operated by Associated, therefore, we wish to be advised which manual is to be used by Associated--the enclosed or the one approved in your letter of December 28th last, or both.

4. Processing of the change of ownership in favor of Associated is presently being held up as we are awaiting log books to be made up by Trans Canada Airlines and forwarded to Associated as apparently log books were not used by Trans Canada Airlines and instead, they had their own set up along these lines in the way of repair sheets, flight sheets, etc., etc.

.....2

8
3-55

COPY

DEPARTMENT OF TRANSPORT

ORIGINAL ON FILE 5258-63

COPY FOR FILE 5008-T6-26

LEJG.

Edmonton, Alta. 4 Jan., 1956.

Associated Airways Limited
Bristol CF-TFZ (Bristol 170 MK 31)

AIR EXPRESS

36278

Director of Air Services,
Ottawa.

Attention: Supt., Air Regulations.

1. Reference to your letter of December 28th last, approving the Operations Manual for Bristol 170 as forwarded to Headquarters by Associated Airways Limited on December 16th, 1955.

2. As you are probably aware, Bristol CF-TFZ has been purchased from Trans Canada Airlines by Associated and we are in process of re-registering this aircraft in the name of Associated Airways Limited, and in this connection, we have received the enclosed Bristol Operations Manual as used by the Trans Canada Airlines.

3. It is brought to your attention that the Bristol as modified by Trans Canada Airlines, differs considerably to the standard Bristol 170 heretofore operated by Associated, therefore, we wish to be advised which manual is to be used by Associated--the enclosed or the one approved in your letter of December 28th last, or both.

4. Processing of the change of ownership in favor of Associated is presently being held up as we are awaiting log books to be made up by Trans Canada Airlines and forwarded to Associated as apparently log books were not used by Trans Canada Airlines and instead, they had their own set up along these lines in the way of repair sheets, flight sheets, etc., etc.

.....2

8
3-55

COPY

ORIGINAL ON FILE.....

COPY FOR FILE.....

5. It is noted that on page 4 of the Certificate of Airworthiness, there is an endorsement made by the D.S.A.R. Toronto, June 21st, 1955, and we quote:

"This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister."

With our Headquarters concurrence, we propose to cancel this special endorsement.

6. The aircraft under discussion, is to be leased and operated by Pacific Western Airlines and when the Lease Agreement, etc., is all in order, they desire preliminary authority be issued by this district office to permit them to operate the Bristol for crew training purposes pending the endorsement of their Operating Certificate for this new type of aircraft.

7. May we have your early reply please, in order that there will be no hold up in this instance and that we may reasonably well comply with Inspection Instruction 4.6.6.1.

(Sgd)K.G. Saunders
for District Controller of Air Services.

Enc.

8
3-55

4/4

5258-81
5008-T6-26

To H.Q

24091

302 Blowey-Henry Bldg.,
Edmonton, Alta.,
10 Jan., 1956.

TRANSPORT - RECORDS
JAN 16 A.M.
File 5008-16-26

Associated Airways Ltd.,
#7 Hangar,
Municipal Airport,
Edmonton, Alta.

Attention: Mr. T. P. Fox

Dear Sir:

We are pleased to forward herewith the formal Certificates of Bristol 170 Mk 31 CF-TFZ, registered in the name of Associated Airways Limited.

The registration of this aircraft in the name of Associated Airways Ltd. is not to be construed in any manner, shape or form as authority for your company to operate the aircraft.

Yours truly,

K. F. Saunders,
District Supt., Air Regulations.

KFS/MM
cc: HQ

51

2462A

To HQ Copy.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 14706

NATIONALITY AND REGISTRATION MARKS CF-TFZ

1. Type and description	Bristol 170 MK 31
2. Name and address of constructor	The Bristol Aeroplane Co. Ltd., Bristol, England.
3. Constructor's serial number	13139
4. Name of owner	ASSOCIATED AIRWAYS LIMITED
5. Address of owner	#7 Hangar, Municipal Airport, Edmonton, Alta.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Edmonton, Alta.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 10th day of January 19 56, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-TFZ and is of Canadian nationality.

Given at Edmonton this 10th day of January 19 56.

for *Superintendent, Air Regulations.*

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

503

50

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12678

NATIONALITY AND REGISTRATION MARKS CF-TFZ

1. Type and description	Bristol 170 MK 31
2. Name and address of constructor	The Bristol Aeroplane Co. Ltd. Bristol, England.
3. Constructor's serial number	13139
4. Name of owner	Trans-Canada Air Lines
5. Address of owner	1080 University Street, Montreal, P.Q.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Montreal
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 28th day of October 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-TFZ and is of Canadian nationality.

Given at Ottawa this 11th day of February, 1954.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-T6-26

DUPLICATE - DIST.FILE NO. _____

52

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- TFZ 2. Old C of R No. 12678

3. New C of R No. 14706 Date 10 Jan. 56

4. C of A No. 4288 Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane x Seaplane [ ] Skiplane [ ]

6. Classification Changes:
   State [ ] to Commercial [ ] to Private [ ]
   Commercial [x] to State [ ] to Private [ ]
   Private [ ] to Commercial [ ] to State [ ]

Valid for Day [x] Night [x]

7. Surname of owner ASSOCIATED AIRWAYS LIMITED Citizen of Canada

Christian name ....

8. Address of owner #7 Hangar, Municipal Airport, Edmonton, Alta.

.....

Change of address to .....

9. Aircraft based at Edmonton, Alta.

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew	See Aircraft Type Approval #25	Maximum passengers		Pass with freight

12 Wt. and balance report [x] Date Copy attached [ ]

Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not .....

otherwise covered C. of A. Items 1. and 3. amended and endorsed to agree with new C of R.

The following notation deleted from page 3 of C. of A. "This Certificate will remain valid during the period the aircraft is owned and operated by Trans-Canada Air Lines and is maintained in accordance with their system of continuous maintenance and inspection approved by the Minister." Sgd. DSAR

13. C of A valid from 27 Dec. 55 to 27 Dec. 1956. Toronto June 21/55

Temporary authority from ..... to .....

MM

Date 10 Jan. 56

District Superintendent Air Regulations

53

5008-T6-26

24090

TRANSPORT - RECORDS
JAN 16 A.M.
File 5008-T6-26

REGISTERED

Associated Airways Ltd.,
#7 Hangar, Municipal Airport,
Edmonton, Alta.

502 Blowey-Henry Bldg.,
Edmonton, Alta.,
10 Jan., 1956.

Dear Sir/s-

Enclosed are Certificate of Registration No. 14706 and Certificate of Airworthiness No. 4288 , together with Engine and Journey and Aircraft Log Books, for your Bristol 170 MK 31 aircraft, CF- TPZ , Serial No. 12139 ..

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The endorsement on Page 3, Section D, paragraph 3, of the Certificate of Airworthiness is brought to your attention, and it is the responsibility of the owner of the aircraft to ensure that this endorsement is fulfilled in its entirety, otherwise the Certificate of Airworthiness will be considered invalid.

The Certificate of Airworthiness is valid until 27 Dec., 1956.

Your attention is drawn to the Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

K. F. Saunders,
District Supt., Air Regulations.

P.S. Propeller Log Book(s) enclosed. Yes x No

cc: H.Q. & form AC-6-152; copy of C of R No. 14706; C of R No. 12678 for cancellations;
cc: DS Radio Edmonton & copy of form 2415

MB/MJJ

OTTAWA, Ontario January 11th, 1956.

5254-d1
5008-T6-26

Bristol Aircraft CF-TFZ
Associated Airways Limited

5008-T6-26
~~5258-63~~

District Controller of Air Services,
302 Mowey-Henry Building,
Edmonton, Alberta.

Attns- District Superintendent, Air Regulations.

1. This is in reference to paragraph 5 of your letter of January 4th, 1956, in regard to the above mentioned subject matter.

2. This will confirm that the special endorsement contained on the Certificate of Airworthiness of Bristol aircraft, CF-TFZ should be cancelled since it is no longer owned by Trans-Canada Air Lines.

Superintendent, Air Regulations.

55

25130

TRANSPORT RECORDS
JAN 30 P.M.
File 5008-16-26

302 Blumy-Henry Building,
EDMONTON, Alberta.

26 January, 1956.

Associated Airways Limited,
No. 7 Hangar - Municipal Airport,
EDMONTON, Alberta.

Attention: Mr. Vern SAUNDERS.

Dear Sirs

Enclosed herewith, for your retention, approved Bristol Operating Manual as formally used by Trans Canada Airlines, and covering aircraft CF-KFE.

This manual is to be used rather than the previous manual which you submitted to our Headquarters, and which was approved under date of December 28th, 1955.

As the subject aircraft is now leased by you to P.W.A., will you kindly see that this Operating Manual is placed in P.W.A.'s hands for their retention.

Yours very truly,

K.F. Saunders,
District Superintendent, Air Regulations.

KFS/Z
cc: H.Q.
cc: P.W.A., Edmonton.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

58 2 9-49

Edmonton, Alberta, January 30, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Associated Airways Ltd. Drawings - Installation of Astro Compass Mount & Auxiliary Power Unit. Also Relocation of ADF Sense Antenna - Bristol Aircraft 170 CF-TFZ	5010-10-70 5008-T6-26

Registered

TRANSPORT - RECORDS
FEB 2 P.M.
File 5008-16-26

Director Air Services,
Ottawa, Ontario. 25438

Attention: Chief Aeronautical Engineer.

1. Attached hereto , for your approval please, copy of letter from Associated Airways Ltd., dated January 13, 1956, covering subject installations, etc., together with the following Engineering Notices and Drawings in quadruplicate:

(1) 56N-1-087 & Drawing No. 500 Installation & Detail Astro Compass Mount in Bristol 170 - CF-TFZ.
(2) EN 56N-1-088 & Drawing No. 502 Installation Auxiliary Power Unit in Bristol 170 - CF-TFZ.
(3) EN 56N-1-089 & Drawing No. 503 Relocation ADF Sense Antenna in Bristol 170 - CF-TFZ.
(4) Drawing No. 504 Installation - A.P.U. & Stand. Bristol 170 CF-TFZ.

F.R. Davenport
for District Controller of
Air Services.

encls.

COPY

57

ASSOCIATED AIRWAYS LTD.

No. 7 Hangar, Municipal Airport,
Edmonton, Alberta.
January 13, 1956.

District Aircraft Inspector,
Department of Transport,
402 BloweyHenry Bldg.,
Edmonton, Alberta.

Dear Sir:

Enclosed please find four copies each of Associated Airways Limited Engineering Notices which apply to Bristol aircraft as follows:

5 6N-1-087 "Installation of Astro Compass Mount"
5 6N-1-088 "Installation of Auxiliary Power Unit"
5 6N-1-089 "Relocation of ADF Sense Antenna"

We would be pleased to have you consider these changes and submit them for further approva. Your remarks or further enquiry would be welcome.

Yours very truly,

ASSOCIATED AIRWAYS LIMITED,

WJD/GDS
Encl. 3 sets.

W. J. Dick,
Director of Maintenance.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

C/ 2 9-49

Edmonton, Alberta. February 6, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Installations of Controllers in Bristol CF-TFZ.	5008-T6-26.

Registered

Director of Air Services,
Ottawa, Ontario.

26327

TRANSPORT - RECORDS
FEB 14 A.M.
File 5008-T6-26

Attention: Chief Aeronautical Engineer.

1. Attached hereto, for your approval, please find copy of letter dated February 2, 1956, together with the following Associated Airways Engineering Notice and Drawings all in quadruplicate:

(1) Engineering Notice No. 56N-1-091.
(2) Drawing No. 505 Revised Connection Diagram J2 Controller.
(3) Drawing No. 506 Installation - J2 Controllers-Gyrosyn Compass System.

2. Installations to be made in Bristol Freighter CF-TFZ Aircraft.

F.E. Davenport
for District Controller of
Air Services.

encl.

COPY

60

ASSOCIATED AIRWAYS
LIMITED

No. 7 Hangar,
Municipal Airport,
Edmonton, Alberta.
February 2, 1956.

District Aircraft Inspector,
Department of Transport,
402 Blowey Henry Building,
Edmonton, Alberta.

Attention: Mr. H. E. Davenport.

Subject: Bristol J2 Controllers.

Dear Sir:

Enclosed please find four copies of each of Associated Airways Limited drawings and Engineering notices which apply to the J2 Controllers installed in the C4 Gyrosyn Compass System of Bristol CF-TFZ.

Engineering Notice No. 56N-.-091

Drawing NO. 505 Revised Connection Diagram J2 Controller

NO. 506 Installation J2 Controllers

We would be pleased to have you consider this installation and submit the drawings for further approval.

Yours very truly,

ASSOCIATED AIRWAYS LIMITED,

WJD/GDS
Encl.

W. J. Dick,
Director of Maintenance.

LMN:AO'D

Ottawa, Ontario, February 9, 1956.

5010-10-70
5008-T6-26

Miscellaneous Modifications
Bristol Freighter Aircraft CF-TFZ

5008-T6-26 (CAE)

District Controller of Air Services,
302 Blowey-Henry Building,
Edmonton, Alberta.

Attention: District Aircraft Inspector

1. With reference to your letter of January 30, 1956, Associated Airways Limited Engineering Notices and drawings listed in your letter are approved and three sealed copies are returned herewith.

(H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

Encls.

LMN:AO'D

Ottawa, Ontario, February 14, 1956.

5008-T6-26

Installation of Controllers
in Bristol Freighter CF-TFZ

5008-T6-26 (C AE)

District Controller of Air Services,
302 Blowey-Henry Building,
Edmonton, Alberta.

Attention: District Aircraft Inspector

1. With reference to your letter of February 6, 1956, Associated Airways Limited Engineering Notice 56N-1-091 and Drawings Nos. 505 and 506, covering the subject installation, are approved and three (3) sealed copies are returned herewith. Installation Drawing No. 506 is approved subject to inspection and test.

(H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

Encls.

L.M.

COPY

ST 64

ASSOCIATED AIRWAYS LIMITED

No. 7 Hangar, Municipal Airport,

Edmonton, Alberta,
February 10, 1956.

District Aircraft Inspector,
Department of Transport,
402 Blowey Henry Bldg.,
Edmonton, Alberta.

Dear Sir:

We are advised by correspondence from Trans Canada Airlines through Central Northern Airlines that Trans Canada Airlines had a modification in progress on their Bristol aircraft concerning changes tothe inertia switch circuit as it affects the power plant fire extinguisher system. The inertia switches are at present not installed in CF-TFZ and we would like to reach an agreement with your Department concerning the compliance date for reinstallation of the subject switches. It is indicated that Trans Canada Airlines will be supplying Central Northern Airlines with their proposed change of circuit and with the switches for reinstallation and it would be our plan to reinstall these switches as soon as they and the drawings are available from Central Northern Airlines.

We have on hand a file of Trans Canada Airlines correspondence concerning the removal of these switches and recommendations for rewiring, etc, which we would be pleased to discuss with you should you so desire.

Yours very truly,

ASSOCIATED AIRWAYS LIMITED,

WJD/GDS

W. J. Dick,
Director of Maintenance.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

605 2 9-49

Edmonton, Alberta. February 14, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Modification to fire extinguisher system - Bristol CF-TFZ aircraft.	5008-T6-26

26548

TRANSPORT - RECORDS
FEB 16 P.M.
File 5008-T6-26

Director of Air Services,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer.

1. Attached hereto copy of letter dated February 10, 1956, from Associated Airways Limited, relative to subject matter.

2. For your comments and instructions, please.

for H.E. Lawford
for District Controller of
Air Services.

encl.

LMH:AO'D

#66

Ottawa, Ontario, February 20, 1956.

008-T6-26

Reinstallation of Inertia Switches
Bristol 170 Aircraft CF-TFZ

5010-10-119
5008-T6-26 (CAE)

District Controller of Air Services,
302 Bloway-Henry Building,
Edmonton, Alberta.

Attention: District Aircraft Inspector

1. With reference to your letter of February 14, 1956, we are not proposing to set a compliance date for the re-installation of inertia switches in Bristol 170 aircraft formerly owned by Trans-Canada Air Lines. While this re-installation is, no doubt, desirable and is recommended, we do not require inertia switches in other types of Canadian aircraft and, consequently, we do not consider them to be mandatory for Bristol 170's registered in Canada.

(H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

Z.3

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

67 2 9-49

Edmonton, Alberta. February 20, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-T6-26 (CAE)	Installation of Controllers in Bristol Freighter CF-TFZ.	5008-T6-26

27007

TRANSPORT - RECORDS
FEB 22 P.M.
File 5008-T6-26

Director of Air Services,
Ottawa, Ontario.

Attention: Chief Aeronautical Engineer.

1. The subject installation was inspected at Edmonton on February 17th, 1956 and found to conform with Drawing No. 506. The entire installation was satisfactory as regards workmanship and materials.

J.H.Davenport

for District Controller of
Air Services.

JHD

7. Number of persons (a) killed Nil (b) seriously injured Nil

8. Nature of accident Landing

9. Type of flying (Private, non-scheduled, ferry, etc.) Charter

10. Opinion as to the cause of the accident (Use ICAO Manual of Accident Investigation) Landing area unsuitable

11. Damage

See attached

12. Infractions of: (a) The Air Regulations Nil

(b) Air Navigation Orders Nil

13. Disciplinary action proposed taken Nil

14. Remarks

Aircraft was finishing landing run

Aircraft May be salvaged winter of 1956 - 57.

15. Sketch

.....

District Controller, Air Services

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

2448

Date:- 31 May, 1956

District File No. 5008-T6-26

AIRCRAFT ACCIDENT REPORT

To: Director of Air Services
Department of Transport
Ottawa, Ontario

EDMONTON District

Attention: Superintendent, Air Regulations

1. (a) Date May 25, 1956 (b) Time (standard): 0930 M.S.T. Use 24-hour clock

2. (a) Type of Aircraft Bristol (b) Nationality and Registration Marks CF-TFZ

(c) C. of A. Valid to 27 Dec. 56 (d) C. of R. Valid Yes (X) No ( )

3. Name of Owner, Operator or Hirer Pacific Western Airlines

4. (a) Crew information

Name	Duty	Age	Licences & Ratings			Experience		
			Type	No	Expiry date	Total	On type	
							Total	Within 90 days
GAUTHIER,W.E.	Pilot	38	Airline Transport	AT-342	31-8-56	9240:	886:00	89:00

(b) Now enrolled in Approved School Yes ( ) No (X) Approved School graduate Yes ( ) No ( )

(c) Name and location of school N/A

(d) Instructor's name N/A Category

(e) Instructor's name who recommended issue of pilot's licence N/A Category

(f) Instructor's name who conducted flight test N/A Category

5. (a) Last point of departure Salmita Mine, N.W.T.

(b) Intended destination Beaverlodge Lake, N.W.T.

6. (a) Place of accident Latitude ° 'N. Longitude ° 'W. Altitude ASL 600'

(b) Terrain: Mountain ( ) Prairie ( ) Arctic ( ) Maritime ( ) Bush (X) Inter-city -populated or semi-populated areas-( )

(c) Weather:

Ceiling 1000V1200 &

Visibility 5V10 SW-

Wind Speed and direction E NW 10 - 15 mph

Were icing conditions encountered? Yes ( ) No (X)

Dew point

Temperature

Turbulence: light ( ) medium ( ) heavy ( )

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

Entered on Accident Cards
JUN 5 1956

(d) Did pilot obtain weather forecast or attend a meteorological briefing? Yes (X) No ( )

(Over)

C O P Y

69

10710 - 65th Avenue,
EDMONTON, Alberta.

May 27th, 1956.

District Controller of Air Services,
Edmonton, Alberta.

Dear Sir:

With respect to the accident to Bristol TFZ on May 25, 1956, below is the report as per 0/10/52.

1. Bristol 170, Canadian CF-TFZ

2. Owner & operator - Pacific Western Airlines. Hirer - Consolidated Beta Gamma.

3. Pilot in command - W. E. GAUTHIER.

4. Date & Time of accident - 0930 MST - May 25, 1956.

5. Last Point of Departure - Salmita Mine, N.W.T.
Point of Intended Landing - Beaverlodge Lake, N.W.T.

6. Position of aircraft - Beaverlodge Lake, N.W.T.

7. Nil (See note at bottom).

8. Part undercarriage fell through ice, buckling undercarriage, outside third of Port Wing, Left propeller badly damaged. Bottom of fuselage wrinked both sides. Fuselage wringled below wing rout on right side.

9. Non Scheduled Commercial Flight.

10. Aircraft wheel dropped through poor ice.

With respect to No. 7, one mechanic, R.J. McManus, bumped his head in aircraft when the wheel dropped through the ice. Some time later he complained of a headache. A Beaver aircraft was then on its way to Veaverlodge base with equipment to salvage aircraft. It returned to Yellowknife with Mr. McManus, who was placed under observation in Yellowknife hospital by Dr. Stanton. On May 26, when I returned to Yellowknife, permission was obtained for his release to proceed to Edmonton for further observation, as Dr. Stanton said he felt Mr. McManus might have suffered a slight concussion, but that he was well enough to proceed to Edmonton.

Yours truly,

"W. E. Gauthier" (SIGNED)

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

7p 2

EDMONTON, Alberta. 31 May, 1956
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Minor Accident - Bristol 170, CF-TFZ	5008-T6-26

8300

TRANSPORT - RECORDS
JUN 4 A.M.
File 5008-16-26

Director of Air Services,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith, for your information and records, please, copy of the pilot's report on the subject accident, submitted in accordance with Information Circular 0/10/52, dated May 27th, 1956, self-explanatory. Also attached is our Aircraft Accident Report Form 2448, in duplicate.

for District Controller of Air Services.

Encls.

COPY
5802 - 17198

IF UNDELIVERED RETURN
TO POINT OF MAILING

OFFICE AT_____

O. H. M. S.

pictures of wreck CF-TFZ

DEPARTMENT OF TRANSPORT
CANADA

51

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

12 2

Edmonton, Alta., 21 June, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170 Mk 31 CF-TFZ Minor Accident	5008-T6-26

10710

TRANSPORT - RECORDS
JUN 26 A.M.
File 5008-T6-26

Director of Air Services,
Ottawa.

Attention: Supt., Air Regulations.

1. Further to our report of May 31st last, herewith album of prints covering the wreck for your files, please.

for District Controller of Air Services.

Enc.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
9-49

Edmonton, Alberta, August 10, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Bristol 170 Mk. 31, CF-TFZ, damaged at Beaverlodge Lake when the left wheel broke through the ice.	5008-T6-26

TRANSPORT - RECORDS
AUG 14 A.M.
File 5008-T6-26

Director of Air Services,
Ottawa, Ontario.

14684

Attention: Chief Aeronautical Engineer.

1. An inspection of the damaged aircraft was carried out, at Beaverlodge Lake, N.W.T., on July 26, 1956. This inspection was carried out in conjunction with Mr. J. C. Walker, Service Engineer, Bristol Aircraft, Winnipeg, and Mr. F. Coulter, Supt. of Maintenance, Pacific Western Airlines, Vancouver.

2. Attached is a detailed report of the damage sustained by the aircraft and the possibilities of salvage prepared by Mr. J. C. Walker. We agree with Mr. Walker's report on this damaged aircraft and feel that the necessary repairs, to even ferry the aircraft out to the nearest main base at Edmonton, are not considered practical due to the cost involved in setting up proper facilities, for the repair and realignment of the aircraft at the location of the crash.

3. However, our main interest in the damaged aircraft is that if the aircraft is going to be salvaged, by either temporary or formal repairs for ferry flight to Edmonton, these repairs should have the approval of the Bristol Aircraft Limited, before issue of Ferry Authority to the owners; this will assure a reasonable standard of safety for the operating crew assigned to ferry the aircraft back to Edmonton.

J J Currie

for District Controller of
Air Services.

COPY

78

REPORT ON DAMAGE TO BRISTOL FREIGHTER CF-TFZ
AT BEAVERLODGE LAKE, N. W. T.

The above aircraft was visited on Thursday, 26th of July, 1956, at the scene of the crash at Beaverlodge Lake, N. W.T. by Mr. J. C. Walker, Service Engineer, Bristol Aircraft (Western) Limited, accompanied by Mr. F.W. Coulter, Maintenance Manager, Pacific Western Airlines, and Mr. J.J. Currie, District Aircraft Inspector of the Department of Transport, Edmonton, Alberta.

To recount briefly the events of the accident, CF-TFZ landed on the ice of Beaverlodge Lake on May 25th, 1956, and while turning at the end of its landing run, the Port Wheel broke through the ice throwing the Port Wing into contact with the ice, severely damaging the Main Spars and the Port side of the Fuselage. The Propeller Blades of the Port Engine were also extensively damaged. It was at first thought that the aircraft would break completely through the ice and sink, so emergency salvage operations were carried out in the form of removing certain equipment. It was, however, possible to drag the aircraft to the shore and beach it. This was the position the aircraft was in when the following examination was carried out.

The following is a detailed list of the damage incurred:

FUSELAGE:

1. The bottom Port side of the Fuselage from Station F140 to Station R340 is crushed and distorted in varying degrees, damage being sustained to Frames, Stringers and Skinning.

2. The lower portion of Port Fuselage Skin between Station F60 and Station R120 is badly wrinkled and crushed upward. Although it was not possible to examine the interior structure of the Port Side, due to the sound-proofing material and the presence of various salvaged items, it is obvious that some damage has been sustained to the Frames and Stringers in the form of buckling.

3. The Port side of the Fuselage adjacent to the undercarriage side brace attachment was subjected to some high loads at the time of the crash. This is indicated by a sideways displacement of the Fuselage amounting to four or five inches. This displacement takes the form of an inward bow starting at approximately Station F60 and extending to approximately Station 120.

4. Stress wrinkles in the section above Port Nose Cargo Doors.

5. The Starboard side of the Fuselage Skin shows severe stress wrinkles and distortion approximately fifteen inches below the Wing surface and extending horizontally from Station F40 to Station R140. A complimentary compression wrinkle shows in the Skin just forward of the Wing attachment, running in a vertical direction and including the area of the 16 gauge Double Plate and Skin.

6. The Fuselage Skin is distorted along the Starboard Centre Section Leading Edge Shoulder Fairing.

7. Internally the Starboard Fuselage Frames are buckling on way of Stringer cut-outs from Station F40 to Station R140 in varying degrees. The Port side is likely to be damaged in similar fashion but probably more severely. As mentioned before it was not possible to examine the structure internally from the Port side.

.....2

77

8. The Nose Door Bulkhead at Station F140 is badly buckled.

NOSE DOORS:

1. The Port Door is fairly severely buckled and damaged along its lower edge, due undoubtedly to contact with the ice at the time of the crash.

2. Starboard Door is similarly damaged but not so severely.

3. The two Doors will not close by some four or five inches and are out of alignment.

PORT WING:

1. The front and rear Spars are badly bent in an upward direction at Station 312. Both top Spar Boom extruded sections are completely broken and the Spar Web distorted.

2. The Wing Upper Skin is damaged and distorted from Station 300 to the Wing Tip.

3. The Wind Lower Skin is damaged and distorted from Station 252 to the Wing Tip and shearing of rivets is apparent.

4. Wing Ribs in the immediate vicinity of the damage are buckled.

5. The Aileron covering is damaged and internal damage to the Leading Edge and Ribs is apparent. In addition, the Aileron has incurred a longitudinal bow.

6. Pitot Heads and Masts are sheared off.

PORT UNDERCARRIAGE:

1. The Main Undercarriage Tube failed completely near its top end, just below the attachment to the Nacelle structure.

2. The "Y" bracing has failed.

3. The side bracing strut failed at approximately its mid point.

4. The Engine Nacelle Fairing is extensively damaged.

5. The Undercarriage Fairing completely demolished.

6. Pneumatic System Air Bottles and Lines damaged.

7. The Engine Mounting Structure does not appear to be damaged but this would have to be investigated further to determine that this is in fact the case.

STARBOARD UNDERCARRIAGE :

1. The Starboard Undercarriage has been displaced approximately four inches in an upward direction.

2. An associated bending of the attachment lug at the top of the main outer Tubes and twisting of the Torque Links is apparent.

PROPELLER:

The Propeller was not available at the site but it is understood that it was extensively damaged beyond permissible limit for repair.

.....3.

COCKPIT:

Due to emergency salvage operations when it was believed the aircraft would sink, the items were removed:

1. Both flight panels.
   NOTE: In this case the elevtrical leads to the Pilot's Panel were cut.

2. The overhead Ignition Switch and Fuel and Oil Cut-Off Panel.

3. Both loops from Cockpit to roof.

4. Magnetic Compass.

5. Radio Units.

MISCELLANEOUS:

1. The Port Tailplane was missing; it is understood, however, that this item was removed to facilitate salvage operations.

2. The engines had been inhibited by spraying inhibiting fluid into the Spark Plug holes and Exhaust Stacks. Exhaust Stack openings have been masked and the Propeller Shaft of the Port Engine greased. Both Engines are covered with canvas covers.

3. The aircraft is lying with its nose extending just over the edge of the lake, with the Port Wing supported with wood blocks. The banks of the lake immediately surrounding the aircraft are fairly heavily treed and slope upward away from the shore at a fair angle.

4. In order to ascertain the extent of damage to the under side of the Fuselage, it would first be necessary to raise the aircraft up.

SALVAGE POSSIBILITIES:

The site of the crash at Beaverlodge Lake, approximately 200 miles north of Yellowknife, is a most unenviable position to carry out repairs of this magnitude as all equipment and personnel have to be flown in and sustained by air for a considerable time and no landing strip is available for land based aircraft until the lake freezes over in the winter. It would, therefore, be necessary for all immediate supplies and equipment to be brought in by Float Plane.

NOTE: Supply by water is available only as far as Yellowknife.

The bigger problem in salvaging CF-TFZ is the problem of repairs to both the front and rear Spars. The Structure Department of Bristol Aircraft Limited, will not consider repairs to these components other than a complete rebuild including the introduction of new Spar Booms. Such extensive operations would require the use of Jigs and in our opinion, having due regard to the location of the accident and the conditions involved, is beyond the scope of Field repairs.

The alternative is to fit a new Wing, such a course is an almost physical impossibility and certainly an extremely expensive one in view of the difficulty involved in transporting the Wing, which when crated measures 41 ft. 3 ins. long by 17 ft. 10 ins. wide and 5 ft. 1 in. in depth.

.....4

75

NOTE: It would be necessary to transport the Wing by air at least 200 miles from Yellowknife to Beaverlodge, assuming that it could be brought from Edmonton to Yellowknife by water transport. Otherwise, it would have to be flown all the way from Edmonton.

Apart from the damage to the Port Wing, the extensive damage and distortion to the Fuselage has to be rectified and the Undercarriage realigned. The removal and correction of the Fuselage malalignment will need very careful and extensive replacement action and before any large areas of Skin could be removed it will be necessary to set the aircraft into some form of cradle to prevent further distortion.

It is extremely difficult with the aircraft in its present position and condition to decide the exact extent of malalignment. This can only be determined after the aircraft has been raised into a level position and careful rigging checks carried out.

Pacific Western Airlines have carried out a Propeller concentricity test to the Port Engine in accordance with the Manufacturers' recommendations, with the following results.

1. Front Cone Seat .0025" Indicator Reading.

2. Rear Cone Seat .001.

As the run-out check is withinpermissible limits, we contacted our Engine Service Department at Bristol Aero Engines Limited for their views on the possibility of shock load damage to the engine. They were of the opinion, in view of the results of the run-out check, and, that at the time of the accident, the engine was throttled back, that internal damage to the engine was unlikely. At the same time it is recommended that a careful check of the Engine Mounting Structure is carried out for cracks and distortion and a thorough run-up check be carried out on the engine before flight.

We feel that provided a new Wing is fitted, the repairs to the Fuselage and Undercarriage while being a most difficult and unenviable operation, is not an impossible task.

TO SUMMARIZE:

In view of the circumstances, the location of the crash, the magnitude of the repairs and replacement, the difficulty of maintaining supplies and equipment, the low temperatures, long hours of darkness and uncertainties of the Canadian winter and the financial outlay involved, the question of salvaging CF-TFZ does not appear practicable.

These cost figures are approximate only; before any final figure could be arrived at, it would be necessary to carry out a detailed study of the damage incurred and the methods to be employed for repair.

74

ESTIMATE OF COST FOR PERMANENT REPAIRS
TO BRISTOL FREIGHTER CF-TFZ

		$
1.	New Port Wing, includes ferry charges, incurances etc. from Bristol, England, to Beaverlodge Lake, North West Territories	50,000
2.	New Propeller	7,000
3.	New Port Undercarriage	5,000
4.	Manufacture of fixture for Supporting Centre Section and Fuselage, includes materials, hardware etc. but no transportation charges	2,500
5.	Materials for repairs to: Fuselage, Fuselage Nose Doors, Nacelle Structure and Fairings, Undercarriage Fairing, includes new Skins, Frames, Stringer Sections, hardware, etc., but not transportation charges	8,000
6.	Labour for repairs, includes repairs at crash site and at base; and covers aircraft strip and inspection, rebuild including new wiring reinstallation of loose equipment, etc. (15,000 hours at P.W.A's rate of $3.51).....	52,650
7.	Salvage equipment, includes Jacks, Chain Blocks, etc.,.....	5,000
8.	Engine Checks, final inspection, ground running flight test, clearance of snags, etc.....	1,000
9,	Engineering Services, includes repair schemes weight and balance report , etc., for renewal of C. of A.....	2,500
		$ 133,650

23

NOTE:

1. No account has been taken of Pacific Western Airlines' cost already incurred for salvage operations to date. (It is understood this amounts to $10,000.00)

2. The cost of setting up a camp at Beaverlodge Lake and maintaining supplies and equipment by air, cost of transporting materials in by air, pilot's salaries, northern bonus, etc., have not been considered and would have to be added to the grand total.

3. The grand total quoted is an approximate estimate only; it would be necessary to carry out a detailed examination of the aircraft and the methods to be employed for repair, before quoting a final figure.

4. No consideration has been given to possible delays due to weather conditions.

5. Should the run-up checks on the Port Engine prove unsatisfactory, it might be necessary to pull the Engine, with an additional increase in costs.

6. According to Pacific Western Airlines' estimate, the above items (except item 5) amount to something like $31,000.00.

HSR:AO'D

Ottawa, Ontario, August 27, 1956.

5008-T62-6 — Bristol 170 Mk. 31, CF-TFZ, damaged at Beaverlodge Lake when the left wheel broke through the Ice — 5008-T6-26 (CAE)

District Controller of Air Services,
302 Blowey-Henry Building,
Edmonton, Alberta.

Attention: District Aircraft Inspector

1. With reference to your letter of August 10, 1956, with respect to the damage of Bristol 170 Mk. 31 aircraft, CF-TFZ, it is pointed out that insofar as repair schemes are concerned, we will accept the manufacturer's methods. However, this does not preclude the operator from preparing his own repair schemes and submitting them to Headquarters for approval without reference to the original manufacturer.

(H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

81-2

EDMONTON, Alberta. 27 August, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	NORTHWEST INDUSTRIES LIMITED Bristol CF-TFZ	5008-T6-26 5201-60

TRANSPORT - RECORDS
AUG 31 P.M.
File 5008-T6-26

16164

Director of Air Services,
OTTAWA, Ontario.

Attention: Chief Aeronautical Engineer.

1. Attached herewith, for your approval, Northwest Industries Limited Drawing No. 9054001, covering the installation of Loop Radio Compass in Bristol aircraft CF-TFZ.

2. May we be advised if the subject drawings meet with your approval.

T.E. Davenport
for District Controller, Air Services.

Encls.

82

MDJ:AO'D

Ottawa, Ontario, September 4, 1956.

5008-T6-26
5201-60

Northwest Industries Limited
Bristol CF-TFZ

5008-T6-26 (CAE)

District Controller of Air Services,
302 Blowey-Henry Building,
Edmonton, Alberta.

Attention: District Aircraft Inspector

1. Installation of a Bendix MN 240 Loop to Bristol aircraft CF-TFZ in accordance with Northwest Industries Limited Drawing No. 9054001, Issue A, is satisfactory and duplicate stamped copies are returned herewith.

for (H.S. Rees),
Chief Aeronautical Engineer,
for
Controller of Civil Aviation.

Encls.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

84 2 9-49

Edmonton, Alberta, October 22, 1957.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Cancellation Formal Certificates CF-TFZ	5008-T6-26

20125

TRANSPORT - RECORDS
OCT 24 AM
5008-T6-26
File

Director General, Air Services,
Department of Transport,
No. 3 Temporary Bldg.,
Ottawa, Ontario.

Attention: Controller, Civil Air Regulations

1. Please refer to our letter dated May 31st, 1956, submitting accident report on the subject aircraft.

2. Herewith Affidavit from P.W.A. Ltd., dated the 18th instant stating that they are unable to locate the formal Certificates for cancellation.

3. In view of the foregoing it is recommended that the subject Certificates now be considered as cancelled and the registration CF-TFZ removed from our Canadian aircraft register.

for District Director, Air Services

Encl

Noted

COPY

PACIFIC WESTERN AIRLINES LTD.

83

3.29

No. 7 Hanger
Municipal Airport
Edmonton, Alberta
October 18, 1957

Department of Transport
302 Blowey-Henry Building
Edmonton, Alberta

Attention: Superintendent of Air Regulations

Subject: Certificates for Bristol Aircraft, CF-TFZ

Dear Sir:

This is to report that to the best of my knowledge the Certificate of Registration No. 14706 and the Certificate of Airworthiness No. 4288 in respect to Bristol 170, Mark 31, Serial No. 13139 have become lost or destroyed. A thorough search of all Vancouver and Edmonton files has been carried out.

Yours truly,

PACIFIC WESTERN AIRLINES LIMITED

W. J. DICK
Chief Inspector, N. D.

WJD/nb

Sworn before me at Edmonton, Alberta, this 18th day of October, 1957

_____
Commissioner of Oaths for the Province of Alberta

FILE No. 5008 - Z1 - 9

VOLUME No 1

VOL. 1
5008 - Z1 - 9

DEPARTMENT OF TRANSPORT

FROM FEB. 1947
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF-ZAI - SPARROW GLIDER.

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 10 1947	72290	CAR			MAY 10 1947
MAY 27 1947	As requested	CAR.			MAY 28 1947
MAY 30 1947	6776	CAR			JUL 28 1947
JUL 28 1947	JUL 30 1947	CAR			
NOV 23	48	33737			AUG 1 - 1947
FEB 2 - 1949		CAR			NOV 26 48
FEB 7 - 1949	42427	CAR			FEB 7 - 1949
FEB 8 - 1949		Gen Acct			FEB 8 - 1949
JUN 21 1950	MR. PATTERSON 2420	CAR			FEB 10 1949
JUN 24 1950		MAI			JUN 26 1950
DEC 10 1950	40149	SRL			DEC 10 1950
	Cancelled aircraft	Records			DEC 11 1950

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER BRANCH

1
8-46

COPY FOR DEPT'L. FILE

Received $ 5.03

O. R. No. 69776

Date 10/2/47

Clerk E.O.

72290

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(TO BE SENT IN DUPLICATE)

THE CONTROLLER OF CIVIL AVIATION
DEPARTMENT OF TRANSPORT
OTTAWA

APPLICATION IS HEREBY MADE FOR THE REGISTRATION UNDER THE AIR REGULATIONS OF THE GLIDER DESCRIBED BELOW.

ENCLOSED IS $ 5.00 BEING FEES FOR REGISTRATION. THE PARTICULARS GIVEN BELOW ARE TRUE IN EVERY RESPECT.

SIGNATURE OF APPLICANT George M Kelly Jr. DATE OF APPLICATION Jan 25/47

OWNER, OR OWNERS OF GLIDER

TRANSPORT-RECORDS
FEB 25 AM
5008-31-9
File

NAME IN FULL (In Block Capitals) | PERMANENT ADDRESS | NATIONALITY

DE HAVILLAND GLIDING CLUB

DOWNSVIEW, ONTARIO

PURPOSE FOR WHICH GLIDER IS TO BE USED (State, Commercial, Instruction or Private) INSTRUCTION

USUAL STATION TORONTO DATE OF MANUFACTURE OR RECONSTRUCTION 1942

ACCOMMODATION FOR WHAT NUMBER OF PASSENGERS 1 TYPE UTILITY MAKER'S NO. 1

SPAN OR BREADTH O/A IN FEET 38 Ft. LENGTH O/A IN FEET 20 Ft.

HEIGHT O/A IN FEET 6 Ft. WEIGHT EQUIPPED, BUT WITHOUT LOAD 234 Lbs.

TOTAL WEIGHT AUTHORIZED (FULLY LOADED) IN LB. 444 Lbs. AIR SPEED MILES PER HOUR 30-125

TYPES OF LAUNCHING TO BE AUTHORIZED: Catapult, Winch, Motor-car tow, Aero tow, Rocket assisted
(Strike out those not applicable)

EQUIPMENT -- (GIVE NUMBER AND TYPE) - 1. INSTRUMENTS. TURN & BANK, ALTIMETER, AIRSPEED VARIOMETER, RATE OF CLIMB, COMPASS.

2. LIGHTS NO 4. TYPES OF RELEASE OR HOOK DE HAVILLAND HOOK

REGISTRATION
(NOT TO BE FILLED IN BY APPLICANT)

GLIDER INSPECTED ON

PARTICULARS ACCURATE AS CORRECTED

MODIFICATIONS FROM TYPE ARE INDICATED ON ANNEXED SHEET

REGISTRATION RECOMMENDED WITH THE FOLLOWING SPECIAL CONDITIONS

DATE

SIGNATURE

RECEIVED JAN 29 1947 TRANSPORT DEPARTMENT OTTAWA

REGISTRATION APPROVED AND REGISTRATION MARK IS F ALLOTTED.

5.06

REGISTRATION Approved or Not approved for reasons annexed.

(Superintendent, Air Regulations.

NOTE: THE FEE FOR ORIGINAL REGISTRATION IS $3.00. IN THE CASE OF CHANGE OF OWNERSHIP, THE FEE FOR RE-REGISTRATION IS $3.00.

Cash $5.06 cheque

G.L

1 0

3

~~5008-21-1~~
~~5008-21-5~~
~~5008-21-6~~
~~5008-21-7~~
~~5008-21-8~~
~~5008-21-8~~
~~5008-21-9~~
~~5008-21-6~~
5008-21-9
~~5008-21-10~~
~~5008-21-11~~

GF/VS

REGISTERED

Ottawa, May 9th,1947

Mr. A.E. Le Cheminant,
Honorary Secretary,
Soaring Association of Canada,
603 Parkdale Ave.,
Ottawa, Ont.

Dear Sir:-

Please find enclosed applications received at this office from club members of the Soaring Association of Canada for the registration of Gliders.

As agreed upon by the Soaring Association of Canada and this Department, the applications are forwarded for your certification as to their serviceability, and that they conform to the manufacturer's design and specifications.

Yours truly,

[illegible]
Superintendent, Air Regulations

Encls.

LIST OF ENCLOSURES

Registration	CF-ZAA	Glider type	LNE-1 Maker's No.31521
"	CF-ZAB	" "	Nacelle Dagling Maker's No.GGCD/2
"	CF-ZAC	" "	Schweizer 2-22 Maker's No. 9
"	CF-ZAD	" "	Cadet Maker's No.SSK/FF296
"	CF-ZAE	" "	Schweizer SGU 1-19 Maker's No. 15
"	CF-ZAF	" "	SGU 1-19 Maker's No. 21
"	CF-ZAG	" "	SGU 1-19 Maker's No. 31
"	CF-ZAH	" "	Schweizer TG-3A-SW Maker's No. W535-AC-26238
"	CF-ZAI	" "	Utility Maker's No. 1
"	CF-ZAJ	" "	LK-10A Maker's No. 96
"	CF-ZAK	" "	LK-10A Maker's No. 114

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	✓
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			TRANSPORT (AIR) 3712

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

5008-Z1-9 ✓

OTTAWA ONTARIO MAY 27 1947

HTP/RS

file

DE HAVILLAND GLIDING CLUB
DOWNSVIEW ONTARIO

AR 22 YOU MAY ACCEPT THIS TELEGRAM AS YOUR AUTHORITY TO OPERATE UTILITY GLIDER MAKERS NUMBER 1 REGISTRATION CF-ZAI PENDING ISSUE OF FORMAL CERTIFICATES STOP THIS AUTHORITY NOT VALID AFTER JULY TWENTY-EIGHT FORTY-SEVEN

cc: DIAR TORONTO CIVIL AVIATION
cc: Mr. Shenstone
c/o AV Roe Canada Limited, Toronto, Ontario

Emss

CF-ZAI

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS
(TO BE SENT IN DUPLICATE)

THE CONTROLLER OF CIVIL AVIATION
DEPARTMENT OF TRANSPORT
OTTAWA

APPLICATION IS HEREBY MADE FOR THE REGISTRATION UNDER THE AIR REGULATIONS OF THE GLIDER DESCRIBED BELOW.

ENCLOSED IS $.5.00 BEING FEES FOR REGISTRATION. THE PARTICULARS GIVEN BELOW ARE TRUE IN EVERY RESPECT.

SIGNATURE OF APPLICANT....Grace M. Kellogh.... DATE OF APPLICATION....Jan. 25./47.
OWNER, OR OWNERS OF GLIDER

NAME IN FULL (In Block Capitals) — PERMANENT ADDRESS — NATIONALITY

DE HAVILLAND GLIDING CLUB

DOWNSVIEW, ONTARIO

PURPOSE FOR WHICH GLIDER IS TO BE USED (State, Commercial, Instruction or Private)...INSTRUCTION..

USUAL STATION....TORONTO....DATE OF MANUFACTURE OR RECONSTRUCTION.....1942.....

ACCOMMODATION FOR WHAT NUMBER OF PASSENGERS.....1.....TYPE...UTILITY..MAKER'S NO...1.....

SPAN OR BREADTH O/A IN FEET.....38.Ft.....LENGTH O/A IN FEET.....20.Ft.....

HEIGHT O/A IN FEET.....6 Ft.....WEIGHT EQUIPPED, BUT WITHOUT LOAD.....234 Lbs.....

TOTAL WEIGHT AUTHORIZED (FULLY LOADED) IN LB...444 Lbs.AIR SPEED.....MILES PER HOUR...30-125.

TYPES OF LAUNCHING TO BE AUTHORIZED: Catapult, Winch, Motor-car tow, Aero tow, ~~Rocket assisted~~
(Strike out those not applicable)

EQUIPMENT -- (GIVE NUMBER AND TYPE) - 1. INSTRUMENTS...VARIOMETER, TURN & BANK, ALTIMETER, AIRSPEED, DATE OF CURVE, COMPASS.

2. LIGHTS.....NO.....4. TYPES OF RELEASE OR HOOK...DE HAVILLAND HOOK

REGISTRATION
(NOT TO BE FILLED IN BY APPLICANT)

GLIDER INSPECTED ON.....

PARTICULARS ACCURATE AS CORRECTED.....

MODIFICATIONS FROM TYPE ARE INDICATED ON ANNEXED SHEET.....

REGISTRATION RECOMMENDED WITH THE FOLLOWING SPECIAL CONDITIONS.....

.....

DATE.....

SIGNATURE.....

REGISTRATION APPROVED AND REGISTRATION MARK C.F.....ALLOTTED.

REGISTRATION
Approved or
Not approved for reasons annexed.

.....
Superintendent, Air Regulations.

NOTE: THE FEE FOR ORIGINAL REGISTRATION IS $3.00 . IN THE CASE OF CHANGE OF OWNERSHIP, THE FEE FOR RE-REGISTRATION IS $3.00.

SOARING ASSOCIATION OF CANADA Subsequent Issue II
Approved Type

Original
on file
5008-Z1-1

THE SOARING ASSOCIATION OF CANADA

Box 851, Ottawa,
May 28, 1947.

A 6776

Ref. Your 5008-Z1-1 to 11 incl.
Dated May 9, 1947.

Department of Transport,
No. 3 Temporary Building,
Ottawa, Ontario.

TRANSPORT-RECORDS
MAY 30 A.M.
File 5008. Z1-9

Attention Mr. C.T. Travers

Dear Mr. Travers:

Returned herewith are the applications received under cover of your letter of the above references and date. In accordance with the SAC Bulletin on Approved Gliders, Issue 2, copy of which is in your possession, all the listed gliders are SAC approved types.

With the exception of the application from the Vancouver Club for the TG3A Mk. CFZAH, all gliders are to the best of the knowledge available to the Association serviceable and a certificate of registration is recommended. The TG3A above mentioned is known to have been seriously damaged last December and as far as is known has not been repaired. It is suggested that this application be reconsidered when a certificate as to its serviceability has been received from the owners.

Yours truly,

(A.N. LeCheminant),
Secretary-Treasurer.

ENTERED
ON CARDS

5961(R)

2462A
6-41

6

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5961

NATIONALITY AND REGISTRATION MARKS CF-ZAI

1. Type and description	Utility (Glider)
2. Name and address of constructor	
3. Constructor's serial number	1
4. Name of owner	DeHavilland Gliding Club,
5. Address of owner	Downsview, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Toronto, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 10th day of June, 19.47, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-ZAI and is of Canadian nationality.

Given at Ottawa this 10th day of June, 19.47.

H.C.P.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

Items Commercial

/RM

5008-Z1-9

Ottawa, Ontario,
July 23rd, 1947.

REGISTERED

DeHavilland Gliding Club,
Downsview,
Ontario.

Gentlemen,

Enclosed please find Certificate of Registration No. 5961, for your Utility Glider, CF-ZAI.

Yours very truly,

(S. Graham),
Superintendent, Air Regulation.

Encl.

Posted in Treasury 1/8/47

(C.A.D.) 28-7-47

THE DE HAVILLAND AIRCRAFT
OF CANADA, LIMITED

STATION "L" - TORONTO - CANADA

CABLES
"MOTH" TORONTO

SHIPMENTS
WEST TORONTO

Postal Station "L",
Toronto, Ontario.
November 20, 1948

A.33737

TRANSPORT-RECORDS
NOV 23 A.M.
File 5008-Z1-9

The Superintendent,
Air Regulations,
Department of Transport,
Civil Aviation Division,
Ottawa,
Ontario.

Reference: Your File No. 5008-Z1-9

Dear Sir:

This is to inform you that ownership of Aircraft CF-ZAl, utility glider, has been transferred to the Toronto Gliding Club. Certificate of Registration of this aircraft was No. 5961.

Yours truly,

E.H. Dowell
President
de Havilland Gliding Club.

ENTERED ON CARDS

ehd/ac

9

HTP/HMC

OTTAWA ONTARIO NOVEMBER 26, 1948

Glider CF-ZAI 5006-Z1-9;

District Controller of Civil Aviation,
260 Richmond Street West,
TORONTO, Ontario

ATTENTION: District Inspector, Air Regulations

1. Enclosed is a copy of a letter received from the DeHavilland Aircraft of Canada, Limited, Toronto, Ontario, advising of the transfer of the DeHavilland Gliding Club to the Toronto Gliding Club. It is submitted for whatever action you deem necessary.

(H. Graham),
Superintendent, Air Regulations.

Encl.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

15

2-46

Toronto, Ontario, February 1st, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z1-9	Re-Registration of aircraft CF-ZAI	5008-Z1-9

TRANSPORT-RECORDS
FEB 9 P.M.
File 5008-Z1-9

A42427

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: S.A.R.

1. Attached herewith are the following papers relating to re-registration of Sparrow Glider aircraft C F - Z A I, Serial No. 1, in the name of "Toronto Gliding Club":

(a) Application form in duplicate.
(b) Fee of $5.00 (see page 8854 in cash book, receipt no. 45341).
(c) Copy of two letters of ownership.
(d) Old Certificate of Registration No. 5961.
(e) Copy of letter of temporary authority.

Issue Re-Reg
for C.P.
H.H.

D.W. Saunders

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

/alb
attach.

Yes

7723(R)

14

Form 2412

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in ~~duplicate~~) triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Enclosed is $3.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant TORONTO GLIDING CLUB per J. Fraser (President) Date of Application 7th December, 1948

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
TORONTO GLIDING CLUB	421 DOUGLAS AVENUE	CANADIAN

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Commercial

Usual Station Ontario County Flying Club, Oshawa Date and place of manufacture or reconstruction 1942 deHavilland Aircraft of Canada Limited

Accommodation for what number of passengers One Type Sparrow Maker's No. 1

Span or breadth o/a in feet 38.5 Length o/a in feet 22.5

Height o/a in feet 6 Weight equipped, but without load 234

Total weight authorized (fully loaded) in lbs 449 Air speed 100 miles per hour

Types of launching to be authorized: Catapult, Winch, Motor-car tow, Aero tow, ~~Restricted~~
(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments 1 ASI, 1 Altimeter, 1 Bank Indicator, 1 Compass 1 Variometer

2. Lights None 3. Types of release or hook deHavilland design automatic release on back pull

REGISTRATION
(Not to be filled in by Applicant)

Glider inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F.-ZAI allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

Inc Co (1948)

COPY

13

ORIGINAL ON FILE.....

COPY FOR FILE.....

THE DE HAVILLAND AIRCRAFT
OF CANADA LIMITED

Postal Station L, Toronto

Oct. 22nd, 1948.

Toronto Gliding Club,
Oshawa Airport,
OSHAWA, Ontario.

Gentlemen: Attention Mr. Jack Ames.

This letter will certify that the Toronto Gliding Club are the owners of D✱H Sparrow Glider, registration CF-ZAI, which was donated to them by this company on August 23rd, 1948.

We trust that you will contact the Department of Transport in order that the necessary transfer of ownership may be made. For this purpose we are sending this letter in duplicate in order that you may have an extra copy for the Department.

Yours very truly,

THE DE HAVILLAND AIRCRAFT OF CANADA LIMITED

Geo. J. Mickleborough
Secretary - Treasurer

GJM/LC

8
11-47

COPY

12

ORIGINAL ON FILE.....

COPY FOR FILE.....

THE DE HAVILLAND AIRCRAFT
OF CANADA LIMITED

Postal Station L, Toronto

Postal Station L,
Toronto, Ontario,
November 20, 1948.

The Superintendent,
Air Regulations,
Department of Transport,
Civil Aviation Division,
Ottawa, Ontario.

Reference: Your file No. 5008-Z1-9.

Dear Sir:

This is to inform you that ownership of aircraft CF-ZAI, Utility Glider, has been transferred to the Toronto Gliding Club. Certificate of Registration of this aircraft was No. 5961.

Yours very truly,

Sgd. (E.H. Dowell),
President,
DeHavilland Gliding Club.

8
11-47

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5961

NATIONALITY AND REGISTRATION MARKS CF-ZAI

1. Type and description	Utility (Glider)
2. Name and address of constructor	
3. Constructor's serial number	1
4. Name of owner	DeHavilland Gliding Club,
5. Address of owner	Downsview, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Toronto, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 10th day of June, 1947 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-ZAI and is of Canadian nationality.

Given at Ottawa this 10th day of June, 1947.

H. L. Patten

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

COPY

10

ORIGINAL ON FILE.....

COPY FOR FILE.....

TOR:5008-Z1-9

260 Richmond St. W., Toronto,
February 1st, 1949.

Toronto Gliding Club,
421 Douglas Avenue,
TORONTO, Ontario.

Gentlemen:

Receipt is acknowledged of your application for re-registration of Sparrow Glider aircraft C F - Z A I, Serial No. 1, together with the following papers:

(a) Application form in triplicate.
(b) Fee of $5.00 - receipt no. 45341 enclosed.
(c) Letter re ownership.
(d) Old Certificate of Registration No. 5961.

Pending the issue of the formal Certificate of Registration, this letter will be your authority to operate C F - Z A I as a commercial aircraft on day visual flying only. This authority is valid until May 1st, 1949.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W. Saunders),
District Inspector, Air Regulations,
Toronto.

/alb
encl.

8
11-47

/RM

16

2462A
4-48

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7723

NATIONALITY AND REGISTRATION MARKS CF-ZAI

1. Type and description	Utility (Glider)
2. Name and address of constructor	
3. Constructor's serial number	1
4. Name of owner	Toronto Gliding Club,
5. Address of owner	421 Douglas Ave., Toronto, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Oshawa, Ontario.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of February 19 49, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-ZAI and is of Canadian nationality.

Given at Ottawa this 5th day of February 19 49.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/mm

17

~~5008-Z1-19~~
5008-Z1-9

Ottawa, Ontario,
February 5th, 1949.

REGISTERED

Toronto Gliding Club,
421 Douglas Avenue,
Toronto, Ontario.

Gentlemen,

Enclosed please find Certificates of Registration Nos. 7724 and 7723, for your Laister-Kauffmann 10A and Utility Gliders, with markings CF-ZAS and CF-ZAI.

Yours very truly,

NOTED
FEB 10 1949
Revenue Audit
Dept. of Transport

(S. Graham),
Superintendent, Air Regulations.

Encls.

cc. D.C.A.S.,
Att: D.I.A.R. Toronto, Ont.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-47

TORONTO, June 20th, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z1-9	Accident: Sparrow Glider CF-ZAI	5008-Z1-9

12420

TRANSPORT - RECORDS
JUN 21 P.M.
5008-Z1-9
File

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: C.A.R.

1. Herewith copy of a report submitted by Mr. J. W. Ames, President of the Toronto Gliding Club Inc., and Mr. C.H. Miller, pilot, giving their account of an accident involving Sparrow Glider CF-ZAI, which occurred on Sunday, June 4th, 1950, at the Oshawa Airport.

2. Since the pilot was not hurt and no passengers were carried, it is felt by this office that no further action is necessary.

3. Our Headquarters will be advised immediately a decision has been reached in respect to rebuilding this glider.

S.T. Grant
for District Superintendent, Air Regulations,
for District Controller of Air Services,
Toronto.

noted
26/6/50

COPY

TORONTO GLIDING CLUB
INCORPORATED

Report on the Crash of the Sparrow (CF-ZAI) on Sunday, June 4, 1950.

The following information given by C.H. Miller to J.W. Ames on June 5, 1950.

General: The Sparrow took off at approx. 10:15 A.M. on Sunday, June 4, 1950, piloted by C.H. Miller (a member of the Toronto Gliding Club), towed by CF-BQT flown by Wm. Van Allen. The landing was made in a field behind the Recreation Hall, just beyond the airport boundary, and culminated in a deliberate 'cartwheel' in order to avoid the boundary fence which probably would have been hit while still airbourne. The glider fuselage was severely damaged with the main bulkhead, only, remaining intact. No apparent damage occurred to the starboard wing or tail surfaces. The port wing suffered Leading Edge damage near the tip and Trailing Edge fractures near the root.

The pilot was unhurt except for a bruised forearm which probably hit the instrument panel.

Pre-Flight Details: The Sparrow had been completely inspected for its annual C of R renewal and test flown after this inspection by F.H. Brame on May 28, 1950. A Daily Inspection was performed by Miller prior to the flight and the aircraft certified as airworthy, except for the Air Speed Indicator, which may have been damaged on June 3rd, when a child was caught blowing into the pitot tube.

Weather: Indications were for a perfect soaring day. Cumulus was beginning to develop and a strong and gusty wind (20 - 30 m.p.h.) was blowing from the North West.

Flight Details: The take off was made at 10:15 A.M. followed by a climb up wind to 2000' just north of Whitby. The A.S.I. registered 40-42 m.p.h. on climb and moved erratically. After release Miller stalled the glider, getting an A.S.I. reading of 20-22, and then continued the flight in very unstable air. He expected to soar, but found the lift narrow and difficult to hold. He therefore headed back toward the airport,

realized from 700 feet, that he would have difficulty in making its edge, and carried on hoping to clear the boundary fence and land somewhat cross wind. This was not possible and he realized as he turned in at A, in diagram, that he would have to land short of the fence. At this stage he expected to get down without difficulty, however he remained airborne too long, helped by gusts and ground effect, and had to dig his starboard wing tip (at mark B) to prevent a head on crash into the fence. He then apparently swung around in a cartwheel touching first the nose fuselage and then the port wing, winding up still right side up at the position marked C.

The fuselage was severely damaged, but the components remained attached. The harness held although Miller's hip and the parachute had evidently touched the ground. The altimeter registered 6000 feet after the impact. The other instruments were apparently undamaged.

Aftermath: The components were disassembled and removed to the hangar. A decision has not yet been made as to whether or not the fuselage should be rebuilt and the damaged wing repaired.

Conclusions:

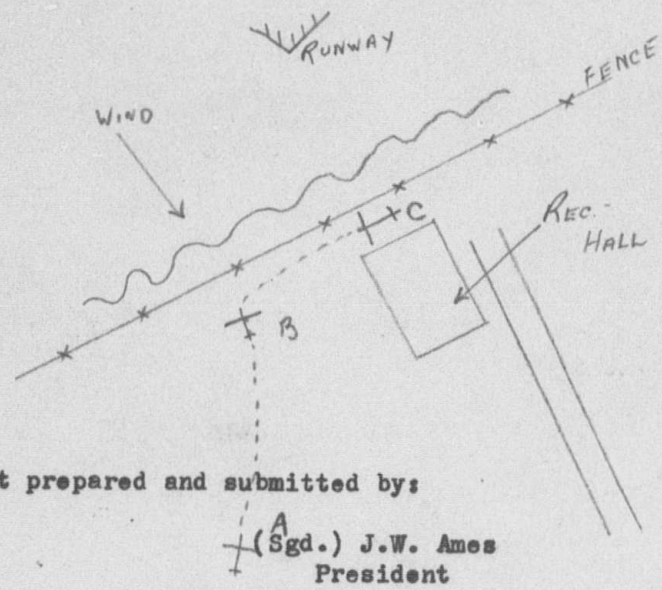
A. The crash was evidently, and by the pilot's own admission, the result of pilot error. The faulty A.S.I. was not a factor as the pilot was familiar with the aircraft and had no difficulty judging speed by sound and altitude, helped by the open cockpit.

   A more suitable landing area should have been chosen from about 700 feet when it became apparent to the pilot that he might not make the airport. There were several fields available into which he could have made a normal approach and landing. The field selected at low altitude was big enough for a safe landing, and a correction to the overshoot by sideslipping could have been made in time.

B. The pilot's experience and training should have been adequate for the type of flying he was doing. It was known that he had a tendency to overshoot and had been practicing landings with suitable success in the same glider on the previous Sunday.

C. We are still convinced that dual training by aerotow is the best form of instruction. The one fault lies in the relatively few landings the student makes compared to other training methods that use ground launching means. We should therefore concentrate on teaching correct landing procedure, and curb faulty tendencies as soon as they are apparent.

D. As a result of this accident, more serious attention will be paid to foreced landing practice and normal precision landing requirements for all students, and junior pilots.



Report prepared and submitted by:

(Sgd.) J.W. Ames
President

Agreed that details and conclusions are correct:

(Sgd.) Chas. H. Miller

c.c.: S.A.C., Ottawa
S.A.C., Instruction file
T.G.C. records

JA/js

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 22
10-56

Toronto, Ontario, December 8th, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
	5008-Z1-9	5008-Z1-9 (ART)

SUBJECT: Sparrow Glider CF-Z A I

TRANSPORT - RECORDS
DEC 9 A.M.
File 5008-Z1-9

Director General, Air Services,
Department of Transport,
No. 3 Temporary Building,
OTTAWA, Ontario.

40149

1. The last owner of the subject aircraft has just advised this office that this aircraft was removed from service almost ten years ago, and that as far as he is concerned the aircraft is no longer in existance.

2. We have on our file a Statutory Declaration from the last registered owner to the effect that the Certificate of Registration had been lost. This Declaration was prepared only two days prior to the last flight of this aircraft on June 4th, 1950, which resulted in the aircraft receiving substantial damage.

3. In view of the foregoing, it is recommended that this aircraft be deleted from the Canadian Civil Aircraft Register.

Regional Director, Air Services.

Coded & Noted
10.12.59

Certs cancelled
10.12.59

FILE No. 5008 - Z 1 - 13 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM MAY 1947

TO

5008 - Z 1 - 13 VOL. 1

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND [illegible]

FILE TITLE CF - ZAM - SLINGSBY FALCON I GLIDER.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER BRANCH

1
8-46

HTP/CS

Ottawa, May 29, 1947.

GLIDER

5008-Z1-13
~~5008-Z1-14~~
~~5008-Z1-15~~

District Inspector, Air Regulations,
910 Confederation Bldg.,
1253 McGill College Ave.,
Montreal 2, P.Q.

1. Reference your letters of May 27th, 1947, the following registration markings have been alloted to:

(1) Registration CF-ZAC allotted to glider owned by Montreal Gliding and Soaring Club.

(2) Registration CF-ZAN allotted to glider owned by Mr. John D. Agnew.

(3) Registration CF-ZAM allotted to glider owned by McGill University Gliding Club.

(H. Graham)
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-46

910 Confederation Building,
Montreal 2, Que., May 27, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5004-1	GLIDER	5004-1

TRANSPORT-RECORDS
MAY 29 A.M.
File

A 6752

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. An Application has been received from McGill University Gliding Club for registration of one Slingsby Falcon I Glider accompanied by fees of $5.00.

2. It is requested that Registration Markings be allocated for this aircraft and communicated to this office at your earliest convenience please.

J. P. Tournier,
For District Inspector, Air Regulations.

JPF:gd

CF-ZAM

OTTAWA ONTARIO DECEMBER 13, 1950

HTP/MEC

5008-Z1-13;
5008-Z1-15;

GLIDERS: CF-ZAM & CF-ZAO

District Controller of Air Services,
Trans-Atlantic Administration Bldg.,
Montreal Airport,
DORVAL, P.Q.

ATTENTION: District Superintendent, Air Regulations

1. Reference is made to your letters of May 27, 1947, allotting registration markings for gliders to be registered in the name of Montreal Gliding Club and McGill University Gliding Club. Registration CF-ZAO and CF-ZAM were allotted respectively on May 29, 1947.

2. Since dispatching our letter allotting these registration markings no further information was received on these aircraft. It is requested that you investigate and advise headquarters.

(C.T. Travers),
Superintendent, Air Regulations.

FILE No. 5008 - Z 1 - 15 VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM MAY 1947
TO

5008 - Z 1 - 15 VOL 1

SUBJECT AIRCRAFT INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF - ZAO — GLIDER

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER BRANCH

1
8-46

HTP/CB

Ottawa, May 29, 1947

~~5008-21-13~~
~~5008-21-14~~
5008-21-15

GLIDER

District Inspector, Air Regulations,
910 Confederation Bldg.,
1253 McGill College Ave.,
Montreal 2, P.Q.

2

1. Reference your letters of May 27th, 1947, the following registration markings have been alloted to:

(1) Registration CF-ZAO allotted to glider owned by Montreal Gliding and Soaring Club.

(2) Registration CF-ZAN allotted to glider owned by Mr. John D. Agnew.

(3) Registration CF-ZAM allotted to glider owned by McGill University Gliding Club.

([illegible])
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-46

910 Confederation Building,
Montreal 2, Que., May 27, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	GLIDER	

TRANSPORT-RECORDS
MAY 29 A.M.
File

/

A 6782

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. An application has been received from the Montreal Gliding and Soaring Club for the registration of one Primary Glider accompanied by fees of $5.00.

2. It is requested that registration markings be allocated for this aircraft and communicated to this office at your earliest convenience, please.

J. P. Fournier,
For District Inspector, Air Regulations.

JPF:gd

CF-ZAO

3

OTTAWA ONTARIO DECEMBER 13, 1950

MTP/MMG

GLIDERS: CF-ZAM & CF-ZAO

~~5008-Z1-13;~~
5008-Z1-15;

District Controller of Air Services,
Trans-Atlantic Administration Bldg.,
Montreal Airport,
DORVAL, P.Q.

ATTENTION: District Superintendent, Air Regulations

1. Reference is made to your letters of May 27, 1947, allotting registration markings for gliders to be registered in the name of Montreal Gliding Club and McGill University Gliding Club. Registration CF-ZAO and CF-ZAM were allotted respectively on May 29, 1947.

2. Since dispatching our letter allotting these registration markings no further information was received on these aircraft. It is requested that you investigate and advise headquarters.

(C.T. Travers),
Superintendent, Air Regulations.

FILE No. 5008 - Z2 - 14 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM AUG. 25, 1949
TO

SUBJECT AIRCRAFT, INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - ZBN - UTG-1 GLIDER.

CROSS REFERENCES

5008 - Z2 - 14 VOL. 1

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) SERVICES DATE LEFT OFFICE	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUL 21 1953	18639	CAR		GJ	JUL 23 1953
JUN 12 1953	18643	CAR		GJ	JUL 23 1953
JUL 23 1953		CAE			JUL 23 1953
JUL 13 1953	Memo 6597	Trans Air Op		Wb GJ	JUL 21 1953 JUN 1 1955
MAY 31 1955	8304	ARL		GJ	JUN 1 1955
JUN 1 1956	Mr. Gordon 14329	ARR		wb	AUG 10 1955
AUG 8 1955	—	ARL		GJ	AUG 10 1955

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER SECTION

4-53

FILE No. 5008 - Z 2 - 14 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM Aug 25, 1949
TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF - ZBN GLIDER

CROSS REFERENCES

5008 - Z 2 - 14 VOL. 1

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
SEP 1 - 1949	22200.	CAR	~~25-10-49~~	[illegible]	SEP 6 - 1949
OCT 24 1949	BF Oct 25	CAR	~~1-11-49~~	[illegible]	OCT 29 1949
NOV 3 - 1949	31262	CAR		BJ	NOV 3 - 1949
DEC 30 1949	BF 1/1/50	CAR	~~1-2-50~~ R	HH	DEC 30 1949
JAN 31 1950	BF 1/2/50	CAR	1-3-50 R	[illegible]	JAN 31 1950
MAR 1 - 1950	BF 1/3/50	CAR	~~1-4-50~~ R	[illegible]	MAR 3 - 1950
MAR 31 1950	BF 1/7/50	CAR	R 1-3-50	HH	APR 1 - 1950
APR 6 - 1950	212	CAR		[illegible]	
APR 26 1950		CAR (1)			APR 26 1950
APR 26 1950	APR 26 1950	CAR (2)			
APR 26 1950		CAR (3)			
MAY 2 - 1950	BF 1/15/50	CAR		[illegible]	MAY 2 - 1950
APR 30 1951	5517	CAR			MAY 3 - 1950
MAY 1 - 1951		CAR		BJ	MAY 1 - 1951
JUN 18 1952	16161	CAR		[illegible]	MAY 1 1951
JUL 11 1952	21133	CAR		BJ	JUN 19 1952
AUG 13 1952	26916	CAR		BJ	JUL 14 1952
SEP 10 1952	31086	CAR		BJ	
OCT 14 1952	35882	CAR		BJ	SEP 11 1952
OCT 22 1952	Reg'm reshd	CAR		ZM	OCT 15 1952
NOV 3 1952	38871	CAR		ZM	OCT 23 1952
NOV 5 1952	39303	CAR		ZM	NOV 4 1952
NOV 21 1952		CAR		[illegible]	NOV 21 1952
	41389	CAR		[illegible]	NOV 25 1952
NOV 21 1952	41390	CAR		[illegible]	NOV 25 1952
NOV 21 1952	41373	CAR		[illegible]	NOV 25 1952
NOV 25 1952	41389	CAR		ZM	NOV 25 1952

TRANSPORT - RECORDS
SEP 2 A.M.
File 5008-22-14

4

ALLOTMENT OF REGISTRATION

REGISTRATION NUMBER CF-ZBN-x PART OF BLOCK ( )

DISTRICT Toronto

DATE OF ISSUE 25-8-49 22200

TYPE OF AIRCRAFT Intermediate Sailplane (Glider)

SERIAL NUMBER UTG-1

OWNERS NAME T.B.Loudon

ADDRESS University of Toronto

REQUESTED BY WIRE (X) DATE (25-8-49)

REQUESTED BY LETTER ( ) DATE ( )

DESPATCHED BY TELEGRAM (X) TELETYPE ( ) LETTER ( )

B/

JF/HMC Miss Jones V

3

OTTAWA ONTARIO AUGUST 25, 1949

CF-ZBH-X

5008-Z2-14-X

REGISTERED

District Controller of Air Services,
260 Richmond Street, West,
TORONTO 2B, Ontario

ATTENTION: District Inspector, Air Regulations

REGISTRATION MARKINGS CF DASH ZEBRA BAKER NAN DASH X ALLOTTED T B LOUDON UNIVERSITY OF TORONTO INTERMEDIATE SAILPLANE MAKERS NUMBER UTG DASH ONE

for (C.T. Travers),
Superintendent, Air Regulations.
CIVIL AVIATION

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE
CORRESPONDANCE EXCLUSIVE AVEC WESTERN UNION CABLE SERVICE

FORM 6122-B

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG
GENERAL MANAGER GÉRANT GÉNÉRAL
TORONTO

STANDARD TIME — HEURE NORMALE

AUG 25 PM 1 27

2-(23)

542

TNA228 20/18= KN TORONTO ONT 25 109P

DIRECTOR OF AIR SERVICES DEPT OF TRANSPORT=

414 3 TEMPORARY BLDG OTTAWA=

22199

ART 320 FORWARD EXPERIMENTAL REGISTRATION T B LOUDON
UNIVERISTY OF TORONTO INTERMEDIATE SAILPLANE MAKERS
NUMBER UTG DASH ONE=

DISTRICT CONTROLLER OF AIR SERVICES.

CF-ZBN-X

ART 320 UTG

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE	X
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			ACCTS/AIR REGS

Send the following message, subject to the terms on back hereof, which are hereby agreed to

FILE:

260 RICHMOND ST W TORONTO AUGUST 25 1949

DIRECTOR OF AIR SERVICES
DEPARTMENT OF TRANSPORT
3 TEMPORARY BLDG
OTTAWA

AFT 320 FORWARD EXPERIMENTAL REGISTRATION T B LONDON UNIVERSITY OF TORONTO INTERMEDIATE SAILPLANE MAKERS NUMBER UTG DASH ONE

DISTRICT CONTROLLER OF AIR SERVICES

DWB/ME
CC:HQ
CHARGE TO: DOMINION GOVERNMENT AIR SERVICES
6TH FLOOR 260 RICHMOND ST W TORONTO

CF-ZBN-X

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.

JF/EM

Ottawa, Ontario, October 26, 1949.

Glider CF-ZBN

5008-Z2-14

District Controller Air Services,
260 Richmond St., West,
Toronto 2B, Ontario.

Attention: District Inspector Air Regulations

1. Registration Markings CF-ZBN-X were allotted August 25, 1949 to Mr. T. B. Loudon, University of Toronto, Toronto, Ontario, for Experimental Intermediate Sailplane.

2. Please check the status of this registration marking and advise.

(C. P. Travers),
Superintendent, Air Regulations.

5008-Z2-14X

260 Richmond St. W.,
Toronto, Ontario
November 1, 1949.

TRANSPORT - RECORDS
NOV 2 P.M.
File 5008-Z2-14

REGISTERED

31262

Mr. J.W. Ames,
President,
Toronto Gliding Club,
421 Douglas Avenue,
Toronto, Ontario.

Dear Sir:

With reference to your telephone conversation, regarding Intermediate Sailplane UTG-1, CF-BZN-X, it will be necessary for the Toronto Gliding Club to submit an application for the re-registration of this aircraft.

Attached hereto are application forms, in triplicate, to be completed and returned to this office, together with re-registration fee of $5.00.

Our Headquarters has confirmed that, before this glider may be flown, the usual blue print and statistical analysis must be forwarded, either to this office, or to our Headquarters, for approval.

Yours truly,

(D. W. Saunders),
District Inspector, Air Regulations,
Toronto.

DWS/mh
Encl.
cc:HQ

HTP/HMC

OTTAWA ONTARIO MARCH 31st, 1950

5008-Z2-14 Registration CF-ZBN-X 5008-Z2-14

District Controller of Air Services,
260 Richmond Street, West,
TORONTO, Ontario

ATTENTION: District Superintendent, Air Regulations

1. Please advise status of application for registration of an intermediate sailplane glider UTG-1 bearing Canadian registration CF-ZBN in the name of J.W. Ames, of the Toronto Gliding Club, Toronto, Ontario.

(C.I. Travers),
Superintendent, Air Regulations.

OFFICIAL RECEIPT

University of Toronto

TORONTO, ONTARIO

12

RECEIVED THE AMOUNT OF

Six Hundred & Fifty —— XX/100 DOLLARS

FROM

By Cash ☐ Cheque ☑ M.O. or P.N. ☐

Toronto Gliding Club

ON ACCOUNT OF	AMOUNT	
Fees		
Residence Dues		
Residence Deposit		
Accounts Receivable		
Sundry — Misc Revenue	650	—
Insurance Sale of Glider GTG-1		
Rebuilt as the "Laudon."		
TOTAL	650	—

305/07/320 Date Day 2 Month 11 Year 49

F. or C.	Yr.	S. No.

42672

St.	Ex.

UNIVERSITY OF TORONTO
CHIEF ACCOUNTANT

Per _____ Cashier

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **HEAVIER** made by **UNIVERSITY OF TORONTO**

Type **INTERMEDIATE SAILPLANE** Maker's No. **UTG 1**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	**45'**	
Length o/a in feet	**22'1"**	
Height o/a in feet	**5'9"**	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	**320 lbs.**	
Total weight authorized (fully loaded) in lbs.	**530 lbs.** Air Speed	**miles per hour**

EQUIPMENT—(Give number and type).

1. Instruments **AIR SPEED, TURN & BANK, RATE OF CLIMB, ALTIMETER**
2. Gauges **NONE**
3. Lights **NONE**
4. Signals **NONE**
5. Fire Extinguishers **NONE**
6. Parachutes **NONE**
7. Tools **NONE**
8. Other Equipment **NONE**

ENGINES	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

9

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant T. B. Loudon

Date of Application August 24/49.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
UNIVERSITY OF TORONTO		
AERONAUTICAL DEPARTMENT	TORONTO	CAN.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station TORONTO

Date and place of manufacture or reconstruction JULY 1949, UNIVERSITY OF TORONTO

Crew required 1

Accommodation for what number of passengers NONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, ~~or Lighter~~ than Air ..... made by **University of Toronto**

Type **Intermediate Sailplane** Maker's No. **UTG-1**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	**45' 0"**	**4' 0"**
Length o/a in feet	**22' 1"**	**22' 6"**
Height o/a in feet	**6' 0"**	**6' 0"**

Cubic Capacity (of Airship or Balloon) .....

Weight equipped, but without load, fuel, or oil **360 lb.**

Total weight authorized (fully loaded) in lbs **562** Air Speed **90** miles per hour **(placard)**

EQUIPMENT—(Give number and type).

1. Instruments **A.S.I., Altimeter, Turn & Bank Indicator, Variometer.**
2. Gauges .....
3. Lights .....
4. Signals .....
5. Fire Extinguishers .....
6. Parachutes **Seat parachute optional.**
7. Tools .....
8. Other Equipment .....

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

14 10

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

re

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..X.. $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..Toronto Gliding Club/ J.W. Ames..

Date of Application ..Nov. 2, 1949..

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Toronto Gliding Club	421 Douglas Ave., Toronto, Ont.	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, ~~Chairman or Director~~	Address	Nationality
Toronto Gliding Club	J.W. Ames	421 Douglas Ave.	Canadian

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station ..Oshawa Municipal Airport..

Date and place of manufacture or reconstruction ..September 1949, Univerity of Toronto..

Crew required ..One..

Accommodation for what number of passengers ..None..

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

/RM

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8652

NATIONALITY AND REGISTRATION MARKS CF-ZBN-X

1. Type and description	Intermediate Sailplane (Glider)
2. Name and address of constructor	University of Toronto, Toronto, Ontario.
3. Constructor's serial number	UTG-1
4. Name of owner	Toronto Gliding Club,
5. Address of owner	421 Douglas Ave., Toronto, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Oshawa, Ontario.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of April 19 50, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-ZBN-X and is of Canadian nationality.

Given at Ottawa this 25th day of April 19 50.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
9-49

Toronto, Ontario, April 5th, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-14X	Registration of aircraft CF-ZBN-X	5008-Z2-14X

TRANSPORT - RECORDS
APR 6 P.M.
File 5008-Z2-14

0712

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations

1. Herewith the following documents relating to registration of "Intermediate Sailplane" aircraft CF-ZBN-X, Serial No. UTG 1:-

(a) Application form in duplicate, dated August 24th, 1949, in the name of University of Toronto Aeronautical Department.
(b) $5.00 registration fee (see page 8891 in cash book, receipt no. 101675).

(c) Application form in duplicate, dated November 2nd, 1949, in the name of Toronto Gliding Club.
(d) $5.00 registration fee (see page 8900 in cash book, receipt no. 101838).
(e) Bill of Sale - University of Toronto Aeronautical Department to the Toronto Gliding Club dated November 2nd, 1949.

2. A proposed flight test program has been submitted to this office and accepted as satisfactory by the Aeronautical Engineer.

8652(R)

Please register for experimental purpose
HPP 14/4/50

J. S. Grant
(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.(5)

/RM

5008-Z2-14

Ottawa, Ontario,
April 25th, 1950.

REGISTERED

Toronto Gliding Club,
421 Douglas Ave.,
Toronto, Ontario.

Gentlemen,

Enclosed please find Certificate of Registration No. 8652 for your Intermediate Sailplane (Glider), CF-ZBN-X.

Yours very truly,

(C.T. Travers),
Superintendent, Air Regulations.

Encls.

cc. D.S.A.R. Toronto, Ontario.

CANADA

2444
4-50

14

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— ZBN-X SERIAL NO.

1. C. of A. No. —— Expires —— C. of R. No. 8652 Expires APR 25/51

AIRCRAFT DATA—Manufacturer UNIVERSITY OF TORONTO Model UTG 1

Hours flown—Since New 62:00 Since Overhaul 1:40

ENGINE DATA—Manufacturer —— Model ——

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3) NA.		
(4)		

Signature of Applicant TORONTO GLIDING CLUB per J Williams

Date April 25/51

---

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed S. M. Burk A2052
"B" ENGINEER

Date April 25, 1951.

---

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed J Williams
TEST PILOT

Date Apr 25/51

---

4. The following documents are attached:

Certificate of Airworthiness ☐ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

---

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
DISTRICT AIRCRAFT INSPECTOR

Date April 25, 1951

---

7. C. of A. and C. of R. renewed, not valid after (Date) April 15 1952

Permissible Gross Weights— Wheels
Skis
Floats

Signed M A Anderson
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date April 28th, 1951.

Other Action:—

---

8. H.Q. Action— C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT 05517

TORONTO, 260 Richmond St. W. April 28th, 1951....

TRANSPORT - RECORDS
APR 30 A.M. 1951
File 5008-Z2-14

Your File 5008-Z2-14

SUBJECT Renewal of Certificates of Registration and Airworthiness CF-ZBN-X

Our File 5008-Z2-14

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for Intermediate Sailplane CF-ZBN-X

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

TRANSPORT - RECORDS
JUN 18 A.M. 1952
File 5008 - Z2 - 14

16161

5008-Z2-14-X

260 Richmond Street West,
Toronto, Ontario,
June 13th, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
TORONTO, Ontario.

Dear Sirs:-

Pending receipt of technical data required for Certificate of Airworthiness, this letter will constitute your temporary authority to operate Glider CF - ZHN-X on day visual flying only and valid until July 9th, 1952.

Yours very truly,

District Superintendent,
Air Regulations, Toronto.

CAB/fs
CC: H.Q.

17

21133

TRANSPORT - RECORDS
JUL 11 A.M. 1952
File 5008-Z2-14

5008-Z2-14X

260 Richmond St. West,
Toronto, Ontario,
July 9th, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
Toronto, Ontario.

Dear Sirs:

Pending formal documentation, this letter constitutes your temporary authority to operate Glider CF-ZBN-X on day visual flying only, valid until August 9th, 1952.

Yours very truly,

MEL

for District Superintendent, Air Regulations,
Toronto.

MEL/am
cc: H.Q.

Noted

TRANSPORT - RECORDS
AUG 13 P.M. 1952
File 5008-Z2-14

18

26915

5008-Z2-14X

260 Richmond St. West,
Toronto, Ontario,
August 12th, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
TORONTO, Ontario.

Dear Sirs:

Pending formal type approval, this letter will constitute a further extension of your temporary authority to operate Loudon Glider, registered CF-ZBN-X, for day visual flight only, not valid after September 12th, 1952.

Yours very truly,

for District Superintendent,
Air Regulations, Toronto.

TMS/am
cc: H.Q.

TRANSPORT - RECORDS
SEP 10 A.M. 1952
File 5008-Z2-14

19

31086

5008-Z2-14X

260 Richmond St. West,
Toronto, Ontario,
September 9th, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
TORONTO, Ontario.

Dear Sirs:

Pending formal type approval, this letter will constitute a further extension of your temporary authority to operate Loudon Glider, registered CF-ZBN-X, for day visual flight only, not valid after October 12th, 1952.

Yours very truly,

District Superintendent, Air Regulations,
Toronto.

STG/am
cc: H.Q.✓

TRANSPORT - RECORDS
OCT 11 A.M. 1952
File 5008-Z2-14

20

35882

5008-Z2-14X

260 Richmond Street West,
Toronto, Ontario,
October 10th, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
TORONTO, Ontario.

Dear Sirs:-

Pending formal type approval, this letter will constitute a further extension of your temporary authority to operate Loudon Glider, registered CF-ZHM-X, for day visual flight only, not valid after November 12th, 1952.

Yours very truly,

(for) District Superintendent,
Air Regulations, Toronto.

CAB/fs
CC: H.Q.

DDM/VA Spare (CAR)

Ottawa, Ontario, October 20th, 1952.

Flight Test Report on the Louden Prototype UTG-1 Glider — 5004-1, 5008-Z2-14

37266

MEMORANDUM TO C.A.E.

1. The above noted report has been carefully studied and it would appear that this aircraft has no undesirable flight characteristics.

2. The shudder referred to in paragraph 4.21 was probably an initial fin stall warning and modifications to the fin reduced the warning to a more acceptable level.

3. From the description of the stalls and spinning tendencies, it is doubtful if this aircraft really stalls and that a minimum steady flight speed is actually obtained.

4. There is nothing in the report to indicate any reason why a type certificate of airworthiness for this glider should not be issued and, in view of the qualifications and glider pilot ability of Mr. J. W. Ames, the acceptance of this report for C. of A. purposes is recommended.

(D. D. Murphy),
Chief Test Pilot.

ENTERED ON CARDS
No. 8 Bldg.

22

LMR/MNL

~~5004-1~~
5008-Z2-14

OTTAWA, Ontario
October 27, 1952.

Mr. J.W. Ames,
Toronto Flying Club,
538 Deleraine Avenue,
Toronto, Ontario

Subject: UTG-1 Type Approval

Dear Sir:

1. Further to our letter of October 23rd, may we remind you that in accordance with The Air Regulations a fee of $25.00 is payable for an aircraft type approval including a glider type approval.

2. Cheques should be made payable to the Receiver General of Canada.

Yours truly,

(H.S. Rees)
Chief Aeronautical Engineer.

CC: D.C.A.S. Toronto
Att: Aero. Engineer

TORONTO GLIDING CLUB

23

538 Deloraine Ave.,
Toronto, Ont.

Oct. 20, 1952.

Department of Transport
Civil Aviation Division,
No. 3 Temporary Bldg.,
Ottawa, Ont.

TRANSPORT - RECORDS
OCT 22 A.M. 1952
File 5008-22.14

37163

Dear Sirs: Attention: Mr. Howard Rees,
Chief Aeronauitcal Engineer.

It would be very much appreciated if the Department's review of the Type Approval submission for the Loudon glider, could be completed in time to permit the "X" to be removed from the prototype (CF-ZBN-X) by the middle of November. We would like to take the glider to Elmira to compete in the "Snowbird Meet" which will be held over the American Thanksgiving, Nov. 27th through 29th, and have been advised by the District Office that entry with an "X" license would almost certainly be prevented by Customs officials.

Our procrastination in submitting the required data is not a good background for requesting special urgency on the part of your office, however, we would be pleased if this may be overlooked, and the work speeded sufficiently to enable the Loudon to compete.

Yours very truly,

J.W. Ames.

JA/js

cc: Mr. W.O. McDowell,
Aeronautical Eng.,
Toronto.

ENTERED
ON CARDS
No. 8 Bldg.

24

LMR/MHL.

5004-1
5008-22-14

OTTAWA, Ontario
October 23, 1952.

Mr. J.W. Ames,
Toronto Flying Club,
538 Deleraine Avenue,
Toronto, Ontario

Subject: UTG-1 Type Approval

Dear Sir:

1. In reply to your letter of October 20th, we do not foresee any difficulty in meeting your request for certification of the UTG-1 Glider, CF-ZBH-X, before the middle of November. There are, however, one or two points which need clarification before we can issue the Type Approval.

2. We have noted some discrepancies in the weight and balance data given in the Draft Type Approval as compared with data given in the Flight Test Report. A C.G. range of 80.2" to 84.5" aft of the datum is requested in the Draft Type Approval whereas a range of 80.1" to 83.8" has been substantiated in the Flight Test Report. Has a rear C.G. limit of 84.5" been substantiated by flight test? In this connection, we will require a Weight and Balance Report demonstrating that the C.G. limits which have been substantiated by flight test and the maximum weight requested in the Draft Type Approval are compatible with the proposed maximum and minimum pilot weights quoted in the Draft Type Approval.

3. Could you be more specific in identifying the wheel and tire by quoting the make, size and ply rating and if possible the model number of the wheel as listed in the C.A.A. Approved Equipment Specification?

Example: Goodyear 6.00-6 wheel (Goodyear Model L6MBD) with 6.00-6 4-ply tire.

Yours truly,

L.M

(H.S. Ross)
Chief Aeronautical Engineer.

CC: D.C.A.S. Toronto
Att: Aero. Engineer

TRANSPORT - RECORDS
25
NOV 3 A.M. 1952
File 5008-Z2-14

38871

J.W. Ames

538 Deloraine Ave.,
Toronto, Ont.

Oct. 31, 1952.

Department of Transport
Civil Aviation Division,
No. 3 Temporary Bldg.,
Ottawa, Ont.

Dear Sirs: Attention: Mr. H.S. Rees,
Chief Aeronautical Engineer.

With reference to your letter of Oct. 27th, (file ref. 5004-1, 5008-Z2-14), I am enclosing Toronto Gliding Club cheque for twenty-five dollars ($25.00) covering the Aircraft Type Approval fee for the UTG-1 Glider.

Yours very truly,

J.W. Ames.

Enclosed cheque
$25.00

RECEIVED
NOV 1 1952
TRANSPORT
TREASURY
AIR

25.00
01.003-001-5-245

JA/js

ENTERED
ON CARDS
No. 3 Bldg.

COPY FOR DEPTL. FILES

Received $ 25.00...
C. R. No. 24314...
Date 3-11-52...
Clerk MF...

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

PROJECT

WEIGHT AND BALLAST REPORT

REPORT No. 28

SHEET No.

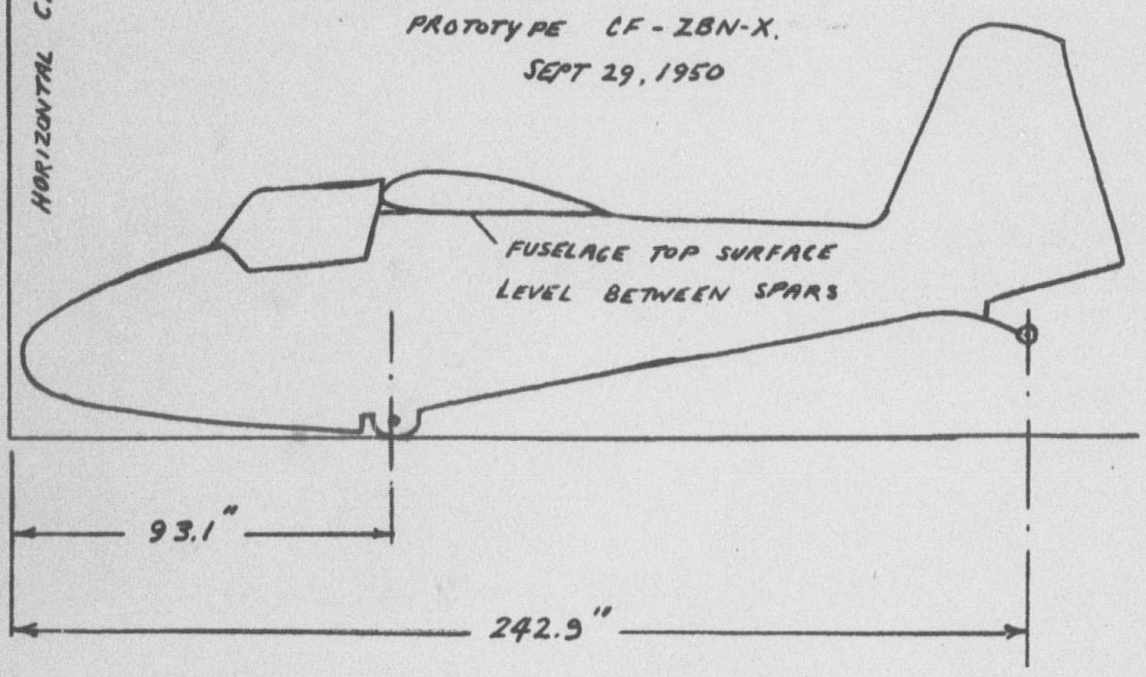
DATE OCT. 29/52

PREPARED BY J.W.AMES

ACTUAL WEIGHT AND BALANCE REPORT

FOR UTG-1 LOUDON

FROM MEASUREMENTS MADE ON
PROTOTYPE CF-ZBN-X.
SEPT 29, 1950



WEIGHT EMPTY (INCLUDING SPECIFICATION EQUIPMENT) = 364 LB.
CENTER OF GRAVITY = 98.4 INCHES

MAXIMUM WEIGHT = 562 LB.

PREPARED BY

ISSUE 2 OCT. 29/52
PAGES 2 & 3 ADDED.

FORM 1369

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 27
SHEET No.
DATE Oct. 29, 1952
PREPARED BY J.W. AMES

PROJECT

WEIGHT AND BALANCE REPORT

THE FOLLOWING TABLES SHOW THE WEIGHTS AND C.G. POSITIONS AT WHICH THE GLIDER HAS BEEN FLOWN, AND THE VARIOUS CONDITIONS UNDER WHICH IT WILL MEET THE DRAFT SPECIFICATION.

TABLE 1 PROTOTYPE CF-ZBN-X AS BALLASTED FOR FLIGHT TEST ONLY

	ITEM	WT. (LB.)	ARM (IN.)	MOMENT (LB. IN.)	
C.G. FORWARD.	EQUIPPED WT.	385	95.0	36575	
	PARACHUTE	20	57.0	1140	
	BALLAST	14	57.0	798	* TEST FLIGHT
	PILOT	166	51.0	8466	LIMITS
	GROSS	585	80.3 *	46979	
C.G. AFT	EQUIPPED WT. AND PARACHUTE AND PILOT SAME AS ABOVE.				
	BALLAST	12	233.0	2796	
	GROSS	583	84.0 *	48977	

TABLE 2 UTG-1 WEIGHT AND C.G. TO SPECIFICATION.

ITEM	WT. (LB)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	364	98.4	35818
MAX. PILOT WT.	198	51.0	10098
GROSS	562	81.7	45916
MIN. PILOT WT.	159	51.0	8109
GROSS	523	84.0	43927

FORM 1368

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 24

SHEET No.

DATE OCT. 29, 1952

PREPARED BY J.W. AMES

PROJECT

WEIGHT AND BALANCE REPORT

FOR PILOTS LIGHTER THAN 159LB. THE FOLLOWING ALTERNATIVES ARE GIVEN.

TABLE 3 UTG-1 CARRYING TYPICAL INSTRUMENTS AND EQUIPMENT AS THE PROTOTYPE IS USUALLY FLOWN.

ITEM	WT. (LB.)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	385	95.0	36575
MAX. PILOT WT.	177	51.0	9027
GROSS	562	81.1	45602
MIN. PILOT WT.	128	51.0	6528
GROSS	513	84.0	43103

TABLE 4 UTG-1 WITH MIN. EQUIPMENT TO SPEC. REQUIREMENTS AND BALLASTED BY SCAEWING STRIPS OF LEAD (13LB) TO REAR FACE OF FRONT BULKHD

ITEM	WT. (LB)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	364	98.4	35818
BALLAST	13	11.0	132
MAX. PILOT WT.	185	51.0	9435
GROSS	562	80.8	45385
MIN. PILOT WT.	130	51.0	6630
GROSS	507	84.0	42580

TABLE 5 UTG-1 AS IN TABLE 4 EXCEPT PARACHUTE CARRIED AND BALLAST REDUCED TO 5.6 LB.

ITEM	WT. (LB)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	364	98.4	35818
PARACHUTE	20	57.0	1140
BALLAST	5.6	11.0	61.6
MAX. PILOT WT.	172.4	51.0	8792
GROSS WT.	562	81.5	45811.6
MIN. PILOT WT	130	51.0	6630
GROSS	519.6	84.0	43649.6

FORM 1368

A. V. ROE CANADA LIMITED
MALTON - ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 30
SHEET No.
DATE Oct. 29/52.
PREPARED BY J.W. Ames.

PROJECT

Glider Draft Specification No.

Draft #2

Department of Transport
Civil Aviation Division

Glider Specification No.

Manufacturer Aeronautical Department, Faculty of Applied Science and Engineering, University of Toronto.

I Model UTG-1 Single Place Training Sailplane.

Type	Class II
Airspeed Limits (Placard)	Glide or dive 90 mph True Ind. Airplane tow 90 mph True Ind. Spoilers open 65 mph True Ind. Auto-Winch tow 65 mph True Ind.
C.g. range	80.3 inches to 84.0 inches
Empty Weight & c.g. position	364 pounds, 98.4 inches
Maximum weight	562 pounds
No. of seats	one
Baggage	none
Control Surface Movements	Elevator 26° up 23° down Aileron 26° up 11° down Rudder 32° left 32° right Spoilers 80° up 0° down.
Serial Numbers Eligible	all
Required Equipment	Airspeed Indicator Safety Belt - DH 86 or other approved type.
Datum	93.1 inches forward of main U/C axle ℄.
Levelling Means	Top of fuselage between main spar and rear joint fitting is horizontal.
Certification Basis	Glider Type Certificate No.
Production Basis	None. Prior to original certification of each model UTG-1 glider a D.O.T. representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data, and a check of the flight characteristics.

FORM 1368

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 29

SHEET No.

DATE Oct. 29/52.

PREPARED BY J.W. Ames.

PROJECT

Glider Draft Specification No.

Landing Gear Main - One Goodyear aircraft tail wheel size 5.00 X 4.00, with AWT, 4 ply tire and tube,
Rear - Tail skid, with commercial roller skate wheel.

Note 1. The following placard must be installed in full view of the pilot.

Maximum Pilot Weight = 198 lb.
Minimum Pilot Weight = 159 lb.

Note 2. Minimum Pilot weight may be reduced to 130 lb. by the addition of approximately 13 lb. lead on rear face of front bulkhead, to adjust c.g. to 84.0 inches. Maximum Pilot weight must be reduced by the amount of the ballast.

----- END -----

FORM 1569

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 32
SHEET No.
DATE Oct. 29/52.
PREPARED BY J.W. Ames.

PROJECT

Glider Draft Specification No.

Draft #2

Department of Transport
Civil Aviation Division

Glider Specification No.

Manufacturer Aeronautical Department, Faculty of Applied Science and Engineering, University of Toronto.

I Model UTG-1 Single Place Training Sailplane.

Type	Class II
Airspeed Limits (Placard)	Glide or dive 90 mph True Ind. Airplane tow 90 mph True Ind. Spoilers open 65 mph True Ind. Auto-Winch tow 65 mph True Ind.
C.g. range	80.3 inches to 84.0 inches
Empty Weight & c.g. position	364 pounds, 98.4 inches
Maximum weight	562 pounds
No. of seats	one
Baggage	none
Control Surface Movements	Elevator 26° up 23° down Aileron 26° up 11° down Rudder 32° left 32° right Spoilers 80° up 0° down.
Serial Numbers Eligible	all
Required Equipment	Airspeed Indicator Safety Belt - DH 86 or other approved type.
Datum	93.1 inches forward of main U/C axle ℄.
Levelling Means	Top of fuselage between main spar and rear joint fitting is horizontal.
Certification Basis	Glider Type Certificate No.
Production Basis	None. Prior to original certification of each model UTG-1 glider a D.O.T. representative must perform a detailed inspection for workmanship, materials and conformity with the approved technical data, and a check of the flight characteristics.

FORM 1368

A. V. ROE CANADA LIMITED
MALTON - ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 31

SHEET No.

DATE Oct. 29/52.

PREPARED BY J.W. Ames.

PROJECT

Glider Draft Specification No.

Landing Gear Main - One Goodyear aircraft tail wheel size 5.00 X 4.00, with AWT, 4 ply tire and tube,
Rear - Tail skid, with commercial roller skate wheel.

Note 1. The following placard must be installed in full view of the pilot.

Maximum Pilot Weight = 198 lb.
Minimum Pilot Weight = 159 lb.

Note 2. Minimum Pilot weight may be reduced to 130 lb. by the addition of approximately 13 lb. lead on rear face of front bulkhead, to adjust c.g. to 84.0 inches. Maximum Pilot weight must be reduced by the amount of the ballast.

----- END -----

FORM 1369

34

538 Deloraine Ave.,
Toronto, Ont.

Oct. 30, 1952.

Department of Transport
Civil Aviation Division,
No. 3 Temporary Bldg.,
Ottawa, Ont.

39303

TRANSPORT - RECORDS
NOV 5 P.M. 1952
File 5008-Z 2-14

Dear Sirs: Attention: Mr. L.M. Nesbitt

Your letter of Oct. 23rd (file ref. 5004-1, 5008-Z2-14) has been received, and I am pleased to note that you expect no difficulty in certifying the UTG-1 Glider by the middle of November.

As you have noted the Draft Type Approval does not agree with the Flight Test Report as to c.g. travel.

In reviewing the weight and c.g. figures I find that I had not accounted for the c.g. shift aft, between the conditions of instruments and equipment carried during flight tests, and the condition required by specification.

The flight test weight and c.g. is covered in section 5.0 of the Flight Test Report. The c.g. travel demonstrated by flight test was 80.3 inches to 84.0 inches. (Note a small correction from the original 80.1 to 83.8 on recalculating using the same weights and moment arms).

The Draft Specification should be corrected to show the same c.g. range. The maximum and minimum pilot weights in Note 1 should then be 198 lb. and 159 lb., at 81.7 inches and 84.0 inches c.g. position respectively. The note concerning a parachute should be deleted since it is not specification equipment.

It is apparent that the minimum pilot weight is unusually high, however the glider will normally carry additional equipment such as compass, variometer, rate of climb, turn and bank indicator, barograph, etc. With such equipment the prototype (CF-ZBN-X) flies at a c.g. of 84.0 inches at a minimum pilot weight without parachute of only 128 lb. We therefore consider it reasonable to specify in Note 1 of the Draft Specification that maximum and minimum pilot weights be 198 lb. and 159 lb. respectively and that for weights below 159 lb., ballast in the form of extra equipment or suitable weights will have to be carried. If it is desirable to carry the minimum ballast it should be in the form of lead sheet fastened with wood screws at approx. 2" pitch to the rear face of the forward bulkhead.

ENTERED
ON CARDS
No. 8 Bldg.

The additional information defining the tire has been added.

I am enclosing three prints each of a second Draft Specification showing these changes, and also a second issue of the Weight and Balance Report which includes two additional pages to show the weight and c.g. under the various conditions of flight test, to Draft Specification and other alternatives.

Yours very truly,

J.W. Ames.

C. A. R. — Recommend we waive requirement for A9-0 inspection certificate (in this case only). since there is evidence on file that glide is OK. R. 7 Jun 32

JA/js

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

37 2 4-52

OTTAWA, Ontario, November 10, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Type Approval UTG-1 Glider CF-ZBN-X	5008-Z2-14 (CAE) 5004-1

41073

MEMORANDUM - C.A.R.

Attached is our Aircraft Type Approval No. 26 Issue 1, covering the UTG-1 Glider CF-ZBN-X. It would be appreciated if this glider could be given a Certificate of Airworthiness as soon as possible to enable it to compete in the United States later this month.

J.Z. Smith.

for (H.S. Rees)
Chief Aeronautical Engineer.

Attach.

11427 (P)
3814 (A)

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
OTTAWA, CANADA

26 Issue 1
University of Toronto
UTG-1

AIRCRAFT TYPE APPROVAL

November 7, 1952.

Manufacturer:	Aeronautical Department, Faculty of Applied Science and Engineering, University of Toronto, Toronto, Ontario.
Model UTG-1:	Single Place Training Sailplane
Type:	Class II Glider
Airspeed Limits:	Glide or dive 90 mph True Ind. Spoilers open 65 mph True Ind. Airplane tow 90 mph True Ind. Auto-winch tow 65 mph True Ind.
C.G. Range	Front limit 80.3 inches aft of datum Rear limit 84.0 inches aft of datum
Datum:	93.1 inches forward of centerline of main U/C axle.
Levelling Means:	Top of fuselage between main spar and rear joint fitting is horizontal.
Maximum Weight:	562 lbs.
No. of Seats:	One
Baggage:	None
Ballast:	Zero to 13 lbs. lead on rear face of front bulkhead. See Approved Loading Schedule.

Control Surface Movements:

Elevator	26° up	23° down
Aileron	26° up	11° down
Rudder	32° left	32° right
Spoilers	60° up	0° down

Serial Nos. Eligible: No. 1 and up

..... 2

Required Equipment: Airspeed indicator

Certification Basis: United States CAR 5 as amended to June 1942.

Landing Gear - Main: One Goodyear 5.00 x 4.00 tail wheel with AWT 4-ply tire and tube.

NOTE 1: The following placard must be installed in full view of the pilot:

MAXIMUM PILOT WEIGHT = 198 lbs.
MINIMUM PILOT WEIGHT = 159 lbs.

THESE WEIGHTS APPLY WHEN NO BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED. FOR MAXIMUM AND MINIMUM PILOT WEIGHTS WHEN BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED SEE APPROVED LOADING SCHEDULE.

H.S. Rees

(H.S. Rees),
Chief Aeronautical Engineer,
Department of Transport.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
4-52

LMN/MNL.

OTTAWA, Ontario, November 10, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Type Approval UTG-1 Glider CF-ZBN-X	5008-Z2-14 (CAE) ~~5004-1~~

42281

MEMORANDUM - C.A.R.

Attached is our Aircraft Type Approval No. 26 Issue 1, covering the UTG-1 Glider CF-ZBN-X. It would be appreciated if this glider could be given a Certificate of Airworthiness as soon as possible to enable it to compete in the United States later this month.

(H.S. Rees)
Chief Aeronautical Engineer.

Attach.

Records.

P.A. file 5008-Z2-14.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25.	Weight of aircraft empty (including water in the radiators):	(a) Landplane.....	364 lbs.
		(b) Seaplane.....	....lbs.
		(c) Skiplane.....	....lbs.

WEIGHT OF FUEL AND OIL

26.	Fuel..... (at 7·2 lbs. per gallon)	....lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
27.	Oil..... (at 9·0 lbs. per gallon)	....lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
28.	Weight allowed for crew.....	....lbs.
29.	Weight allowed for equipment, excluding wireless apparatus.....	....lbs.
30.	Weight of wireless apparatus.....	....lbs.
31.	Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....	....lbs.
32.	Maximum total weight authorized.....	....lbs.
	Landplane.....	....lbs.
	Seaplane.....	....lbs.
	Skiplane.....	....lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....Five Hundred and Sixty-Two Pounds
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....one.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of + 80.3.....inches and + 84.0.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. ~~Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight, it must never exceed.....r.p.m.~~ See Aircraft Type Approval #26.

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated.....May 4, 1952.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this.....12th.....day of.....November.....19.....52.

.....
Superintendent, Air Regulations.

39

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3614

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Toronto Gliding Club.
2. Christian name
3. Address 421 Douglas Avenue, Toronto, Ontario.
4. Nationality Canadian.

NAME OF CONSTRUCTOR

5. Name University of Toronto

NATIONALITY AND REGISTRATION MARKS

6. CF-ZBM

DESCRIPTION OF AIRCRAFT

7. Type University of Toronto Glider Series UTG-1 Constructor's No. UTG-1
8. Place and year of construction of aircraft Toronto, Ontario, 1949.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) One

CLASSIFICATION OF AIRCRAFT

13. Category Class II Normal
14. Subdivision A,B,C,D & E
15. Maximum span (in flying position) 45' 0"
16. Maximum length (in flying position) 22' 1"
17. Total height (with and without trolley in case of seaplanes) 6' 0"

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		May 4th, 1953.	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

38

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

~~Magnetic Compass~~
~~Altimeter~~
Airspeed Indicator
~~Engine~~ Revolution Counter
Oil Pressure ~~Gauge~~
Oil Temperature ~~Gauge~~

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

AIRCRAFT TYPE APPROVAL #26
& WEIGHT AND BALANCE REPORT
FORMS PART OF THIS CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT.

Note: This certificate is subject to Air Regulations, 1938, as amended, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

40

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11427

NATIONALITY AND REGISTRATION MARKS CF-ZEM

1. Type and description	University of Toronto Glider UTG-1, Class II
2. Name and address of constructor	University of Toronto, Toronto, Ontario.
3. Constructor's serial number	UTG-1.
4. Name of owner	Toronto Gliding Club,
5. Address of owner	421 Douglas Avenue, Toronto, Ontario.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Oshawa, Ontario.
8. Purpose	Commercial.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of April 1950., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZEM and is of Canadian nationality.

Given at Ottawa this 12th day of November. 1952.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

43

LMN/MNL

~~5004-1~~
5008-22-14

OTTAWA, Ontario
November 14, 1952.

Mr. J.W. Ames,
Toronto Flying Club,
538 Deloraine Avenue,
Toronto, Ontario

Subject: UTC-1 Glider, CF-ZBN-X

Dear Sir:

1. Three copies of Aircraft Type Approval No. 26, Issue 1, covering the model UTC-1 Glider are enclosed for your information. The Certificate of Airworthiness for CF-ZBN-X has been forwarded to the District Office in Toronto for completion.

2. Note 1 of the Type Approval has been revised to read as follows:

MAXIMUM PILOT WEIGHT = 198 lbs.
MINIMUM PILOT WEIGHT = 159 lbs.

THESE WEIGHTS APPLY WHEN NO BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED. FOR MAXIMUM AND MINIMUM PILOT WEIGHTS WHEN BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED SEE APPROVED LOADING SCHEDULE.

The loading schedule mentioned in this note can be similar to Tables 2, 3, 4, and 5 of your Weight and Balance Report dated October 29th, 1952, except that the details covering the identity, weight and location of the different items of equipment and the corresponding maximum and minimum pilot weights and ballast required should be given for all expected combinations of loading. The revised schedule should be approved by the District Aeronautical

..... 2

42

Engineer, Toronto. In the meantime you may use Tables 2, 3, 4 and 5 of the Weight and Balance Report dated October 29th, 1952, a sealed copy of which is returned herewith.

Yours truly,

(H.S. Rees)
Chief Aeronautical Engineer.

Encls.

cc: D.C.A.S. toronto
Attention: Aero. Engineer

41

JCF/MM

OTTAWA, Ontario, November 12th, 1952.

5008-Z2-14 University of Toronto Glider UTG-1, CF-ZBN. 5008-Z2-14(CAR)

REGISTERED

District Controller of Air Services,
260 Richmond St. West,
TORONTO 2B, Ontario.

Attn:- District Superintendent, Air Regulations.

1. Enclosed are Certificates of Registration No. 11427, Airworthiness No. 3614, Weight and Balance Report with Journey and Aircraft Log Book covering Glider UTG-1, Serial UTG-1, registration marking CF-ZBN owned by Toronto Gliding Club.

2. The owners have indicated that they would like to take the Glider to Elmira, United States of America, to compete in the "Snowbird Meet" being held during the latter part of the month.

3. As we have no information covering an inspection for airworthiness of this Glider, and in order not to delay the issuing of the Certificates, we are forwarding them for your action when you are satisfied that Departmental requirements have been met.

4. When the owners satisfy you in this regard, you are requested to endorse Certificate of Airworthiness No. 3614 on page 4 and also enter the Airworthiness date under Item 40 thereon.

5. The Airworthiness date will also have to be entered under Item 3 in the Journey and Aircraft Log Book.

6. It is requested that Certificate of Registration No. 8652 "experimental" be returned for cancellation and the -X marking should be removed from the aircraft now that the Aircraft Type Approval No. 26 covers this aircraft.

7. May this office be advised as to the respective dates entered on these documents in order that our records may be brought up to date.

(C.T. Travers),
Superintendent, Air Regulations.

Encls.

27

PA

CAR [illegible]

TRANSPORT - RECORDS
NOV 15 A.M. 1952
File 5008-Z2-14

43A

5008-Z2-14X

40709

260 Richmond Street West,
Toronto 2B, Ontario.

November 14, 1952.

Toronto Gliding Club,
538 Deloraine Avenue,
Toronto, Ontario.

Dear Sirs:

Pending formal type approval, this letter will constitute a further extension of your temporary authority to operate Loudon Glider, registered CF-ZBN-X, for day visual flight only, not valid after December 15, 1952.

Yours very truly,

ARPinder

(for) District Superintendent,
Air Regulations, Toronto.

RP:jh

c.c. H.Q. ✓

Noted

41389

TRANSPORT - RECORDS
45
NOV 21 A.M. 1952
File 5008-Z2-14

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. November 18, 1952

Your File 5008-Z2-14X

SUBJECT Renewal of Certificates of Registration and Airworthiness

University of Toronto Glider UTG-1 Class II

CF-ZBN

Our File 5008-Z2-14X

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the [redacted] Certificates of Registration and Airworthiness for CF-ZBN

2. The following entries have been made on Certificate of Airworthiness No. 3814.

(a) Page 2 - Item 40 - "November 18, 1952."

(b) Page 4 - Endorsement of Airworthiness "valid to May 4th, 1953."

A R Pinder
for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

P.S. "November 18, 1952" entered in Item 3 of Journey and Aircraft Log Book.

ARP
ARP

4 2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— ZBN-X SERIAL NO.

1. C. of A. No. — Expires — C. of R. No. 8652 Expires APR. 15, 1952

AIRCRAFT DATA—Manufacturer UNIVERSITY OF TORONTO Model UTC-1

Hours flown—Since New 106 Since Overhaul 1:00

ENGINE DATA—Manufacturer — Model —

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2) N.A.		
(3)		
(4)		

Signature of Applicant TORONTO GLIDING CLUB per J.G. Williams

Date May 5, 1952

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed T.J. Gillies
"B" ENGINEER

Date May 4/52

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed J.G. Williams
TEST PILOT

Date MAY 4. 1952.

4. The following documents are attached:

Certificate of Airworthiness ☐ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Aircraft Inspected Sept/52

Signed H Ball
DISTRICT AIRCRAFT INSPECTOR

Date May 8/52

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING BRANCH

7. C. of A. and C. of R. renewed, not valid after (Date) May 4th 1953

Permissible Gross Weights— Wheels
Skis
Floats

Signed A.R. Pinder
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date May 9th 1952, May 18

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

47 3/5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Toronto, Ontario, November 18, 1952
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-14	Intermediate Sailplane (Glider) CF- Z B N - X Serial No. UTG-1	5008-Z2-14

41390

TRANSPORT - RECORDS
NOV 21 A.M. 1952
File 5008 - Z 2 - 14

In Reply Refer to File

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attentions: C.A.R.

1. Returned herewith for cancellation Certificate of Registration No. 8652 for the m/n aircraft, as requested in your letter dated November 12th, 1952, para. 6.

A R Pinder
for (D.W. Saunders)
District Superintendent, Air Regulations,
for (District Controller, Air Services)
Toronto.

Encl.1

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

April 28th, 1951 - Renewed valid until April 15th, 1952 - [illegible]

May 4th 1952 - Renewed valid until May 4th 1953

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

RM

46

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8652

NATIONALITY AND REGISTRATION MARKS CF-ZBN-X

1. Type and description	Intermediate Sailplane (Glider)
2. Name and address of constructor	University of Toronto, Toronto, Ontario.
3. Constructor's serial number	UTG-1
4. Name of owner	Toronto Gliding Club,
5. Address of owner	421 Douglas Ave., Toronto, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Oshawa, Ontario.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of April 19 50., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-ZBN-X and is of Canadian nationality.

Given at Ottawa this 25th day of April 19 50.

H. L. Patteson

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

48

41393

TRANSPORT - RECORDS
NOV 21 AM 1952
File 5008 - Z2 - 14

5008-Z2-14

REGISTERED

260 Richmond St.West,
Toronto, Ontario,
November 18, 1952.

Toronto Gliding Club,
421 Douglas Avenue,
TORONTO, Ontario.

Dear Sirs:

Enclosed are Certificate of Registration No. 11427 and Certificate of Airworthiness No. 3814 together with Weight and Balance Report for your University of Toronto Glider, Serial No. UTG-1 aircraft, CF-ZBN, also Journey and Aircraft Leg Book.

This aircraft must be operated within the conditions and limitations contained in the Certificate of Airworthiness, which is valid until May 4th, 1953.

Your attention is directed in the Air Regulations part VIII section 2, regarding Certificates, Licences and Log Books.

The new Certificate of Registration No. 11427 identifies this Aircraft as CF-ZBN and not CF-ZBN-X as previously registered. It will be your responsibility to change these markings so that they correspond to the new Certificate.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

A R Pinder

(D.W. Saunders)
District Superintendent, Air Regulations,
Toronto.

Encls.
/df
cc:C.R.
H.Q.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

-51- 2
8-52

Toronto, Ontario, June 11th 1953
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-14	Glider UTG-1 CF-ZBN	5008-Z2-14

18639

TRANSPORT - RECORDS
JUN 12 P.M. 1953
File 5008-Z2-14

Director of Air Services,
Department of Transport,
Ottawa, Ontario

Attention: C.A.R.

1. A cheque in the amount of $5.00 was submitted by the Toronto Gliding Club as a fee for the Renewal of Certificate of Airworthiness issued the m/n aircraft, covered by O.R.#2942.

2. For your information and action, please.

(D.W.Saunders)
District Superintendent, Air Regulations
for(District Controller, Air Services)
Toronto

5008-Z2-14

260 Richmond St. W.
Toronto, Ontario
June 11th 1953.

Toronto Gliding Club,
538 Deloraine Ave.,
Toronto, Ontario.

Dear Sirs;

We are in receipt of your cheque in the amount of $5.00 which you submitted as a fee for the renewal of Certificate of Airworthiness No. 3814 issued your Glider UTG-1 aircraft, CF-ZBN.

As there is no fee required for the renewal of Certificate of Airworthiness, the $5.00 will be returned to you in due course.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto

/mgm
C R.
H.Q.

18643

TRANSPORT - RECORDS
JUN 12 P.M. 1953
File 5008-Z2-14

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. June 10, 1953

Your File | SUBJECT | Our File

Renewal of Certificates of Registration and Airworthiness

5008-Z2-14X | **University of Toronto Glider UTG-1,Class II CF-ZBN** | 5008-Z2-14X

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for **CF-ZBN**

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

49

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— ZBN SERIAL NO. 1

1. C. of A. No. 3814 Expires MAY 4, 1953 C. of R. No. 11427 Expires .....

AIRCRAFT DATA—Manufacturer UNIVERSITY OF TORONTO Model U.T.G.-1

Hours flown—Since New 190 Since Overhaul ~~190~~ 85

ENGINE DATA—Manufacturer N.O.T. APPLICABLE Model —

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3)		
(4)		

Signature of Applicant Toronto Gliding Club D. W. Saunder (Treasurer)

Date May 30, 1953

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed D E Darrah
M "B" ENGINEER

Date May 30, 1953

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed F H Brame
TEST PILOT (F. H. BRAME)

Date May 30, 1953

4. The following documents are attached:

Certificate of Airworthiness ☑ Certificate of Registration ☑ Weight and Balance Report (when applicable) ☑

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 11427 and C. of A. No. 3814, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
DISTRICT AIRCRAFT INSPECTOR

Date JUN 8 53

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) May 30, 1954

Permissible Gross Weights— Wheels 562 Lbs.
Skis
Floats

Signed [signature]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date June 10, 1953

Other Action:—

Noted JL

8. H.Q. Action— C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

53 2
8-52

JCF/2C — Ottawa, 10th July, 1953.
PLACE DATE

YOUR FILE | SUBJECT: Glider UTG-1 CF-ZBN | OUR FILE: 5008-Z2-14 (C.A.R.)

MEMORANDUM TO TREASURY 'AIR':

1. Please refer to letter No.18639, dated June 11th, 1953, from the D.S.A.R., Toronto, which is self-explanatory.

2. We do not charge a fee for the renewal of Certificates of Airworthiness, and request that the $5.00 covered by receipt No.O.R.#2942 be returned to the Toronto Gliding Club, 538 Deloraine Avenue, Toronto, Ontario.

Original Signed by
R. CARTER GUEST

(C. T. Travers),
Superintendent, Air Regulations.

~~TREASURY AIR~~

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

54 2/8-52

JGF/ZG ~~Ottawa, 18th July, 1953.~~

YOUR FILE	SUBJECT	OUR FILE
	Glider UTG-1 CF-ZBN	5008-ZB-14 (C.A.R.)

Records

29130

MEMORANDUM TO TREASURY 'AIR':

1. Please refer to letter No.18639, dated June 11th, 1953, from the D.S.A.R., Toronto, which is self-explanatory.

2. We do not charge a fee for the renewal of Certificates of Airworthiness, and request that the $5.00 covered by receipt No.O.R.#2942 be returned to the Toronto Gliding Club, 538 Deloraine Avenue, Toronto, Ontario.

Refunded 20/7/53

Original Signed by
R. CARTER GUEST

for (C. T. Travers),
Superintendent, Air Regulations.

ACCOUNTS PAYABLE VOUCHER

DEPARTMENT OF TRANSPORT

OTTAWA CANADA

FOR TREASURY OFFICE USE 129 6-52

BRANCH [redacted] Air

VOUCHER DATE 20-7-53

AMOUNT 5.00

BRANCH No.

STAT. No.

PAYEE'S NAME AND ADDRESS

Toronto Gliding Club
538 Deloraine Ave.
Toronto Ont.

CHEQUE No.

DATE

APPLICATION No.

EXTEN. AND ADD.	CLASS AND RATES
LIQUIDATED	ENT'D IN SUB-LEDGER

AUDITED

DIV'N No.	ESTABL. No.	VOTE No.	PRIM. No.	OBJECT No.	SUB TOTAL	SUB TOTAL	TOTAL
31	003	001	51	246			5.00

FOLD HERE

Refund of monies received for Certificate of Airworthiness as per memo from Superintendent, Air Regulations dated July 10/53

PARTICULARS FOR PAYEE:—

INVOICE DATE	No.	AMOUNT

SUMMARY OF ENCUMBRANCES

ENC. No.	AMOUNT	S.A. No.

Passed for payment 21-7-53 mb.

LOCAL OFFICE DISTRIBUTION

O.R. 2942

File # 5008-Z2-14

I HEREBY CERTIFY THAT THE WORK HAS BEEN PERFORMED, THE GOODS HAVE BEEN RECEIVED AND THE PRICES ARE FAIR AND JUST.

W

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-Z2-14

DUPLICATE - FILE

TRANSPORT - RECORDS
MAY 30 A.M.
File 5008-Z2-14

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- Z B N 6597 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 3814 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Toronto Gliding Club ..... Citizen of .....
   Christian name ....
8. Address of owner 421 Douglas Ave., Toronto, Ont.
   .....
   Change of address to .....
9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐
   Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from May 30/55 to May 30/56
    Temporary authority from ..... to .....

(D.W. Saunders)
District Superintendent Air Regulations

Date May 27, 1955

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-Z2-14

DUPLICATE - DIST. FILE NO.

TRANSPORT - RECORDS
JUN 1 A.M.
5008-Z2-14
File

51

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- Z B N 8204 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 3814 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner Toronto Gliding Club ..... Citizen of .....
   Christian name ....

8. Address of owner 538 Deloraine Avenue, Toronto, Ontario.
   .....

   Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from May 30, 1956 to May 30, 1957

Temporary authority from ..... to .....

(D.W. Saunders)
District Superintendent Air Regulations

Date May 31, 1956

66

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11427

NATIONALITY AND REGISTRATION MARKS CF-ZBN

1. Type and description	University of Toronto Glider UTG-1, Class II
2. Name and address of constructor	University of Toronto, Toronto, Ontario.
3. Constructor's serial number	UTG-1.
4. Name of owner	Toronto Gliding Club,
5. Address of owner	~~421 Douglas Avenue~~, 538 Deloraine Avenue, Toronto, Ontario.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Oshawa, Ontario.
8. Purpose	Commercial.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of April 1950., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBN and is of Canadian nationality.

Given at Ottawa this 12th day of November, 1952.

for *Superintendent, Air Regulations.*

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No..... / Pitch.....Diameter.....

25.	Weight of aircraft empty (including water in the radiators):	(a) Landplane..... 364	lbs.
		(b) Seaplane.....	lbs.
		(c) Skiplane.....	lbs.

WEIGHT OF FUEL AND OIL

26.	Fuel..... (at 7·2 lbs. per gallon)	lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
27.	Oil..... (at 9·0 lbs. per gallon)	lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
28.	Weight allowed for crew.....	lbs.
29.	Weight allowed for equipment, excluding wireless apparatus.....	lbs.
30.	Weight of wireless apparatus.....	lbs.
31.	Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....	lbs.
32.	Maximum total weight authorized.....	lbs.
	Landplane.....	lbs.
	Seaplane.....	lbs.
	Skiplane.....	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane..... Five Hundred and Sixty-Two Pounds .....
Seaplane.....
Skiplane.....

34. Minimum crew necessary..... One .....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of + 80.3 inches and + 84.0 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. ~~Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.~~

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h. See Aircraft Type Approval #26.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated November 18th, 1952 in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, 1932.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 12th day of November, 19 52.

.....
Superintendent, Air Regulations.

VALID FOR DAY FLYING ONLY.

65

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3614

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Toronto Gliding Club.
2. Christian name
3. Address 538 Deloraine ~~421 Douglas~~ Avenue, Toronto, Ontario.
4. Nationality Canadian.

NAME OF CONSTRUCTOR

5. Name University of Toronto

NATIONALITY AND REGISTRATION MARKS

6. CF-ZEN

DESCRIPTION OF AIRCRAFT

7. Type University of Toronto Glider Series UTG-1 Constructor's No. UTG-1
8. Place and year of construction of aircraft Toronto, Ontario, 1949.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) One

CLASSIFICATION OF AIRCRAFT

13. Category Class II Normal
14. Subdivision A,B,C,D & E
15. Maximum span (in flying position) 45' 0"
16. Maximum length (in flying position) 22' 1"
17. Total height (with and without trolley in case of seaplanes) 6' 0"

64

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
OTTAWA, CANADA

26 Issue 1
University of Toronto
UTG-1

AIRCRAFT TYPE APPROVAL

November 7, 1952.

Manufacturer:	Aeronautical Department, Faculty of Applied Science and Engineering, University of Toronto, Toronto, Ontario.
Model UTG-1:	Single Place Training Sailplane
Type:	Class II Glider
Airspeed Limits:	Glide or dive 90 mph True Ind. Spoilers open 65 mph True Ind. Airplane tow 90 mph True Ind. Auto-winch tow 65 mph True Ind.
C.G. Range	Front limit 80.3 inches aft of datum Rear limit 84.0 inches aft of datum
Datum:	93.1 inches forward of centerline of main U/C axle.
Levelling Means:	Top of fuselage between main spar and rear joint fitting is horizontal.
Maximum Weight:	562 lbs.
No. of Seats:	One
Baggage:	None
Ballast:	Zero to 13 lbs. lead on rear face of front bulkhead. See Approved Loading Schedule.

Control Surface Movements:

Elevator	26° up	23° down
Aileron	26° up	11° down
Rudder	32° left	32° right
Spoilers	60° up	0° down

Serial Nos. Eligible: No. 1 and up

..... 2

CJ

Required Equipment: Airspeed indicator

Certification Basis: United States CAR 5 as amended to June 1942.

Landing Gear - Main: One Goodyear 5.00 x 4.00 tail wheel with AWT 4-ply tire and tube.

NOTE 1: The following placard must be installed in full view of the pilot:

MAXIMUM PILOT WEIGHT = 198 lbs.
MINIMUM PILOT WEIGHT = 159 lbs.

THESE WEIGHTS 'PPLY WHEN NO BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED. FOR MAXIMUM AND MINIMUM PILOT WEIGHTS WHEN BALLAST OR ADDITIONAL EQUIPMENT IS CARRIED SEE 'PPROVED LOADING SCHEDULE.

H.S. Rees

(H.S. Rees),
Chief Aeronautical Engineer,
Department of Transport.

A. V. ROE CANADA LIMITED
MALTON - ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 12
SHEET No.
DATE Oct. 29/52
PREPARED BY J.W. AMES

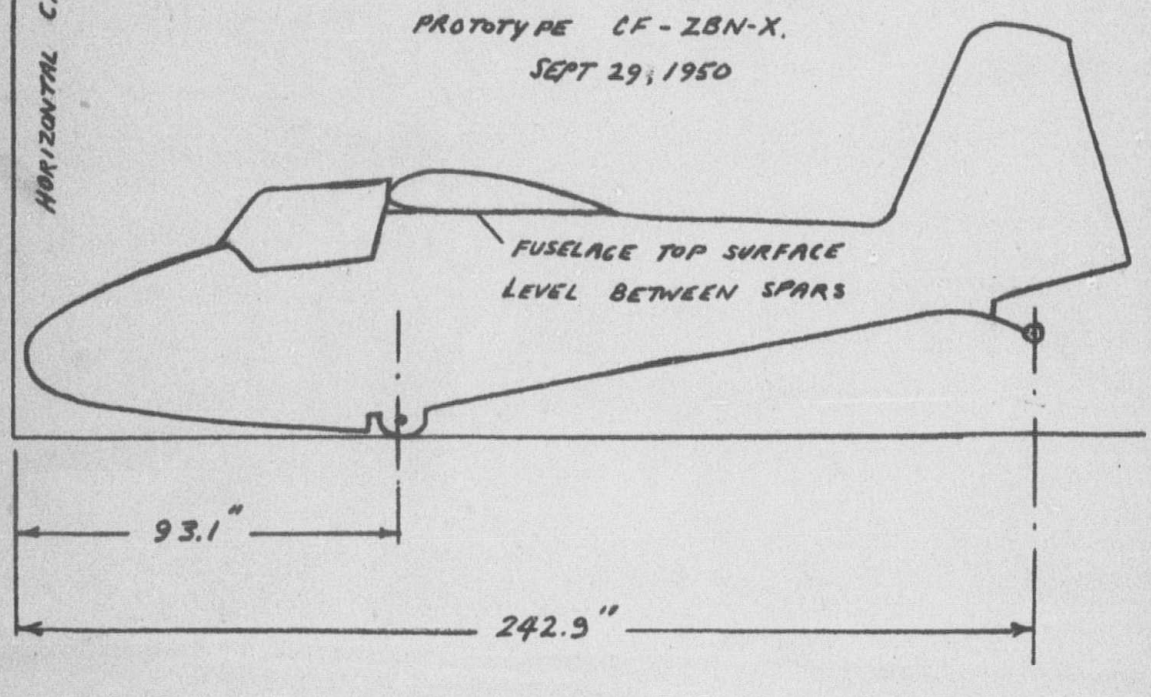
PROJECT

WEIGHT AND BALLAST REPORT

ACTUAL WEIGHT AND BALANCE REPORT

FOR UTG-1 LOUDON

FROM MEASUREMENTS MADE ON
PROTOTYPE CF-ZBN-X.
SEPT 29, 1950



WEIGHT EMPTY (INCLUDING SPECIFICATION EQUIPMENT) = 364 LB.
CENTER OF GRAVITY = 98.4 INCHES

MAXIMUM WEIGHT = 562 LB.

PREPARED BY
ISSUE 2 OCT. 29/52
PAGES 2 & 3 ADDED.

FORM 1360

A. V. ROE CANADA LIMITED
MALTON · ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 61
SHEET No.
DATE Oct. 29, 1952
PREPARED BY J.W. AMES

PROJECT

WEIGHT AND BALANCE REPORT

THE FOLLOWING TABLES SHOW THE WEIGHTS AND C.G. POSITIONS AT WHICH THE GLIDER HAS BEEN FLOWN, AND THE VARIOUS CONDITIONS UNDER WHICH IT WILL MEET THE DRAFT SPECIFICATION.

TABLE 1 PROTOTYPE CF-ZBN-X AS BALLASTED FOR FLIGHT TEST ONLY

	ITEM	WT.(LB.)	ARM(IN.)	MOMENT (LB. IN.)	
C.G. FORWARD.	EQUIPPED WT.	385	95.0	36575	
	PARACHUTE	20	57.0	1140	
	BALLAST	14	57.0	798	* TEST FLIGHT
	PILOT	166	51.0	8466	LIMITS
	GROSS	585	80.3 *	46979	
C.G. AFT	EQUIPPED WT. AND PARACHUTE AND PILOT SAME AS ABOVE.				
	BALLAST	12	233.0	2796	
	GROSS	583	84.0 *	48977	

TABLE 2 UTG-1 WEIGHT AND C.G. TO SPECIFICATION.

ITEM	WT.(LB)	ARM (IN.)	MOMENT (LB.IN.)
EQUIPPED WT.	364	98.4	35818
MAX. PILOT WT.	198	51.0	10098
GROSS	562	81.7	45916
MIN. PILOT WT.	159	51.0	8109
GROSS	523	84.0	43927

FORM 1868

A. V. ROE CANADA LIMITED
MALTON - ONTARIO
RESEARCH & DEVELOPMENT (AIRFRAME)

REPORT No. 60

SHEET No.

DATE OCT. 29, 1952

PREPARED BY J.W. AMES

PROJECT

WEIGHT AND BALANCE REPORT

FOR PILOTS LIGHTER THAN 159LB. THE FOLLOWING ALTERNATIVES ARE GIVEN.

TABLE 3 UTG-1 CARRYING TYPICAL INSTRUMENTS AND EQUIPMENT AS THE PROTOTYPE IS USUALLY FLOWN.

ITEM	WT. (LB.)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	385	95.0	36575
MAX. PILOT WT.	177	51.0	9027
GROSS	562	81.1	45602
MIN. PILOT WT.	128	51.0	6528
GROSS	513	84.0	43103

TABLE 4 UTG-1 WITH MIN. EQUIPMENT TO SPEC. REQUIREMENTS AND BALLASTED BY SCREWING STRIPS OF LEAD (13 LB) TO REAR FACE OF FRONT BULKHD

ITEM	WT. (LB)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	364	98.4	35818
BALLAST	13	11.0	132
MAX. PILOT WT.	185	51.0	9435
GROSS	562	80.8	45385
MIN. PILOT WT.	130	51.0	6630
GROSS	507	84.0	42580

TABLE 5 UTG-1 AS IN TABLE 4 EXCEPT PARACHUTE CARRIED AND BALLAST REDUCED TO 5.6 LB.

ITEM	WT. (LB)	ARM (IN.)	MOMENT (LB. IN.)
EQUIPPED WT.	364	98.4	35818
PARACHUTE	20	57.0	1140
BALLAST	5.6	11.0	61.6
MAX. PILOT WT.	172.4	51.0	8792
GROSS WT.	562	81.5	45811.6
MIN. PILOT WT	130	51.0	6630
GROSS	519.6	84.0	43649.6

FORM 1368

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
May 4th, 1952 Toronto, Ontario.	Airworthy	May 4th, 1953	A. R. Pinder
May 30, 1953 Toronto, Ontario	"Airworthy"	May 30, 1954	[illegible]
May 2, 1954 Malton, Ontario	Airworthy	May 30, 1955	[illegible]
May 11, 1955 Oshawa, Ontario	Airworthy	May 30, 1956	[illegible]
May 26, 1956 Brantford, Ont.	Airworthy	May 30, 1957	[illegible]

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

AIRCRAFT TYPE APPROVAL #26
& WEIGHT AND BALANCE REPORT
FORMS PART OF THIS CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT.

Note: This certificate is subject to Air Regulations, [illegible] and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

67-2

TORONTO Ontario August 3, 1956
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z3-7 5008-Z2-14	Schweizer SGU2-22 CF-ZCG Loudon UTG-1 CF-ZBN	5008-Z3-7 5008-Z2-14

14329

TRANSPORT - RECORDS
AUG 8 A.M.
File 5008-Z2-14

Director of Air Services,
Department of Transport,
No. 3 Temporary Building,
OTTAWA.

1. The Toronto Gliding Club has advised that on June 1, 1956, at approximately 1800 hrs., their gliders CF-ZBN and CF-ZCG were destroyed on the ground, during a violent windstorm, and during this destruction no person was in the gliders and no one was hurt.

2. Attached hereto are the Certificates of Registration and Airworthiness, for these two gliders, for cancellation.

(D. W. Saunders),
District Superintendent, Air Regulations,
for District Controller of Air Services,
Toronto.

COPY ON
5008-Z3-7

Encls.

Noted
GJ

FILE No. 5008 - ZBQ VOLUME No. 1

VOL. 1
5008 - ZBQ

DEPARTMENT OF TRANSPORT

FROM JUNE 1951
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - ZBQ - KIRBY CADET GLIDER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

FILE No. 5008 12-17 VOLUME No. 1

VOL. 1 — 5008 12-17

DEPARTMENT OF TRANSPORT

FROM JUNE, 1951
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF-ZBQ - KIRBY CADET GLIDER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 9 1959	32440	SRL			FEB 10 1959
FEB 10 1959	—	OSP.			MAR 3 1959
	—	SAE.			
APR 20 1959	Reg Mr Lachemineant	AIFT		LC	
OCT 28 1959	25807	SRL			APR 27 1959
NOV 3 1959	— VH	Records		DS	
OCT 30 1959	—	SAE/A.		AZ	NOV 2 1959
NOV 2 1959	—	OSP.			NOV 3 1959

FILE No. 5008 - Z2 - 17 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JUNE, 1951
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE OF - ZBQ - KIRBY CADET GLIDER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

5008 - Z2 - 17 VOL. 1

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUL 5 1951	19074	CAR			JUL 5 1951
JUL 20 1951	22425	CAR			AUG 24 1951
		CAE			AUG 24 1951
	28429	CAR			AUG 24 1951
AUG 24 1951		CAE			AUG 27 1951
AUG 27 1951		AHC	5-8-52		AUG 28 1951
AUG 29 1951		GRC			AUG 29 1951
AUG 31 1951		LasAC			AUG 31 1951
		RCL			AUG 31 1951
SEP 4 1951	BF 5/9/51	CAI			SEP 6 1951
SEP 14 1951	BF 15/9/51	CAR			SEP 15 1951
NOV 7 1952	34673	CAR	30/11/53		DEC 20 1952
DEC 20 1952		CAE			DEC 22 1952
JAN 29 1953	BF 30/1/53	CAR			JUN - 3 1953
	08461	CAR			JUN - 8 1953
JUN - 8 1953		CaI.			JUN - 9 1953
JUL 21 1953	27003	CAR			OCT 29 1953
MAY 10 1954	5100	CAR			JUL 22 1953 MAY 14 1954
MAY 10 1954		CAE			MAY 17 1954
MAY 26 1954	6479	CAR			MAY 26 1954
MAY 26 1954		CaI			MAY 27 1954 SEP 1954
MAY 29 1956 JUN 26 1956	5908	ARC			MAY 24 1955
	10707	ARC			JUN 1956 MAY 1956
MAY 3 1957	4073	ARC			MAY 1957
MAY 21 1957	6021	ARC			MAY 21 1957
DEC 23 1958	27672	ARC			

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6122

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

STANDARD TIME 1951 JUL 3 AM 9 19

(18) ..

TNA052 27/20=KN TORONTO ONT 3 NFT=
DIRECTOR OF AIR SERVICES ATTN SUPT AIR REGULATIONS=
=DEPT OF TRANSPORT OTTAWA=

19073

106

ART329 REQUEST REGISTRATION MARKINGS KIRBY CADET GLIDER
SERIAL TP23 OWNED BY CHARLES M YEATES 194 HUXLEY AVENUE
SOUTH HAMILTON ONTARIO=
FOR DISTRICT CONTROLLER AIR SERVICES=

Aircraft Licensing

CF-ZBQ

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE	X
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			DOMINION GOVERNMENT Air Services 6th Floor 260 Richmond St W

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Toronto, Ontario
July 3rd, 1951

CAR

P.A. IA 5008-ZZ-17

19330

DIRECTOR OF AIR SERVICES
ATTENTION SUPERINTENDENT AIR REGULATIONS
DEPARTMENT OF TRANSPORT
OTTAWA ONTARIO

ART329 REQUEST REGISTRATION MARKINGS KIRBY CADET GLIDER SERIAL TP23

OWNED BY CHARLES M YEATES 194 HUXLEY AVENUE SOUTH HAMILTON ONTARIO

for District Controller Air Services

cc:5008-5
cc:Headquarters
cc;Accounts - Air Regs.
cc:Telegram File

CF-ZBQ

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102-B

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED
FULL RATE MESSAGE
DAY LETTER
NIGHT MESSAGE
NIGHT LETTER
EVENING & SUNDAY

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
ST/CHK	CNR		TRANSPORT (AIR) 3712

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je [illegible]
Send the following message, subject to the terms on back hereof, which are hereby agreed to

2

OTTAWA ONTARIO JULY 4, 1951.

DISTRICT CONTROLLER OF AIR SERVICES,
260 RICHMOND STREET WEST,
TORONTO, ONTARIO
ATTENTION: DISTRICT SUPERINTENDENT, AIR REGULATIONS.

CAR445 METEL ART329 REGISTRATION MARKING CHARLIE FOX DASH ZEBRA BAKER QUEEN ALLOTTED TO KIRBY CADET GLIDER SERIAL TP23 OWNED BY CHARLES M. YEATES.

[signature]
CIVIL AVIATION.

EDS

ALLOTMENT OF REGISTRATION

3

REGISTRATION NUMBER CF-ZBQ

PART OF BLOCK ( )

DISTRICT Toronto, Ont.

DATE OF ISSUE 4.7.51 19074

TRANSPORT - RECORDS
JUL 4 P.M. 1951
File 5008-22-17

TYPE OF AIRCRAFT Kirby Cadet Glider,

SERIAL NUMBER TP23

OWNERS NAME Charles M. Yeates,

ADDRESS 194 Huxley Ave., South Hamilton, Ont.

REQUESTED BY WIRE (x) DATE (3.7.51)

REQUESTED BY LETTER ( ) DATE ( )

DESPATCHED BY TELEGRAM (x) TELETYPE ( ) LETTER ( )

4.7.51

Records

Please open

file and

return

Ron

R

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

15

2
6-47

TORONTO Ontario July 19, 1951
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Kirby Cadet Glider CF-ZBQ	5008-Z2-17

22425

TRANSPORT - RECORDS
JUL 20 A.M. 1951
File 5008-Z2-17

In Reply
Refer to File

Director of Air Services,
Department of Transport,
Ottawa

Attention C.A.R.

1. Please find attached the following:

(a) Application for Registration of a Glider, submitted by Messrs. Charles M. Yeates, Roy F. Byrne, and Russell Norman. The $5.00 registration fee has been paid.

(b) Form 2444.

(c) Copy of a letter dated June 18, 1951 from Slingsby Sailplanes Ltd.

(d) ~~Copy of~~ Original Bill of Sale.

(e) Letter (original) dated July 3, 1951 from Mr. Charles Yeates, which is self-explanatory.

2. Temporary authority has not been issued, pending your review and decision in this regard.

(D. W. Saunders),
District Superintendent, Air Regulations,
for District Controller of Air Services,
Toronto.

Attach.(5)

C.A.R.
O.K. for arw or thereabouts in normal category only. If the restrictions/ in Slingsby Sailplane Ltd. letter of June 18/51 are complied with.
21/8/51

Form 2412

14

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Enclosed is $ 5.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant Chas. M. Yeates Date of Application June 28/51
Ray Byrne
Russell Norman

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Charles M. Yeates	194 Huxley Ave., S., Hamilton, Ont.,	British
Ray F. Byrne	324 Cope St., N.,	"
Russell Norman	62 Balmoral Ave., N.,	"

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Hamilton Date and place of manufacture or reconstruction St. Catharines 1945

Accommodation for what number of passengers 1 Type Kirby Cadet Maker's No. TP 23

Span or breadth o/a in feet 41' Length o/a in feet 22 1/2'

Height o/a in feet 5' Weight equipped, but without load 310 #

Total weight authorized (fully loaded) in lbs 500 Air speed Max. 95 miles per hour

Types of launching to be authorized: Catapult, Winch, Motor-car tow, Aero tow, ~~Rocket assisted~~
(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments Air Speed, Altimeter.

2. Lights None 3. Types of release or hook Ottfur

REGISTRATION

(Not to be filled in by Applicant)

Glider inspected on July 10 1951 at Hamilton Airport

Particulars accurate as corrected No Drawings available

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions to be registered to type.
restriction as to launching

Date July 11/51 Signature [illegible]

DEPARTMENT OF TRANSPORT CANADA

Registration approved and Registration Mark C.F. allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

Form 2412

13

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Enclosed is $ 3.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant Charles M. Yeates Date of Application June 28/51
× Roy Byrne
× Russell Norman

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Charles M. Yeates	194 Huxley Ave. So., Hamilton, Ont.	British
Roy F. Byrne	324 Copp St., N., "	"
Russell Norman	62 Balmoral Ave. N., "	"

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Hamilton Date and place of manufacture or reconstruction St. Catharines, 1945

Accommodation for what number of passengers 1 Type Kirby Cadet Maker's No. TP23

Span or breadth o/a in feet 41' Length o/a in feet 22½'

Height o/a in feet 5' Weight equipped, but without load 310 #

Total weight authorized (fully loaded) in lbs 500 # Air speed Max. 95 miles per hour

Types of launching to be authorized: Catapult, Winch, Motor-car tow, Aero tow, ~~Rocket assisted~~
(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments Air Speed, Altimeter

2 Lights None 3. Types of release or hook Ottfur

REGISTRATION

(Not to be filled in by Applicant)

Glider inspected on July 10 1951 at Hamilton Airport

Particulars accurate as corrected No Drawings Available

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions to be registered to Type
restriction as to Launching

Date July 11/51 Signature [illegible]

DEPARTMENT OF TRANSPORT — AERONAUTICAL ENGINEERS — CANADA

Registration approved and Registration Mark C.F. allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— SERIAL NO. TP 23

1. C. of A. No.....Expires.....C. of R. No.....Expires.....

AIRCRAFT DATA—Manufacturer R. Noonan, St. Catharines. Model Kirby Cadet

Hours flown—Since New..... Since Overhaul .....

ENGINE DATA—Manufacturer..... Model.....

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	.....	.....
(2)	.....	.....
(3)	.....	Russell Norman
(4)	.....	Roy Byrne

Signature of Applicant Chas. M. Yeates

Date June 29, 1951

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed J. F. Gibson
"B" ENGINEER

Date June 18/51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed G. R. Innes CPL 68.
TEST PILOT

Date June 28/51

4. The following documents are attached:

Certificate of Airworthiness ☐ Certificate of Registration ☐ Weight and Balance Report (when applicable) ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
DISTRICT AIRCRAFT INSPECTOR

Date July 4/51

7. C. of A. and C. of R. renewed, not valid after (Date).....

Permissible Gross Weights— Wheels
Skis
Floats

Signed D. Saunders
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date 11-7-51

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

SLINGSBY SAILPLANES LTD.
Light Aircraft Manufacturers.

11

Offices & Works
Kirbymoorside, York.

18th June, 1951.

Mr. Russel Norman,
62 Balmoral Ave. N.,
Hamilton, Ontario.

Dear Sir:

The maximum allowable speed on the Kirby Cadet glider is 95 m.p.h. The stalling speed is about 31 m.p.h. at the maximum allowable all-up weight, and the safe speed is about twice the stalling speed. Regarding manoeuvres, the aircraft is cleared in this country in the normal category in which aerobatics of any kind are prohibited, but all orthodox manoeuvres such as loops and stall turns are frequently carried out. It is also stressed for any form of launching up to 70 m.p.h. using a release on the nose.

The prices for which you ask are as follows:-

Airspeed Indicator - £7, Variometer - £7/15/0 and parcel post to Hamilton Ontario - 4/3, giving a total of £14/19/3 delivered in Canada.

Yours faithfully,

for SLINGSBY SAILPLANES LTD.

Signed - T.A. Brown.

(COPY)

BOX 416

Bill of Sale

PHONE 2-4875

. . . St. Catharines Flying Club . . .

10

St. Catharines Air Cadet

Dec 12 1960

TO

ST. CATHARINES

19

Glider # TP 23. Sold to Roy Byrne.

and Russ Norman.

For sum of 50.00.

Paid in Full.

Jack F. Fuller
Manager.
St. Catharines Flying
Club

BOX 416

PHONE 2-4875

. . . St. Catharines Flying Club . . .

9

TO

ST. CATHARINES

19

Formerly owners of Glider TP 33.

was St. Catharines Air Cadet Squadron.

Mr. Lloyd Gonneau. Commanding Officer.

19# Hupley Ave.; So.,
Hamilton, Ont., 06221
July 3, 1951.

AIR SERVICES REGISTRY
TORONTO.
JUL 4 1951
File.....

Dist. Supt Air Regulations:
Dept of Transport,
260 Richmond St., W.,
Toronto, Ontario

Dear Mr. Saunders:

It is intended by this writer that the information set out below shall form a complete history of the Kirby Cadet Glider for which we now seek registration by your department.

Enclosed with this letter you will find:

① Bill of Sale
② Application for Registration of a Glider.
③ Application for Renewal of Certificate of airworthiness
④ Copy of a letter from Slingsby Sailplanes Ltd, Kirbymoorside, York.

Pieces Made Dept. 1951

The Kirby Cadet Glider was designed by Milton Hearne and normally manufactured by the Slingsby Sailplanes Company located at Kirbymoorside, York, England while others of the type were constructed in Canada, by individuals, to the original specifications.

The machine for which we now seek registration was one of those constructed in this country. The man who performed the work was Richard Noonan, a longstanding member of the Soaring Association of Canada (S.A.C.), who began glider building at Brandon Manitoba in 1925; who, along with David Parker, was the instructor responsible for the air cadet Glider Programme during its post-war existance, and who is presently completing the construction of a high performance soaring machine to the design specifications and under license from the Schweizer Aircraft Corporation, Elmira N.Y., U.S.A.

Dick Noonan, as it states on page 75 of the S.A.C. Year Book 1948-49, "went to St. Catharines in 1941 and became interested in the Air Cadet League. There he built a Kirby Cadet and

trained Air Cadets of 23 Squadron on it. Fifteen Cadets were trained to "A" and five to "B". This was the first A.C.L. gliding in Canada. Noonan took this Cadet to Elmira in 1945 and there obtained his "C" in it."

Further, on page 17 of that same Year Book it states, "The Provincial Committee of the Air Cadet League, having lost interest after two and a half years of operations, suddenly in the spring of the year (1947) just as the gliding season was about to open made up its mind to have nothing more to do with the glider training of Air Cadets; thereupon activities ceased."

The above extracts were included here in place logbooks which, apparently, were not kept.

The machine in question there lay unused in the back of the hangar at St. Catherines until Roy Byrne & Russell Norman, with whom I am now allied, purchased it on Dec. 12, 1950.

Since that date we three, under the direction and guidance of Lesley Baranowski, T.G.C. instructor; J. W. Ames, president S.A.C.; Albert Pow, London, have overhauled the machine.

Mr. J.F. Gibson has since certified the aircraft as airworthy and Mr. J. W. Ames has signified after test flights that the craft's behaviour is normal for its type.

Therefore we respectfully request that our application for registration of this Kirby Cadet Glider be considered by your dept.

Yours sincerely,

Chas. M. Yeates
Prof. Eng.

P.S. Mr. A. N. LaChaminant, past president S.A.C. or any of the other S.A.C members mentioned above would no doubt be able to confirm and expand any of the above detail as you may require. They may be reached
% S.A.C., Box 851, Ottawa, Canada.

CY.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

STANDARD TIME

1951 AUG 17 AM 10 42 578 (40)

.TNA139 25/18=KN TORONTO ONT 17 1022A=

=DIRECTOR OF AIR SERVICES, ATTN SUPT AIR REGULATIONS=

204 =DEPT OF TRANSPORT OTTAWA= 30670

ART426 PLEASE EXPEDITE REPLY OUR LETTER JULY 19 1951 KIRBY CADET GLIDER CHARLIE FOX DASH ZEBRA BAKER QUEEN=

ARP FOR DISTRICT CONTROLLER AIR SERVICES=

=ARP=

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE
CORRESPONDANCE EXCLUSIVE AVEC WESTERN UNION CABLE SERVICE

FORM 6102-B

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG
GENERAL MANAGER GÉRANT GÉNÉRAL
TORONTO

CLASS OF SERVICE DESIRED GENRE DE SERVICE	
FULL RATE PLEIN TARIF	
DAY LETTER LETTRE DE JOUR	17
NIGHT MESSAGE DÉPÊCHE DE NUIT	
NIGHT LETTER LETTRE DE NUIT	

PLACE X OPPOSITE SERVICE DESIRED
INDIQUEZ PAR UN X LE GENRE DE SERVICE DÉSIRÉ

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
HTP/MMG			(TRANSPORT AIR 3712)

Send the following message, subject to the terms on back hereof, which are hereby agreed to
Veuillez expédier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes

FILE: 5008-22-17

OTTAWA ONTARIO AUGUST 17th, 1951

DISTRICT CONTROLLER OF AIR SERVICES
260 RICHMOND STREET WEST
TORONTO ONTARIO

ATTENTION: DISTRICT SUPERINTENDENT AIR REGULATIONS

CAR598 REURART426 IN ORDER ISSUE TEMPORARY C OF A FOR KIRBY CADET GLIDER

REGISTRATION CF DASH ZEBRA BAKER QUEEN PENDING FINAL APPROVAL HEADQUARTERS

CIVIL AVIATION.

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.
VOTRE MESSAGE EST-IL CLAIR ET COMPLET? LES MOTS SUPPLÉMENTAIRES COÛTENT À PEINE QUELQUES CENTS.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE	X
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			DOMINION GOVERNMENT Air Services 6th Floor 260 Richmond St. E., Toronto, Ontario

Send the following message, subject to the terms on back hereof, which are hereby agreed to

August 17th 1951

CAR.

5008-Z2-17

PSA. JBB

DIRECTOR OF AIR SERVICES
ATTENTION SUPERINTENDENT AIR REGULATIONS
DEPARTMENT OF TRANSPORT
OTTAWA ONTARIO

ART426 PLEASE EXPEDITE REPLY OUR LETTER JULY 19 1951 KIRBY CADET GLIDER

CHARLIE FOX DASH ZEBRA BAKER QUEEN

ARP.

for District Controller Air Services

DWS/alb
cc:5008-Z2-17
cc:Headquarters
cc:Accounts - Air Regs.
cc:Telegram File

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.

CAR

28429

TRANSPORT - RECORDS
AUG 21 P.M. 1951
File 5008-Z2-17

18

TOR:5008-Z2-17

260 Richmond St. W., Toronto,
August 20th, 1951.

Messrs. C.M. Yeates, R.F. Byrne & R. Norman,
194 Huxley Avenue South,
HAMILTON, Ontario.

Dear Sirs:

This letter constitutes your temporary authority to operate KIRBY CADET C F - Z B Q as a private Glider on day visual flying only under normal categories and not valid after October 20th, 1951.

This authority is issued pending final approval of your application by the Headquarters of this Department.

Yours truly,

MER

(D.W. Saunders),
District Superintendent, Air Regulations,
Toronto.

/alb
cc:Headquarters

10407(R)

Issue C of R
See note on 22425

/RM

19

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10407

NATIONALITY AND REGISTRATION MARKS CF-ZBQ

1. Type and description	Kirby Cadet Glider
2. Name and address of constructor	St. Catharines, Ont.
3. Constructor's serial number	TP23
4. Name of owner	Charles M. Yeates, Roy F. Byrne, and Russell Norman,
5. Address of owner	194 Huxley Ave., S., Hamilton, Ont., 324 Cope St., N., Hamilton, Ont., ~~62 Balmoral Ave., N., Hamilton, Ont.~~
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ont.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 20th day of August 19.51., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, ~~1938, 1949, as amended~~, and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 23rd day of August 1951

Superintendent, Air Regulations.

~~A certificate of airworthiness for this aircraft is in force~~

Subject to Manufacturer's Limitations.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

20

5008-22-17

Ottawa, Canada,
August 23rd, 1951.

REGISTERED

Messers. C.M. Yeates, R.F. Byrne and R. Norman,
194 Huxley Ave., S.,
Hamilton, Ont.

Gentlemen;

Enclosed is Certificate of Registration No. 10407 for your Kirby Cadet Glider, CF-ZBQ, serial no. TP23.

Yours very truly,

(C.T. Travers),
Superintendent, Air Regulations.

NOTED TREAS. REV.

Encl.

cc. D.S.A.R. Toronto, Ont.

(P. 16 t3 + AO)
5/9/51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

25 2 9-50

Montreal Airport, Dorval, Que.,
November 6th, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Glider Kirby Cadet - CF-ZBQ	5008-Z2-17

Director of Air Services,
Department of Transport,
OTTAWA, Ont.

39673

TRANSPORT - RECORDS
NOV 7 P.M. 1952
File 5008-Z2-17

Attention: Superintendent, Air Regulations.

1. Please find attached the following documents regarding the subject Glider:-

(a) Application for Certificate of Registration in the name of "Club Vol à Voile de Sherbrooke" 61 Alexandre Street, Sherbrooke, P.Q.

(b) Bill of Sale from Messrs. Yeates, Byrne and Norman to Sherbrooke Gliding Club;

(c) Certificate of Registration No. 10407.

2. Registration fee of five dollars has been paid and is covered by Official Receipt No. 106632.

3. It is understood that the Sherbrooke Gliding Club or Club Vol à Voile de Sherbrooke is duly incorporated and that this information is already available to Headquarters. The application appears to be in order and issuance of a Certificate of Registration is recommended.

for District Controller, Air Services.

encls.

ZBQ

Form 2412

24

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Enclosed is $ 5.00 being fees for registration Club Vol à Voile de Sherbrooke

The particulars given below are true in every respect.

Signature of Applicant J. Boire pres. Date of Application Dec 6th 1951

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Club Vol à Voile de Sherbrooke	Sherbrooke	
or Sherbrooke Gliding Club		

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Club use

Usual Station Windsor Airport (miles) Date and place of manufacture or reconstruction St Catherine Ont.

Accommodation for what number of passengers 1 Type Kirby Cadet Maker's No. TP 23

Span or breadth o/a in feet 39' 6" Length o/a in feet 20' 0"

Height o/a in feet 3' 0" Weight equipped, but without load 200 lbs

Total weight authorized (fully loaded) in lbs 370 lbs Air speed 31 miles per hour

Types of launching to be authorized: ~~Catapult~~, Winch, Motor-car tow, Aero tow, ~~Rocket assisted~~
(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments 1 airspeed
1 altimeter
1 variometer

2 Lights none 3. Types of release or hook release on nose

REGISTRATION
(Not to be filled in by Applicant)

Glider inspected on October 2nd, 1952, by Aircraft Inspector Lace.

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions - Recommended - After inspection, Mr. Lace stated that the machine is considered airworthy.

Date November 6th, 1952.

Signature A. Laurin

Registration approved and Registration Mark C.F-ZBQ allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registratic s $3.00.

Form 2412

23

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Enclosed is $ 5.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant Club Vol à Voile de Sherbrooke Date of Application Dec. 6th 51

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Club Vol à Voile de Sherbrooke	Sherbrooke	
or Sherbrooke Gliding Club		

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) club use

Usual Station Windsor Airport Date and place of manufacture or reconstruction St Catherine Ont.

Accommodation for what number of passengers 1 Type Kirby Cadet Maker's No. TP 23

Span or breadth o/a in feet 39' 6" Length o/a in feet 20' 0"

Height o/a in feet 3' 6" Weight equipped, but without load 200 lbs

Total weight authorized (fully loaded) in lbs 370 lbs Air speed 31 miles per hour

Types of launching to be authorized: ~~Catapult~~, Winch, Motor-car tow, Aero tow, ~~Rubber-assisted~~
(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments 1 airspeed
1 altimeter
1 variometer

2 Lights none 3. Types of release or hook release on nose

REGISTRATION
(Not to be filled in by Applicant)

Glider inspected on October 2nd, 1952, by Aircraft Inspector Lace.

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions - Recommended - After inspection, Mr. Lace stated that the machine is considered airworthy.

Date November 6th, 1952.

Signature J. F. Laurence

Registration approved and Registration Mark C.F-ZBQ allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

1987 TOR: 5008-Z2-17

22

DATE. December 1, 1961

BILL OF SALE

PROVINCE OF ONTARIO, CANADA

KNOW ALL MEN BY THESE PRESENTS: That in consideration of one Dollar and other consideration, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto

Sherbrooke Gliding Club

heirs, executors, administrators and assigns, all right, title and interest in and to the following goods and chattels via:

Airplane CF-ZBQ

Serial # TP-13

Engine ——

Engine # ——

Roy Byrne

Signed. Ian M. Yeats

Russell S. Norman

/RM

21

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10407

NATIONALITY AND REGISTRATION MARKS CF-ZBQ

1. Type and description	Kirby Cadet Glider
2. Name and address of constructor	St. Catharines, Ont.
3. Constructor's serial number	TP23
4. Name of owner	Charles M. Yeates, Roy F. Byrne, and Russell Norman,
5. Address of owner	194 Huxley Ave., S., Hamilton, Ont., 324 Cope St., N., Hamilton, Ont., ~~62 Balmoral Ave., N., Hamilton, Ont.~~
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ont.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 20th day of August 19 51, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, ~~XXX XXXXXXXX~~ H.P. 24/51 and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 23rd day of August 19 51

H. L. Patterson

Superintendent, Air Regulations.

~~XXXXXXX

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

5008-Z2-17

Montreal Airport, Dorval, P.Q. November 18, 1952.

TRANSPORT - RECORDS
DEC 2 A.M. 1952
File 5008-Z2-17

42971

Sherbrooke Gliding Club,
61 Alexander Street,
Sherbrooke, Quebec.

Attention: Mr. Jacques Codere.

Gentlemen:

Pending issuance of formal Certificate, this letter will constitute a temporary Certificate of Registration valid until December 17, 1952, for your Glider CF-ZBQ.

This authority is subject to the conditions of the Manual of Operations for this Glider and the current Weight and Balance Report.

Yours very truly,

J.L. Blondeau,
District Superintendent, Air Regulations.

cc JPF/mr

cc H.Q.
D.C.A.S.
C.R.

24

JCF/MJL

OTTAWA ONTARIO DECEMBER 18th, 1952.

5008-Z2-17

Kirby Cadet Glider CF-ZBQ

5008-Z2-17

District Controller of Air Services,
Trans-Atlantic Administration Building,
Montreal Airport,
Dorval, Quebec.

Attn:- District Superintendent, Air Regulations.

1. Your letter, 5008-Z2-17, dated November 6th, 1952, covering the application of Club Vol a Voile de Sherbrooke, to register Kirby Cadet Glider CF-ZBQ is acknowledged.

2. In order to comply with The Air Regulations, a Certificate of Airworthiness must be issued for all Gliders and before further action may be taken on this application, we require a Weight and Balance Report and a $5.00 fee for the Certificate of Airworthiness.

3. Immediately upon receipt of the fee and Weight and Balance Report the formal documents may be issued.

(C.T. Travers),
Superintendent, Air Regulations.

CAR

DEPARTMENT OF TRANSPORT

27 2 9-50

INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Dorval, Que.,
May 5th, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Glider - CF-ZBQ	5008-Z2-17

TRANSPORT - RECORDS
MAY 8 A.M 1953
File 5008 - Z 2 - 17

08461

Director of Air Services,
Department of Transport,
OTTAWA, Ont.

Attention: Superintendent, Air Regulations.

1. A fee of five dollars ($5.00), covered by Official Receipt No. 187285 for the above mentioned glider has been paid to this office.

2. It is therefore recommended that the Certificate of Airworthiness for this aircraft be issued and forwarded to this office for transmission to the owner after submission of a satisfactory Weight and Balance Report.

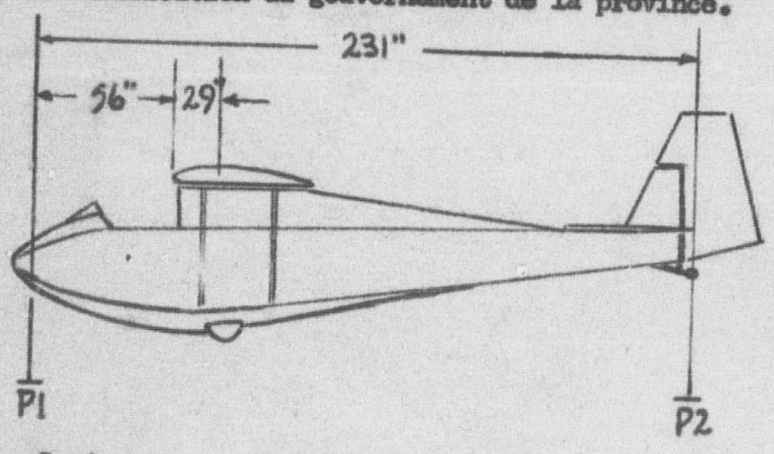
for District Controller, Air Services.

11902 (R)
3977 (A)

RAPPORT DE POIDS & CENTRAGE

Planeur : Kirby Cadet
Enrégistrement: CF-ZBQ
No. de série: TP-23

Ce planeur a été pesé dans un hangar clos à l'aéroport de Windsor Mills, sur bascules de marque Fairbanks Morse d'une capacité respective de 1200 lbs et 1000 lbs, portant le sceau de vérification du gouvernement de la province.



	Lecture	Parasite	Net
P1	209	11	198
P2	134	18	116
	pesanteur exacte à vide		314 lbs

Position du centre de gravité, appareil à vide

$$\frac{231 \times 116}{314} = 85$$

Etaient inclus dans le planeur durant la pesée
1) les courroies de sureté
2) trois instruments:
l altimètre, l "airspeed" l "rate-of-climb"

CLUB VOL A VOILE DE SHERBROOKE

Modère.

président,

Checked OK.
CBS July 21/53

31

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11902

NATIONALITY AND REGISTRATION MARKS CF-ZBQ

1. Type and description	Glider Kirby Cadet
2. Name and address of constructor	Slingsby Sailplanes Limited St. Catherines, Ontario
3. Constructor's serial number	TP23
4. Name of owner	Sherbrooke Gliding Club
5. Address of owner	61 Alexander Street, Sherbrooke, Quebec.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Windsor Mills Airport
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 18th day of November 19 52, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 23rd day of May 19 53

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

JF/BJC

32

OTTAWA, Ontario May 30th, 1953.

Glider Kirby Cadet,CF-ZBQ 5008-Z2-17

REGISTERED

District Controller of Air Services,
Trans-Atlantic Building,
Montreal Airport,
Dorval, Quebec.

Attention: District Superintendent, Air Regulations

1. Enclosed are Certificates of Registration No. 11902 and Airworthiness No. 3977 also the Journey & Aircraft Log Book covering Kirby Cadet TP 23 Glider, CF-ZBQ, registered in the name of Sherbrooke Gliding Club.

2. A Weight & Balance Report is required for this Glider with the original being inserted in the Certificate of Airworthiness and a copy being forwarded to Headquarters.

3. The Certificate of Airworthiness should be endorsed as follows:

(a) Enter empty weight under Item 25
(b) Enter C.G. Limits under Item 37
(c) Enter and sign Airworthiness date on Page 4.

4. Please inform Headquarters when these endorsements have been completed.

(C.T.Travers),
Superintendent, Air Regulations.

27

FORM 2195

DEPARTMENT OF TRANSPORT

FILE NO. 5008-22-17 33

DATE JULY 17 195 3

DEPARTMENTAL COMMUNICATIONS

TRANSPORT RECORDS

JUL 21 P.M. 1953

File 5008-22-17

27003

CANADIAN NATIONAL TELEGRAPHS
DAYLETTER COLLECT

DSAR RN 44
MTL AIRPORT

CLUB VOL A VOILE DE SHERBROOKE
SHERBROOKE P Q

ANQ 860 CE TELEGRAMME CONSTITUE CERTIFICATS TEMPORAIRES IMMATRICULATION ET NAVIGABILITE POUR PLANEUR SOLI RDATO QUEBEC VALIDE JUSQU'AU SEIZE AOUT CINQUANTE TROIS EN ATTENDANT VERIFICATION RAPPORT POIDS ET BALANCE

JLB:fb

DOAS MONTREAL

PHONE IN AT TO GET OFF BY

c.c. MQ

ORIGINATOR

ST CAR CAE HQ

TRANSPORT - RECORDS
JUL 22 A.M.
File 1008-Z2-17
CANADA
DEPARTMENT OF TRANSPORT

27212

10016

AIR SERVICES REGISTRY
MONTREAL
MAY 19 1953
File

2444
5-52

34

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF – ZBQ

SERIAL NO. TP 23

1. C. of A. No. _____ Expires _____ C. of R. No. _____ Expires _____
Aircraft Data—Manufacturer Dick Noonan Model Kiaby Cadet
Hours flown—Since New 15 hrs 24 mns Since Overhaul –
Engine Data—Manufacturer _____ Model –

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3)		
(4)		

Club Voli a Voile de Sherbrooke
Signature of Applicant Jacques Codère
Date 10 Mai 53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed W. Machutt
"M" Licence No. 158
Date May 10-1953

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, ~~power plant~~, landing gear, etc., are equivalent to the standards of the type.

Signed Jacques Codère
Pilot
Date 11 mai 1953

4. The following documents are attached:

Certificate of Airworthiness	☐
Certificate of Registration	☐
Weight and Balance Report (when applicable)	☒

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed pr George S Lace
~~District Aircraft Inspector~~
Date July 21/53.

7. C. of A. and C. of R. renewed, not valid after.

Date 11 May 1954

Permissible Gross Weights—Wheels
—Skis
—Floats

Signed L. E. Lawrence
District Superintendent, Air Regulations
Date 21.7.53

Mtkd

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3 5

2
9-49

Edmonton, Alta. 6 May 54.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-17	Glider CF-ZBQ	5008-Z2-17

TRANSPORT - RECORDS
MAY 10 A.M.
File 5008-Z2-17

Director of Air Services,
Ottawa.

Attention: SAR

05100

1. Perusal of the Certificate of Airworthiness of Glider CF-ZBQ, shows that on the Weight and Balance Report, the empty weight is 314 lbs. and under para. 33 of the C of A, maximum total weight authorized, landplane, the gross is 370 lbs. Therefore, we suggest to you that when a pilot is flying this Glider, the Glider is overloaded.

2. Will you kindly confirm from your records please, the empty and gross weight of the subject glider.

for District Controller, Air Services.

JCF/JM

36

OTTAWA, Ontario, May 14th, 1954.

5008-Z2-17 Glider CF-ZBQ 5008-Z2-17

District Controller of Air Services,
302 Blouey-Henry Building,
Edmonton, Alberta.

Attn: District Superintendent, Air Regulations.

1. Your letter 5008-Z2-17, dated May 6th, 1954, covering Glider CF-ZBQ, is acknowledged.

2. The Certificate of Airworthiness No. 3977 was completed as applied for by the owners the Sherbrooke Gliding Club, and was forwarded to the District office for further completion when certain requirements were made by the owners.

3. We have investigated the requirements for this type of glider and the following information will enable you to amend the Certificate of Airworthiness.

(a) The maximum gross weight authorized is 500 lbs.

(b) The empty weight is 314 lbs., indicated on the Weight and Balance Report, July 21, 1953.

(c) The Certificate of Airworthiness validity date is 11th of May, 1954.

(G.F. Travers),
Superintendent, Air Regulations.

D.

D & T / Transport
Civil Aviation Division
402 Bluney-Hendrie Building
Edmonton.

37

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11902

NATIONALITY AND REGISTRATION MARKS CF-ZBQ

1. Type and description	Glider Kirby Cadet
2. Name and address of constructor	Slingsby Sailplanes Limited St. Catherines, Ontario
3. Constructor's serial number	TP23
4. Name of owner	Sherbrooke Gliding Club
5. Address of owner	61 Alexander Street, Sherbrooke, Quebec.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Windsor Mills Airport
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 18th day of November 1952..., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 23rd day of May 19 53

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

Engines

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No..... / Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane.....	.....lbs.
	(b) Seaplane.....	.....lbs.
	(c) Skiplane.....	.....lbs.

Weight of Fuel and Oil

26. Fuel.....	.....lbs.
(at 7·2 lbs. per gallon)	
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
27. Oil.....	.....lbs.
(at 9·0 lbs. per gallon)	
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
28. Weight allowed for crew.....	.....lbs.
29. Weight allowed for equipment, excluding wireless apparatus.....	.....lbs.
30. Weight of wireless apparatus.....	.....lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....	.....lbs.
32. Maximum total weight authorized.....	.....lbs.
Landplane.....	.....lbs.
Seaplane.....	.....lbs.
Skiplane.....	.....lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....Three Hundred and Seventy Pounds Five hundred pounds (21.5.54)
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....One.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. ~~Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.~~

40. The indicated air speed must never exceed (a).....95.....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated.....November 18, 1952.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this.....23rd.....day of.....May.....19.53...

.....
Superintendent, Air Regulations.

40

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3977

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

CU-NIM GLIDING CLUB OF RED DEER (21.5.54)

1. Surname of owner (or name of Company) Sherbrooke Gliding Club
2. Christian name
Secretary, 6 Georgia Apartments, Red Deer, Alberta
3. Address 61 Alexander Street, Sherbrooke, Quebec
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Slingsby Sailplanes Limited

NATIONALITY AND REGISTRATION MARKS

6. CF-ZBQ

DESCRIPTION OF AIRCRAFT

7. Type Glider Series Kirby Cadet Constructor's No. T23
8. Place and year of construction of aircraft St. Catherines, Ontario 1941

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) One

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 39' 6"
16. Maximum length (in flying position) 20' 0"
17. Total height (with and without trolley in case of seaplanes) 3' 0"

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		May 11, 1954 May 14, 1955	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
~~Engine Revolution Counter~~
~~Oil Pressure Gauge~~
~~Oil Temperature Gauge~~

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

1. Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried in the aircraft during flight.
2. Maximum allowable speed is 95 M.P.H.
3. Stalling speed is about 31 M.P.H. at maximum weight.
4. Safe speed is about twice the stalling speed.
5. Aerobatics are prohibited
6. Launching spped up to 70 M.P.H.

Note: This certificate is subject to Air Regulations, [redacted] and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

41

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No 14414

NATIONALITY AND REGISTRATION MARKS CF-ZBQ.

1. Type and description	Glider Kirby Cadet
2. Name and address of constructor	Slingsby Sailplanes Limited St. Catherines, Ontario.
3. Constructor's serial number	TP23
4. Name of owner	Cu-Nim Gliding Club of Red Deer
5. Address of owner	Secretary, 6 Georgia Apartments, Red Deer, Alta.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Red Deer, Alta.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of May 1954, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 21st day of May 1954.

EDMONTON

for *Superintendent, Air Regulations.*

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-Z2-17
DUPLICATE - DIST. FILE NO. 5008-Z2-17

4 P

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- ZBQ 2. Old C of R No. 11902

3. New C of R No. 14414 ✓ Date 21 May 54

4. C of A No. 3977 Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane [x] Seaplane [ ] Skiplane [ ]

6. Classification Changes:
   State [ ] to Commercial [ ] to Private [ ]
   Commercial [ ] to State [ ] to Private [ ]
   Private [x] ✓ to Commercial [ ] to State [ ]

Valid for Day [x] ✓ Night [ ]

7. Surname of owner .....Cu-Nim.Gliding.Club.of.Red.Deer. Citizen of Canada.....
   Christian name ....

8. Address of owner .....Secretary,.6.Georgia.Apartments,.Red.Deer,.Alta.....
   .....
   Change of address to .....

9. Aircraft based at .....Red.Deer,.Alta.....

10. Type	Weight empty	Max. gross weight
Land	314	500 ✓
Sea		
Ski		

11. Minimum crew	1	Maximum passengers		Pass with freight

12 Wt. and balance report [ ] Date Copy attached [ ]
   Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not .....
otherwise covered .....
.....C.of.A,.Item.33,.Gross.Weight.changed.from.Three. Hundred and Seventy Pounds to Five Hundred Pounds.
.....

13. C of A valid from .....12.May.54..... to .....14.May.55.....
   Temporary authority from ..... to .....

Date .....21 May 54.

R S Keith for
District Superintendent Air Regulations

Noted

f3
5008-Z2-17

REGISTERED
Secretary,
Cu-Nim Gliding Club of
Red Deer,
6 Georgia Apts.,
Red Deer, Alta.

402 Blowey-Henry Bldg.,
Edmonton, Alta.,
21 May, 1954.

TRANSPORT - RECORDS
MAY 25 P.M.
File 5008-Z-2-17

06479

KINDLY CHANGE NAME & AD RESS OF OWNER ON ALL LOGS TO AGREE WITH C OF R AND C OF A.

Dear Sir/s-

Enclosed are Certificate of Registration No. 14414 and Certificate of Airworthiness No. 3977, together with Engine and ~~Journey and Aircraft Log Books~~, for your Glider Kirby Cadet aircraft, CF- ZHQ, Serial No. 1723.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The endorsement on Page 3, Section D, paragraph 3, of the Certificate of Airworthiness is brought to your attention, and it is the responsibility of the owner of the aircraft to ensure that this endorsement is fulfilled in its entirety, otherwise the Certificate of Airworthiness will be considered invalid.

The Certificate of Airworthiness is valid until 14 May 55.

Your attention is drawn to the Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

K. F. Saunders
District Supt., Air Regulations.

MM

P.S. Propeller Log Book(s) enclosed. Yes No X

cc: H.Q. & DSAR Montreal.

HEADQUARTERS - Registered mail. Attached is C of R No. 14414 (copy), C of R No. 11902 for cancellation; form AC-5-132, for your records.

TO BE USED FOR
RE-REGISTRATION AND
ANY AMENDMENTS TO
CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5908-Z2-17
DUPLICATE - DISTRICT FILE NO.

TRANSPORT RECORDS
MAY 20 A.M. 44
File 5908-Z2-17

TO: [illegible] OTTAWA
ATTENTION: SAR

AIRCRAFT LICENSING RECORDS

5908

1. Registration mark CF- ZBQ 2. Old C of R No. 14414.....

3. New C of R No. ..... Date .....

4. C of A No. 3977..... Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane Seaplane [ ] Skiplane [ ]

6. Classification Changes: State [ ] to Commercial [ ] to Private [ ]
Commercial [ ] to State [ ] to Private [ ]
Private [ ] to Commercial [ ] to State [ ]

Valid for Day [ ] Night [ ]

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report [ ] Date Copy attached [ ]

Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not .....

otherwise covered .....

.....

.....

13. C of A valid from ....16 May 55..... to .....16 May 56.....

Temporary authority from ..... to .....

KFS/M
Date 16 May 55

District Superintendent Air Regulations

USED FOR REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. 5008-Z2-17

DUPLICATE - PAST FILE NO. ____

TRANSPORT - RECORDS
JUN 26 A.M.
5008-Z2-17
File

TO [redacted] OTTAWA
ATTENTION: SAR

AIRCRAFT LICENSING RECORDS

1. Registration mark CF- ZBQ 10707 2. Old C of R No. 1414

3. New C of R No. ..... Date .....

4. C of A No. 3977 Category: Normal [x] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane x Seaplane [ ] Skiplane [ ]

6. Classification Changes: State [ ] to Commercial [ ] to Private [ ]
Commercial [ ] to State [ ] to Private [ ]
Private [x] to Commercial [ ] to State [ ]

Valid for Day [x] Night [ ]

7. Surname of owner ..... Citizen of .....
Christian name ....

8. Address of owner .....
.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report [ ] Date Copy attached [ ]
Wt. and balance amendment [ ] Date Copy attached [ ]

Amendment not .....
otherwise covered .....
.....
.....

13. C of A valid from 29.May.56 to 29.May.1957
Temporary authority from ..... to .....

MM
Date 20 June 56

J.R. Baumstad
District Superintendent Air Regulations

4073

TRANSPORT - RECORDS
MAY 3 P.M.
5008 22-17
File

302 Blowey Henry Bldg.,
Edmonton, Alberta.
29th April, 1957.

Cu-Nim Gliding Club of Red Deer,
P.O. Box 163, Red Deer, Alberta.

Dear Sir:

Re: Glider Kirby Cadet CF-ZBQ

Records on file at this office show that the validity date of the Certificate of Airworthiness No 2977 for the above-noted aircraft registered in your name, expires on the 29th May, 1957.

You are advised that any flying carried out by this aircraft subsequent to the above mentioned date constitutes a breach of The Air Regulations, Sections 210 and 215.

You are requested, therefore, to advise this office your intentions towards having the aircraft properly inspected for the renewal of the Certificate of Airworthiness. Consideration will be given to granting a ferry permit in order that the aircraft may be flown to a base where the required facilities exist for a proper inspection to be made, if the validity of the Certificate of Airworthiness has expired.

It is to your advantage to have renewal of C of A carried out within 30 days prior to expiry date and thereby maintain the present expiry date of the C of A without penalty of the 12 month period.

Your reply is requested at your earliest convenience.

Yours very truly,

K.F. Saunders,
District Supt., Air Regulations.

2462-A
2-56

To HQ

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE 53 [ ]

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 1414

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-ZBQ	Slingsby Sailplanes Ltd. Glider Kirby Cadet	TP23

TRANSPORT - RECORDS
MAY 21
File 5008-20-17

6021

(4) NAME OF OWNER Cu-Nim Gliding Club of Red Deer.

(5) ADDRESS OF OWNER P.O. Box 163, Red Deer, Alberta.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE 21 May, 1954

SEAL

for ~~SUPERINTENDENT~~ AIR REGULATIONS
Controller, Civil

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
2-56

52

SERIAL NO. 3977

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- ZBQ	Slingsby Sailplanes Ltd. Glider Kirby Cadet	123

(4) CATEGORY

Private

LANDPLANE ☒ SEAPLANE ☐ SKIPLANE ☐

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER 29 May, 1953

FOR DAYLYING ONLY

DATE OF ISSUE 18 Nov. 52

SEAL

for xxxxxxxxxx
SUPERINTENDENT AIR REGULATIONS
Controller, Civil

SEE REVERSE SIDE

51

5008-Z2-17

402 Blowey Henry Building,
EDMONTON, Alberta.
May 15, 1957.

REGISTERED

Cu Nim Gliding Club of Red Deer,
P.O. Box 163,
Red Deer, Alberta.

Dear Sir:

Returned herewith Certificate of Registration No. 14414 and Certificate of Airworthiness No. 3977 covering aircraft Glider Kirby Cadet CF-ZBQ

ACTION TAKEN

C of A renewed to be not valid after 29 May, 1958

Kindly place these Certificates in the pocket of the Journey and Aircraft log book and carry on board the aircraft on all flights.

Yours truly,

K.F. Saunders,
Dist.Supt. Air Regulations.

Enc.

KFS/JL
cc: H.Q.

Noted
C.A.P.
22.5.57

CANADA

2444
7-55

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval _____

REGISTRATION – CF – ZBQ SERIAL No. TP 23

1. C. of A. No. 3977 Expires 29 May 57 C. of R. No. 14414 Expires _____
Aircraft Data—Manufacturer Slingsby Sailplanes Model Kirby Cadet
Hours flown—Since New 42:13 Since Overhaul --
Engine Data—Manufacturer N/A Model N/A

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) N/A		
(2) N/A		
(3) N/A		
(4) N/A		

Signature of Applicant [signature]
for Cu Nim Gliding Club of Red Deer
Date 8 May 1957

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated None Signed [signature]
"M" Licence No. VRM-254
Serial No. of last Service Bulletin incorporated None Date 6 May 1957

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed [signature]
Pilot XDG 133
Date 6 May 1957.

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X (Certified no change in weight and balance since last weighed on 27 Sep 54)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 14414 and C. of A. No. 3977, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
for District Aircraft Inspector
Date MAY 14 1957

7. C. of A. and C. of R. renewed, not valid after.

Date 29 May, 1958

Permissible Gross Weights—Wheels 500
—Skis
—Floats

Signed [signature]
District Superintendent, Air Regulations
Date 15 May, 1957

Other Action:— New C of A and C of R issued

8. H.Q. Action C.A.R.

C.A.E. $100

49

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 14414

NATIONALITY AND REGISTRATION MARKS.....CF-ZBQ

1. Type and description	Glider Kirby Cadet
2. Name and address of constructor	Slingsby Sailplanes Limited St. Catherines, Ontario.
3. Constructor's serial number	TP23
4. Name of owner	Cu-Nim Gliding Club of Red Deer
5. Address of owner	Secretary, 6 Georgia Apartments, Red Deer, Alta.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Red Deer, Alta.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of May 1954., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBQ and is of Canadian nationality.

Given at Ottawa this 21st day of May 1954.

for *Superintendent, Air Regulations.*

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	314	lbs.
	(b) Seaplane		lbs.
	(c) Skiplane		lbs.

WEIGHT OF FUEL AND OIL

26. Fuel		lbs.
(at 7·2 lbs. per gallon)		
(a) Number of tanks		
(b) Capacity of tanks	Imp. gals.	
27. Oil		lbs.
(at 9·0 lbs. per gallon)		
(a) Number of tanks		
(b) Capacity of tanks	Imp. gals.	
28. Weight allowed for crew		lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full		lbs.
32. Maximum total weight authorized		lbs.
Landplane		lbs.
Seaplane		lbs.
Skiplane		lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane Five ~~Three~~ Hundred ~~and Seventy~~ Pounds ~~XXX~~ ...17 May 54
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....One.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. ~~Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.~~

40. The indicated air speed must never exceed (a).....95.....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated.....November 18, 1952.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~ 1952.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this.....23rd.....day of.....May.....19.....53

.....
Superintendent, Air Regulations.

VALID FOR DAY FLYING ONLY

18

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3977

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Cu-Nim Gliding Club of Red Deer ~~Sherbrooke Gliding Club~~ 21 May 54
2. Christian name
3. Address Secretary, #6 Georgia Apartments, Red Deer, Alta. 21 May 54 ~~44 Alexander Street, Sherbrooke, Quebec~~
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Slingsby Sailplanes Limited

NATIONALITY AND REGISTRATION MARKS

6. CF-ZBQ

DESCRIPTION OF AIRCRAFT

7. Type Glider Series Kirby Cadet Constructor's No. TP23
8. Place and year of construction of aircraft St. Catherines, Ontario 1941

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) One

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 39' 6"
16. Maximum length (in flying position) 20' 0"
17. Total height (with and without trolley in case of seaplanes) 3' 0"

41

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
~~Engine Revolution Counter~~
Oil Pressure Gauge
~~Oil Temperature Gauge~~

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

1. Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried in the aircraft during flight.
2. Maximum allowable speed is 95 M.P.H.
3. Stalling speed is about 31 M.P.H. at maximum weight.
4. Safe speed is about twice the stalling speed.
5. Aerobatics are prohibited
6. Launching spped up to 70 M.P.H.

Note: This certificate is subject to Air Regulations, [illegible], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
Inspected by Engineer on 14 May 54.	Satisfactory.	11 MAY 1954 14 May 55.	
Inspected by Engineer A.N. Shrive YZM-235 16 May 55.	Satisfactory	16 May 1956	
Inspected by Engineer on 30 May 56.	Satisfactory	29 May, 1957	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

2444
4-57

54

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval _____

REGISTRATION – CF – ZBQ SERIAL No. TP23

1. C. of A. No. 3977 Expires 29 May 1958 C. of R. No. 14414 Expires _____
   Aircraft Data—Manufacturer Slingsby Sailplanes Model Kirby Cadet
   Hours flown—Since New 52:34 Since Overhaul - -
   Engine Data—Manufacturer N/A Model _____

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) N/A		
(2)		
(3)		
(4)		

Signature of Applicant K. Weinstein
for Cu-Nim Gliding Club of Red Deer,
Date 12 December, 1958

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated N/A Signed K. Weinstein (K. Weinstein)
"M" Licence No. VRM-254

Serial No. of last Service Bulletin incorporated N/A Date 12 December, 1958

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date Dec 14 1958 Signed Garratt X XDG 134
Pilot

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached: Certificate of Airworthiness [x] Certificate of Registration [x]
   Weight and Balance Report [x] Certified no change of weight.

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.
   Date Dec 18/58 Signed for District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after. Date: 14 Dec 1959
   Permissible Gross Weights—Wheels 500 Skis _____ Floats _____
   Amendment or other Action: New C of A issued

Noted for 23.12.58

Date 19 Dec 1958 Signed for Regional District Superintendent, Air Regulations

8. H.Q. Action C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

2462
2-56

55

CERTIFICATE OF AIRWORTHINESS

SERIAL NO. 3977

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- ZBQ	Slingsby Sailplanes Ltd. Glider Kirby Cadet	TP23

(4) CATEGORY

Private — LANDPLANE ☐ SEAPLANE ☐ SKIPLANE ☐

VALID FOR DAY FLYING ONLY

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL, THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER 29 May, 1958

DATE OF ISSUE 18 Nov. 52

SEAL

for ~~DIRECTOR~~ AIR REGULATIONS
Controller, Civil

SEE REVERSE SIDE

2402-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

56

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 1441

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-ZBQ	Slingsby Sailplanes Ltd. Glider Kirby Cadet	TP23

(4) NAME OF OWNER Cu-Nim Gliding Club of Red Deer,

(5) ADDRESS OF OWNER P.O. Box 163, Red Deer, Alberta.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE 21 May, 1954

SEAL

for SUPERINTENDENT AIR REGULATIONS
Controller, Civil

SEE REVERSE SIDE

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus instal

A. Transmitters. (Give Frequencies) ..... NIL .....

B. Receivers ..... NIL .....

C. Miscellaneous. (ADF, ILS, etc.) ..... NIL .....

Radio Licence No. (if A/C previously registered in Canada) ..... NIL .....

PART "D"

I hereby certify 1. (a) That I am the sole owner of the aircraft described herein,
(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at Red Deer this 26th day of January 19 59

Witness J. Calder Makey XDC-140 .....

Designation:- ..... D. L. Eagle
(Signature of Applicant(s))

.....
(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by [m] (initial) Date:- 4/2 19 59

Registration Marks CF-Z.B.Q. allotted [m] (initial)

Documentation required as listed below has been checked and is satisfactory [m] (initial)

Fee $5.00 (Registration) received [m] (initial) Fee $5.00 (Airworthiness) received [ ] (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY [yes] and NIGHT [no] flying.

Dated at Edmonton this 4 day of Feb 19 59

Regional District Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

- [x] (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)
- [x] (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)
- [ ] (III) Fee of $5.00 for Certificate of Airworthiness.
- [ ] (IV) Aircraft Weight and Balance Report. (In duplicate.)
- [ ] (V) Aeroplane Flight Manual, Operation Limitations.
- [ ] (VI) Certificate of Airworthiness for Export or equivalent document.
- [ ] (VII) Customs and Excise Clearance Form B.1.
- [ ] (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).
- [ ] (IX) D.O.T. Approved Release notes, where applicable.
- [ ] (X) Certification of Aircraft Imported Complete. (Form 2443.)
- [ ] (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

57

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

...ct Director, Air Services.
...ent of Transport.
Edmonton, Alta.

(Parts A, B, C & D must be completed by the applicant.)

PART "A"

...pplication is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particu-...ars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF- ZBQ	SLINGSBY SAILPLANES LTD	Glider KIRBY CADET	TP 23	JULY 1944

Aircraft is to be registered as:- STATE ☐ COMMERCIAL ☐ PRIVATE ☑

Proposed base of Operation:- INNISFAIL ..... Certificate of Airworthiness or ~~Flight Permit Number~~ in force.. 3977.
(If applicable)

OWNER ~~OR OWNERS~~ OF THE AIRCRAFT:- DONALD LYLE BARTON EAGLE
(All names to be listed) 36 Calender Road Calgary Alta

If Owner/s is a Corporation, particulars of President or Chairman and all Directors are as follows:-

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.
	N I L		

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- A/C Type Approval No.....
C.A.A. Specification No.....

Weight and Balance Report submitted is for:- LAND ☑ SEA ☐ SKI ☐

Type Engine/s installed. ...NIL..... Max. Gross Weight Authorized:- ...500... lbs.

Minimum Flight Crew:- ...1... Total Number of Persons to be carried ...1...
(including crew)

Nav. Lights NO Landing Lights NO

2413
1-57

Cdn Reg 10.2.59 File # S.S. Reg # E 001021

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

T. HQ

2462
2-56

58

SERIAL NO. 3977

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- ZBQ	Slingsby Sailplanes Ltd Glider Kirby Cadet	TP23

TRANSPORT RECORDS
DEC 12 P.M.
5008-Z2-17
File

(4) CATEGORY				
Normal	LANDPLANE [X]	27672 SEAPLANE [ ]	SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER 14 Dec 59

DATE OF ISSUE 18 Nov 52

SEAL

C. O. Bentley
SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

Minister of Transport

2462-A
2-56

59

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 17981

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-ZBQ	Slingsby Sailplanes Ltd Glider Kirby Cadet	TF23

ACTION TAKEN
MAR 3 1959
OSC No. 3

ADDED
(4)

(4) NAME OF OWNER Donald Lyle Barton EAGLE

(5) ADDRESS OF OWNER 36 Calendar Road Calgary Alberta

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE Feb 4 1959

SEAL

for MINISTER OF TRANSPORT

SEE REVERSE SIDE

CI[illegible]ICES
[illegible] DIVISION

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008- 32-17

60

To H.Q

Federal Bldg., 9820-107 St.,
Edmonton, Alberta,
Feb. 4, 1959.

TRANSPORT - RECORDS
FEB 9 P.M.
File 5008-32-17

Mr. Donald Lyle B. Eagle,
36 Calender Road,
Calgary, Alta.

32440

Dear Sir/s:

Enclosed are Certificate of Registration No...17981..... and Certificate of Airworthiness No.....3977..... for your .....Glider Kirby Cadet.....aircraft, CF-ZBQ , Serial No...3P23

The Certificate must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until ....Dec 14 1959.....

Your attention is drawn to the Engineering and Inspection Manual, page 510, Part 1, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours very truly,

F.W. Bone,
Regional Controller, Civil Aviation

P.S.
Propeller Log Book (s) enclosed. Yes___ No_X_
Journey & Aircraft & Engine Log Books enclosed. Yes___ No_X_

cc: H.Q. ✓
cc: Regional Supt. RADIO Regulations Edmonton

71

61 2/8-57

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Vancouver 1, B.C., 26 October, 1959.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-Z2-17 (ARV)

SUBJECT: GLIDER, Kirby Cadet aircraft CF-ZBQ

TRANSPORT - RECORDS
OCT 28 A.M.
File 5008-Z2-17

Director General, Air Services,
Department of Transport,
Ottawa, Ontario.

25807

1. We have received notice that the above-noted aircraft is a complete write-off, and it is requested the markings be deleted from the Aircraft Register.

2. Certificate of Registration # 17981 and Certificate of Airworthiness # 3977 have been returned to this office and have been placed on our file.

for Regional Director,
Air Services.

Coded & Noted
30.10.59

Certs. Cancelled.
30.10.59

22519608-ZBQ

CANADA

DEPARTMENT OF TRANSPORT Serial No. 624

AIR SERVICES
CIVIL AVIATION BRANCH

SUMMARY ACCIDENT REPORT

Aircraft: Cadet Glider, CF-ZBQ
Place: Cranbrook, B.C.
Date: 19th April, 1959.

RESUME

At about 1413 MST Piper PA-12, CF-KNW, owned by Mr. Anton Hlohovsky and Leonard Zubyk, took off from Cranbrook Airport with Cadet Glider CF-ZBQ, owned by Mr. D.L. Eagle and flown by Geoffrey N. Logan in tow. Some minutes after take off, a left turn was started over Moir Park on the west side of the City of Cranbrook to return to the Airport. As the turn progressed the Glider made an extremely steep diving turn to the right. This diving turn initially resulted in a slack tow rope; as the glider continued to turn away from the tow aircraft the tow rope tightened imposing loads additional to the normal air loads. At this point the right wing spars of the Glider failed in an up load condition and the wing separated from the aircraft. The pilot bailed out but due to low altitude he struck the ground before his parachute was fully open. His injuries proved fatal.

INVESTIGATION AND EVIDENCE

A Certificate of Airworthiness had been issued and there was no evidence to indicate any malfunction of the airframe or controls prior to the accident and as far as could be determined the aircraft was fit for the flight. Two minor defects, one on the welding of the aileron control bracket bell crank pivot brace and a doubtful splice on the starboard wing strut cross brace cable were not considered as contributory to the accident. The pilot Geoffrey Logan held a Private Pilot Licence and had accumulated 71:00 hours of flying time on powered aircraft. He also held a student glider pilot permit and had only flown 35 minutes on gliders prior to the accident.

Portions of the failed main spar were examined by qualified personnel at the National Aeronautical Establishment Laboratory. Their opinion was that the spar failed in an up load condition in excess of that for which it was designed.

.... 2

The pilot Logan had made a previous aero towed flight on the day of the accident which, in the opinion of the tow pilot was most unsatisfactory. He stated that he had experienced considerable difficulty in off setting the effects of the glider pilot's attempts to maintain position. The second tow resulting in the accident, started off well but deteriorated and repeated the mornings performance. The tow pilot stated it was his intention to release the glider as soon as he reached a favourable position. It was while attempting to reach such a position that the accident occurred unknown to the tow pilot whose main concern was to release the glider to prevent hazard to his tow plane. The tow pilot had difficulty releasing the glider and the release was not made until after the glider wing had separated.

CONCLUSION

Through inexperience the pilot of the glider misused his flight controls to the extent that when in aero towed flight stresses were set up in the wing structure of the glider beyond its designed strength resulting in the right wing becoming detached in flight.

FILE No. 5008 - Z2 - 23

VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM MAY, 1952

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - ZBW - LAISTER-KAUFFMAN L-K-10A GLIDER

VOL. 1

5008 - Z2 - 23

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES

FILE No. 5008 - Z2 - 23 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM MAY, 1952

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - ZBW - LAISTER-KAUFFMAN LK-10A GLIDER.

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) SERVICES DATE LEFT OFFICE	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AY 7 1952	5750	CAR	7.7.52	GJ	MAY 7 1952
AY 28 1952	10963	CAR		GJ	MAY 28 1952
AY 28 1952		CAE		2nd	MAY 29 1952
UL 4 - 1952	BF 7/2/52	CAR	7.11.52	GJ	JUL 4 1952
JUL 14 1952	21400	CAR	15.6.53		DEC 20 1952
DEC 20 1952		CAE		2nd	DEC 22 1952
11.52	BF 7-11-52 (Transferred to 5008 Z2-1) #1986	CAR		GJ	DEC 22 1952
26 1953	49965	CAR	11.53		JAN 27 1953
FEB 13 1953	BF 1/2/53	CAR			FEB 13 1953
R 14 1953	2427	CAR		GJ	MAY 7 - 1953
AY 7 - 1953		CAE		2nd	MAY 20 1953
MAY 20 1953		RJL			MAY 20 1953
MAY 20 1953		CAR			MAY 21 1953
MAY 22 1953	Reg Mrs Jane 12266	CAR		GJ	MAY 25 1953
		CAR			MAY 25 1953
25 1953		CAE		2nd	MAY 26 1953
MAY 29 1953	BF 1/6/53	CAR			JUN 1 1953
MAY 30 1953	14796	CAR		GJ	JUN 1 1953
N 1 1953		CAE		5th	JUN 8 1953
JUN 23 1954	9007	CAR			JUN 25 1954
SEP 14 1954	14757	CAR		GJ	SEP 13 1954
APR 15 1955	2054	CAR	15.5.55		APR 28 1955
MAY 13 1955	BF 15/5/55	CAR			MAY 20 1955
MAY 31 1955	6715	ARP		GJ	JUN 3 1955
JUN 3 1955		CAI			JUN 6 1955

FORM 2195

DEPARTMENT OF TRANSPORT

DEPARTMENTAL COMMUNICATIONS

FILE NO. 5008-22-23

DATE 5th May, 1952.

CAR

Pa 2051

05890

DAS OW

ANVAJY PLEASE SUPPLY REGISTRATION MARKINGS FOR LAISTNR-KAUFFMAN GLIDER MODEL 2GA SERIAL NUMBER 36 PURCHASED BY SOARING CLUB OF B.C. FROM SEATTLE WASH

DGAS

Vancouver

CONFIRMATION - DAS

CF-ZBW

5008-ZZ-23
C.C.A.

OW 12 11

05749

DAS OW

ARV137 PLEASE SUPPLY REGISTRATION MARKINGS FOR LAISTERKAUFFMAN

GLIDER MODEL 10A SERIAL NUMBER 36 PURCHASED BY SOARING

CLUB OF B C FROM SEATTLE WASH

DCAS VANCOUVER 052115Z

ARV137 10A 36 B C

CF-ZBW

FORM 2195

DEPARTMENT OF TRANSPORT

DEPARTMENTAL COMMUNICATIONS

FILE NO. 5008-22-25 ~~5008-2~~

DATE MAY 6th, 19 52.

3

37/28

OTTAWA ONTARIO

DISTRICT CONTROLLER AIR SERVICES
401 WINCH BUILDING
VANCOUVER B.C.
ATTENTION DISTRICT SUPERINTENDENT AIR REGULATIONS

CANCEL METEL ARV157 REGISTRATION MARKING CGCA FOXTROT DASH ZULU BRAVO WHISKEY
ALLOTTED TO LAISTER KAUFFMAN GLIDER TEN A SERIAL THIRTY-SIX OWNED BY SOARING
CLUB OF B C

CIVIL AVIATION

Noted

PATENTED - MOORE BUSINESS FORMS LTD.

FILE COPY

ALLOTMENT OF REGISTRATION

REGISTRATION NUMBER CF-ZBW PART OF BLOCK ( )

DISTRICT Vancouver

DATE OF ISSUE 6.5.52

05750

TYPE OF AIRCRAFT Laister Kauffman Glider 10

SERIAL NUMBER 36

OWNERS NAME Soaring Club of B.C.

ADDRESS

REQUESTED BY WIRE (x) DATE (6.5.52)

REQUESTED BY LETTER ( ) DATE ( )

DESPATCHED BY TELEGRAM ( ) TELETYPE (x) LETTER ( )

TRANSPORT - RECORDS
MAY 17 A.M. 1952
File 5008 - Z2 - 13

1-26

United States of America
Department of Commerce
Civil Aeronautics Administration
Washington

TRANSPORT - RECORDS
MAY 28 A.M. 1952
File 5008 - Z2 - 23

10963

Certificate of Airworthiness for Export

No. E-13952

This certifies that the product identified below, and more particularly described in the applicable specifications,[1] has been examined and found to comply with approved data, with applicable Civil Air Regulations and other airworthiness requirements of the Civil Aeronautics Board, and with special requirements of the importing country as filed with the United States Government; ~~except as noted~~

Manufacturer's Name and Address: Laister-Kauffmann Aircraft Corp.
St. Louis 10, Missouri

Product: Glider

Model: LK-10A

Serial No.: 36

Country to which exported: Canada

James E. McKessen

James E. McKessen
SIGNATURE OF CAA REPRESENTATIVE
Aviation Safety Agent - Aircraft Factory

By _____
DESIGNEE'S SIGNATURE

May 22, 1952
DATE

DESIGNEE NUMBER

[1] Applicable specifications, if not attached to this export certificate, will have been forwarded to the appropriate governmental office of the importing country.

16—54485-1 U. S. GOVERNMENT PRINTING OFFICE

SOARING CLUB OF B.C.
3836 Neville St.
South Burnaby, B.C.

May 1952

Formerly:
NC-50892

OVERHAUL OF LAISTER-KAUFFMANN GLIDER, TYPE 10A, SERIAL # 36. "CF-ZBW."

FUSELAGE : Entire fuselage re-covered with Grade A Flightex, and taped with 2" Flightex pinked-edge tape. Doped with 6 brushed-on coats of clear Berry Brothers nitrate dope. Sprayed with 2 coats of aluminum pigmented Berry Bothers nitrate dope. Finished with 2 spray coats of Diana Cream pigmented Berry Brothers nitrate dope. [redacted] Nose trimmed with Consolidated Blue dope (sprayed) 2 coats.

TOWING HOOK : Removed, sanded, primed, painted with enamel, replaced, lubricated. New release [redacted]able connected. Checked for correct operation.

LANDING SKID : Unbolted and removed. Scraped and sanded, metal parts primed and painted with enamel. Wood parts sanded and enamelled. Bolted back on.

WHEEL & BRAKE : Wheel assembly removed, taken apart and checked. Cleaned, lubricated, assembled and replaced. Brake adjusted, new cables installed. Cables connected and adjusted.

SEATS & FLOORBOARDS : Old seats and floorboards removed from both cockpits. New [redacted] seats and floorboards made from plywood, sanded, varnished; fittings cleaned, primed, enamelled, replaced on wood parts; and bolted back in cockpits. Floorboards [redacted] screwed down with [redacted] screws and speednuts.

HATCH FRAMES & CANOPIES : Hatch frame sanded down to bare metal, primed, and enamelled. Fittings removed around canopies and similarly reconditioned. Plexiglas covers removed, frame cleaned up, plexiglas rubbed down with Scott aircraft windshield cleaner. Holes patched and extra reinforcement added by Plexolite Products Vancouver, where necessary. Side openings in side of canopy cleaned for free movement. Aluminum fairing strips made, to cover gaps between canopy section, and screwed on. Tape placed around forward section of windshield, doped and finished to fuselage fabric in final color. Hatch Fittings cleaned, sanded, primed and enamelled.

WING ROOT FAIRINGS : Removed from fuselage. Several loose plywood gussets repaired or replaced. Fairing bolted back on fuselage, and taped to fuselage when same re-covered, [redacted]. Doped and finished [redacted] fuselage done, sprayed final finish coats of pigmented dope. Fittings sanblasted, bolt holes cleaned out, metal parts primed, and enamelled.

TURTLEBACK : Plywood turtleback removed in one piece, cleaned, sanded, and bolted back on fuselage. Taped to finished fuselage, and doped along with final finished fuselage job.

SOARING CLUB OF B.C.
Laister-Kauffmann CFZBW

9

TAIL ASSEMBLY : Vertical Stabilizer. Removed from fuselage, old fabric taken off, minor wood part at bottom repaired and re-glued, wood parts sanded down and varnished. Metal parts sanded, primed and enamelled. Stabilizer re-covered with new Grade A Flightex fabric, doped, 6 coats clear nitrate, by brush; 2 sprayed coats aluminum pigmented dope; followed by 2 sprayed coats of Diana Cream pigmented dope. Replaced on fuselage.

Elevator removed, space trim tab framed in, covered with new fabric & doped. Made permanently inoperative, as stated in specifications.

Horizontal Stabilizer & Elevators. (Unit). Removed from fuselage, cleaned up, metal parts primed and enamelled. Rejuvenated with Skylac rejuvenator, sprayed one coat of Aluminum pigmented BB nitrate dope, wet sanded, and finished with one sprayed coat of Diana Cream pigmented dope.

Rudder : Old fabric removed, all wood parts checked over and minor wood repair job with glue. Re-covered with Grade A Flightex fabric, doped 6 coats of clear nitrate dope (Berry Bros); followed by 2 sprayed coats of Aluminum pigmented dope (Berry Bros nitrate); followed by 2 sprayed coats of Diana Cream pigmented nitrate dope. Metal parts cleaned, sanded, primed and enamelled. Tape used was 2" flightex with pinked edge.

TAIL SKID : Removed from fuselage, sanded, primed, and enamelled. Replaced on fuselage using bolts with castellated nuts and cotter pins.

PORT WING : Inspected by owner, Mr. F.B.Smith, CAA licensed air mechanic "A" & "E" #549007, with several inspection holes being cut in fabric along spar. Careful check made at all regular inspection holes, and at plexiglas opening at aileron horn and crank. Inspection cuts covered with Grade A Flightex fabric, minor small wood parts at wing root repaired. Ailerons checked for correct travel. Fabric rejuvenated with Skylac rejuvenator. One coat of Aluminum pigmented BB nitrate dope sprayed on. Wet sanded. Finished with one coat of Diana Cream pigmented dope (Berry Brothers), and leading edge finished with Consolidated Blue. (see bills attached). New spoiler cable connected.

STARBOARD WING : Work on this wing as for Port wing. Rejuvenated, one coat pigmented aluminum sprayed on, with finish coat sprayed on, of Diana Cream, with Consolidated blue trim on leading edge. Holes patched, new spoiler cable connected up.

CONTROL SYSTEM : All cables, pulleys and fittings removed from fuselage at time old fabric removed. After fuselage was sandblasted, primed and enamelled,-new rudder, elevator and rudder trim-tab cables were replaced back in fuselage, and connected up. Chafing tubes, pulleys and fittings were cleaned and lubricated where called for. All cable ends were served and varnished. Tension of all cables was adjusted to correct amount. Trim tab handle connected up and adjusted. Correct travel adjusted and measured. Chafing tubes were taped and fastened back to fuselage members.

SOARING CLUB OF B.C.
Vancouver B.C.
Laister-Kauffmann CF-ZBW

(Control System, continued)
Aileron cables within fuselage replaced with new cables. Aileron cross bar sanded, primed and enamelled. Bolt holes cleaned out.
Control column removed, cleaned, checked, replaced and adjusted. Lubricated. Boot in rear cockpit sewn up, and metal frame mounted.
Rudder pedals checked over, sanded, primed, enamelled. Adjusted, and new cable placed for adjustment of foot length, to adjustment handle on panel. Moving parts lubricated.
Cables and fittings for non-operative elevator trim tab removed from ship, as per approved type certificate.
Rudder trim tab adjusted. Moving parts lubricated.
Spoiler handle checked, new cables placed for portion in fuselage. Brake cable replaced with new cable, as for other cables in fuselage, and adjusted. Checked for free movement.

INSTRUMENTS : Following instruments are now in place in Forward Cockpit: Air Speed, Altimeter, Turn & Bank, Compass, and Rate of Climb. Air speed indicators AF-42-79038, and AF-42-69448 overhauled and calibrated per certificate from Oregon Air-Motive, Portland Oregon. Other instruments in good working order. Connected up.
Following instruments in After Cockpit : Altimeter, Air Speed, and Turn and Bank. All in good order. Connected up.

PLACARDS : Placard re permissable towing and flying speed is in place in both cockpits, as specified. Additional placard re permissable pilot weights in either cockpit, is in place.

SAFETY BELTS : Safety belts removed when fuselage stripped, cleaned, checked and replaced in cockpits, using new bolts, casetellated nuts, and cotter pins safetied.

LUBRICATION : Entire ship gone over and all points requiring lubrication were attended to, as specified in L.K. lubrication schedule.

Trailer. Laister-Kauffmann trailer, for towing on highways, gone over, tail lights installed, mudguards bolted on, minor welding repairs made to tubing, plywood cover of 1/4" plywood bolted on top, one coat rez. (to shed rain whilst on highways.) New fittings made for better support of wing root & spar fittings.

BALLAST WEIGHT : Ballast weight in nose of fuselage removed, sanded, primed, enamelled. replaced in correct position in nose with proper bolts and fittings.

NAVIGATION LIGHTS (Removed) : Old light fittings, now inoperative, removed from wing tips, wood dowel placed in holes, then covered with flightex fabric, doped and finished along with wing dope job.

INSPECTION PLATES : Inspection rings, with covers, placed at necessary points along fuselage for rapid assembly of tail surfaces, and inspection of key points, as prescribed.

004-

SOARING CLUB OF B.C.

Vancouver, B.C.

Date : May 10, 1952.
Place, Vancouver, B.C.
Canada.

AIRCRAFT WEIGHT AND BALANCE REPORT

Prepared by Thomas McLaughlin. Witnessed by J.S. Dashwood

Certificate No. XDM 13 'B' category ~~Inspector.~~ VRG 106 Soaring Club of B.C.

Make : Laister-Kauffmann (GLIDER) Model: LK 10A. Serial: 36

Registration : (Canadian) CF-ZBW (Formerly : NC 50892)

	Net Weight	
Nose Wheel:	445 pounds	Wheel C.L. to tail wheel is: 159 inches
Tail skid :	48 pounds	Datum is : C.L. of main wing spar.
		Wheel C.L. is 4.0 inches forward of datum.

Total, as weighed : 493 pounds
* Including 14.0 pounds of ballast in nose at -72"

48 Lbs (tail skid weight) X 159 inches (wheel C.L. to tail skid C.L. / 493 (Total weight as weighed) = 15.4 (Inches

((15.4 inches is C.G. aft of wheel C.L.))

15.4 (CG aft of wheel) - 4.0 (wheel CL to datum) = 11.4 CG AFT of LOADED datum

	MOST REARWARD CG (LOADED)			MOST FORWARD CG (LOADED)		
	Weight	Arm	Moment	Weight	Arm	Moment
Aircraft (Empty)	493	+11.4	+5620.2	493	+11.4	+5620.2
Pilot	170	-30.5	-5185.0	170	-30.5	-5185.0
Passenger (170#)	170	+18.0	+3060.0			
TOTAL :	833	+4.19	+3495.2	663	+.65	+435.2

C.G. LIMITS : -1.69 Most Forward and +5.69 Most Rearward.

(As specified by the U.S. Civil Aeronautics Administration for this aircraft, 2 PCIM, approved June 8th 1945.)

Required equipment was installed. J.C. Mack.

Soaring Club of B.C.
3836 Neville St.
South Burnaby, B.C.

May 1952

5

This machine was recieved by the Soaring Club of B.C. in a stripped condition except for the wings which were inspected by Mr.F.B.Smith of Seattle.The fuselage structure had been reconditioned,new seats made up,rudder pedals and control column removed reconditioned and reinstalled,all fuselage control cables were renewed,all pulleys and fittings and fairleads reconditioned,minor repairs were carried out to the vertical fin and the rudder structure.

The work list as outlined in the previous pages was carried out by the personell of the Soaring Club of B.C. who have had considerable experience in this type of work.

The aircraft was weighed and a weight and balance report made out;a copy of this report is attached.

I hereby certify that I have inspected this aircraft and that all materials and workmanship are standard to the type,and that no unapproved modifications have been incorperated,and that the aircraft is airworthy.

Thomas Mc Laughlin
XDM 13 'B' Category

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

18 2/2-50

401 Wigch Building,
Vancouver 1, B.C. (PLACE) 8th July, 1952. (DATE)

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-23	Laister-Kauffmann 10A Glider - CF-ZBW	5008-Z2-23

TRANSPORT - RECORDS
JUL 14 P.M. 1952
File 5008-Z2-23

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

21400

Attention: Superintendent, Air Regulations.

1. Please find enclosed the following documents submitted in connection with the registration of the marginally noted glider:

(a) Application for registration form (duplicate);
(b) Bill of Sale between Francis B. Smith, 4531 46th Ave., Seattle 5, Wash., U.S.A. and Mr. F.N.G. Dashwood, 3836 Neville St., South Burnaby, B.C.;
(c) Copy telegram from Chief Dominion Customs Appraiser to Soaring Club of B.C.;
(d) Form 2443;
(e) Copy letter from C.A.A. dated 26 June, 1952;
(f) Copy temporary Certificates Registration and Airworthiness valid to 6 September, 1952.

2. Fee in the amount of $3.00 has been received and Financial Receipt No. 52010 issued.

3. This application appears to be in order, and it is recommended that formal Certificate of Registration now be issued, please.

R. Carter Guest
p District Controller of Air Services.

Encs: 7.

Form 2412

17

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Laister-Kauffmann 2-place Glider 2-PCLM

Enclosed is $ 3.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant F G Dashwood Date of Application June 5th, 1952.

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
DASHWOOD, Francis Noel Gay	3836 Neville St., South Burnaby, B.C.	Canadian

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Vancouver, B.C. Date and place of manufacture ~~or reconstruction~~ 21st Dec., 1942 St. Louis, Mo., U.S.A.

Accommodation for what number of passengers 1 Type LK10A Maker's No. G-15 Serial No. 36

Span or breadth o/a in feet 50' 2" Length o/a in feet 21' 8"

Height o/a in feet 3' 9" Weight equipped, but without load 493 lbs.

Total weight authorized (fully loaded) in lbs 875 Air speed limits: Glide or Dive: 126 MPH miles per hour Spoilers open: 105 MPH. Auto or Winch Tow: 72 MPH. Airplane Tow: 126 MPH. Flying Speed 45 MPH.

Types of launching to be authorized: ~~Catapult~~, Winch, Motor-car tow, Aero tow, ~~Rocket-assisted~~

(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments Altimeter, Airspeed, Turn & Bank, Rate of Climb. Compass.

2 Lights None 3. Types of release or hook Safety type.

REGISTRATION

(Not to be filled in by Applicant)

Glider inspected on 19th June, 1952.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet Nil

Registration recommended with the following special conditions Nil

Date 19th June, 1952.

Signature J C C Wilson D.S.A.R.

Registration approved and Registration Mark C.F.-ZBW allotted. 11836 (R) 3945 (A)

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

Form 2412
16

CANADA

APPLICATION FOR REGISTRATION OF A GLIDER

AIR REGULATIONS

(To be submitted in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations of the glider described below.

Laister-Kauffmann 2-place Glider 2-PCLM

Enclosed is $ 3.00 being fees for registration The particulars given below are true in every respect.

Signature of Applicant F. Dashwood Date of Application June 5th, 1952.

OWNER, OR OWNERS OF GLIDER

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
DASHWOOD, Francis Noel Gay	3836 Neville St., South Burnaby, B.C.	Canadian

Purpose for which glider is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Vancouver, B.C. Date and place of manufacture ~~or reconstruction~~ 21st Dec., 1942 St. Louis, Mo., U.S.A.

Accommodation for what number of passengers 1 Type LK10A Maker's No. G-15 Serial No. 36

Span or breadth o/a in feet 50' 2" Length o/a in feet 21' 6"

Height o/a in feet 3' 9" Weight equipped, but without load 493 lbs.

Total weight authorized (fully loaded) in lbs 575 Air speed limits: Glide or Dive: 126 MPH miles per hour

Spoilers open: 105 MPH. Auto or Winch Tow: 72 MPH. Airplane Tow: 126 MPH. Flying

Types of launching to be authorized: ~~Catapult~~, Winch, Motor-car tow, Aero tow, ~~Rocket assistance~~ Speed 45 MPH.

(Strike out those not applicable)

Equipment—(Give number and type). 1. Instruments Altimeter, Airspeed, Turn & Bank, Rate of Climb, Compass.

2 Lights None 3. Types of release or hook Safety type.

REGISTRATION

(Not to be filled in by Applicant)

Glider inspected on 19th June, 1952.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet Nil

Registration recommended with the following special conditions Nil

Date 19th June, 1952.

Original Signed by
Signature G. C. UPSON
D.S.A.R.

Registration approved and Registration Mark C.F. ZBW allotted.

Registration { approved or
not approved for reasons annexed.

Superintendent, Air Regulations

NOTE.—The fee for original registration is $3.00. In the case of change of ownership, the fee for re-registration is $3.00.

FORM ACA-500 (6-47)
PART C

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

BILL OF SALE

15

FOR AND IN CONSIDERATION OF $ 1.00 and other / considerations THE UNDERSIGNED OWNER OF THE FULL LEGAL AND BENEFICIAL TITLE OF THE AIRCRAFT DESCRIBED AS FOLLOWS:

AIRCRAFT MAKE	SERIAL NO.	CAA REGISTRATION NO.
Laister-Kauffmann LK-10A	36	N50892 (CF-ZBW)

DOES THIS 21st DAY OF May 19 52 HEREBY SELL, GRANT, TRANSFER, AND DELIVER ALL OF HIS RIGHT, TITLE, AND INTEREST IN AND TO SUCH AIRCRAFT UNTO:

NAME OF PURCHASER
Soaring Club of B. C. F. N.G.Dashwood, Sec

ADDRESS OF PURCHASER (Number, street, city, zone, and State)
3836 Neville Street
S. Brunaby, British Columbia, Canada

AND TO its EXECUTORS, ADMINISTRATORS AND ASSIGNS, TO HAVE AND TO HOLD SINGULARLY, THE SAID AIRCRAFT FOREVER, AND CERTIFIES THAT SAME IS NOT SUBJECT TO ANY MORTGAGE OR OTHER ENCUMBRANCE EXCEPT:

TYPE OF ENCUMBRANCE	AMOUNT	DATE
None	---	---

IN FAVOR OF

IN TESTIMONY WHEREOF we HAVE SET OUR HAND AND SEAL
THIS 21st DAY OF May 19 52

NAME OF SELLER
Francis B. Smith

BY (Signature in ink)
Francis B. Smith

TITLE (If signed on behalf of a Corporation or Partnership or if signed by an agent)
Francis B. Smith

ACKNOWLEDGMENT

STATE OF [illegible]

COUNTY OF [illegible]ing

ON THIS 21 DAY OF [illegible]May 1952
BEFORE ME PERSONALLY APPEARED THE ABOVE-NAMED SELLER, TO ME KNOWN TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING BILL OF SALE, AND ACKNOWLEDGED THAT HE EXECUTED THE SAME AS HIS FREE ACT AND DEED. GIVEN UNDER MY HAND AND OFFICIAL SEAL, THE DAY AND YEAR ABOVE WRITTEN.

NOTARY PUBLIC [illegible]Peter MY COMMISSION EXPIRES Dec. 19, 50
Seal

READ INSTRUCTIONS AT RIGHT CAREFULLY

RETAINED BY PURCHASER - USE TYPEWRITER

COPY

14

Copy for File: 5005-22-23 (VR)
ORIGINAL CHECKED
returned to owner
COPY FOR FILE 5005-22-23 (OW)

CANADIAN PACIFIC TELEGRAPHS

SOARING CLUB OF B C
3636 NEVILLE ST
SOUTH BURNABY B C

HELST LAISTER KAUFFMANN GLIDER TYPE TEN A SERIAL NUMBER THIRTY-SIX TYPE AND SIZE NOT MADE IN CANADA ENTITLED DUTY FREE ENTRY ITEM FOUR FORTY L BRACKET ONE STOP SUBJECT TEN PERCENT SALES TAX LEVIED ON APPRAISED VALUE STOP USED GLIDER SUBJECT APPRAISAL AT TIME OF IMPORTATION

"A. R. HINDS"

For CHIEF DOMINION CUSTOMS APPRAISER

(COLLECT)

13 2443 4-50

CANADA

DEPARTMENT OF TRANSPORT

Certification of Aircraft Imported Complete

AIRCRAFT REGISTRATION CF— ZBW
AIRCRAFT TYPE Laister-Kauffmann Glider LK10A
NAME OF IMPORTER F.N.G.Dashwood

SERIAL NO. 36
C.A.A. SPEC. NO. G-15

I hereby certify that I have inspected this aircraft and that no damage has been incurred during transit, and that all special Canadian requirements as outlined in the relevant Information Circulars, if applicable, have been complied with.

Signed .....
"A" AND "C" ENGINEER
CERT. NO. XDM 13
Date Jan 15 52

I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed ..... VRC 101
TEST PILOT
Date June 14th 1952

The above information has been checked and confirmed. The aircraft is acceptable for the issue of Certificate of Airworthiness and Registration.

Signed .....
DISTRICT AIRCRAFT INSPECTOR
Date June. 19/52

COPY

12

ORIGINAL ON FILE 5008-22-23 (WR)

COPY FOR FILE 5008-22-23 (OW)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

P.O. Box 3224
Seattle 14, Washington

June 26, 1952

District Superintendent
Air Regulations
Department of Transport
401 Winch Building,
Vancouver 1, British Columbia, Canada

Attention: Mr. G. C. Upson

Gentlemen:

Mr. F. N. G. Dashwood of the Soaring Club of B.C., Vancouver, British Columbia, Canada, has requested this office to inform you of the export certification status of his Laister-Kauffmann glider, Model 10A, serial number 36, bearing Canadian identification markings CF-ZBW.

This aircraft was inspected on May 22, 1952, and a Certificate of Airworthiness for Export Number E-13952 was issued. As agreed with Mr. Dashwood, the Certificate of Airworthiness for Export, together with the overhaul record and weight and balance statement signed by Mr. Thomas McLaughlin, XIM 13, "B" category, was forwarded to Ottawa.

We hope this information will enable you to register Mr. Dashwood's glider.

Sincerely yours,

"Vernon L. Gardner"

for: Roy E. Peterson, Acting Chief
Aircraft Engineering Branch.

8
10-50

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

//

REFER TO FILE NUMBER
5008-22-23

401 Winch Building,
Vancouver 1, B.C.
8th July, 1952.

Mr. F.N.G. Dashwood,
3636 Neville St.,
South Burnaby, B.C.

Dear Sir:

This letter constitutes temporary Certificate of Registration and Airworthiness for Laister-Kauffmann Glider, Model 10A aircraft CF -SBW , to be not valid after 6th September, 1952, pending issuance of permanent Certificates of Registration and Airworthiness.

All-up weight of this aircraft is not to exceed 875 lbs. as a Glider. , VFR Day Flying Only.

This authority does not permit the operation of radio apparatus, unless this equipment has been duly licensed by the Department of Transport, Radio Division.

This authority does not include permission to operate this aircraft commercially for hire or reward unless you are in possession of a Licence issued by the Air Transport Board and also an Operating Certificate issued by the Department of Transport.

Yours truly,

Original Signed By
CARTER GUEST

District Superintendent,
Air Regulations.

HCR/ego
cc: DAS ✓
AC-5-29

JCF/NMH

19

Ottawa, Ontario, December 18, 1952.

5008-Z2-23

LK 10A Glider CF-ZBW

5008-Z2-23

District Controller of Air Services,
401 Winch Building,
Vancouver 1, B.C.

Attention: District Superintendent, Air Regulations.

1. The application for registration of LK 10A Glider CF-ZBW in the name of F.H.G. Dashwood has been delayed pending a decision to issue Certificates of Airworthiness for all gliders registered in Canada, of all approved types to U.S. or British standards.

2. We are now processing applications to register gliders and note that only $3. was received for CF-ZBW reference your receipt no. 52010.

3. For the Certificate of Airworthiness a further fee of $5. is required and a further fee of $2. for registration. The Certificate of Airworthiness for Export no. E-13952 and a Weight and Balance Report are now on file.

4. Formal certificates will be issued immediately upon receipt of the necessary fees.

(C. T. Travers)
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

21 2 2-50

401 Winch Building,
Vancouver 1, B.C. 22nd January, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-23	LK 10A Glider -- CF-ZBW	5008-Z2-23

49965

TRANSPORT - RECORDS
JAN 26 A.M. 1953
File 5008-Z2-23

Director ofAir Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to your letter dated 18th December, 1952, enclosed please find copy of letter from the owner of the marginally noted Glider which is self-explanatory.

2. You will be further advised when this Glider is again in service.

District Controller of Air Services.

Enc: 1.

COPY

20

ORIGINAL ON FILE 5008-Z2-23 (VR)

COPY FOR FILE 5008-Z2-23 (OW)

5187 Sherbrooke Street,
Vancouver 15, B.C.
January 7, 1953.

District Controller of Air Services,
Department of Transport,
401 Winch Building,
Vancouver, B.C.

Attention: Mr. N. C. Terry.

Dear Sir:

Regarding your letter to Mr. Dashwood your file No. 5008-Z2-23 of December 31, 1952, please be advised that at the present time the L. K. Glider, CF-ZBW, is in storage for annual inspection and minor repairs.

It is expected that this machine will be inactive until the end of March and at that time we will submit application for renewal of C. of A. and C. of R. plus the fees to cover same.

Hoping this meets with your approval, I remain.

Yours very truly,

SOARING CLUB OF B.C.

"T. McLaughlin"

President
T. McLaughlin

TM/vj

8
10-50

22

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11836

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider LK-10A
2. Name and address of constructor	Laister-Kauffman Aircraft Corp., St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	F. N. G. DASHWOOD
5. Address of owner	3836 Neville St., South Burnaby, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 22nd day of May 1952., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Ottawa this 1st day of May 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

23

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11836

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider LK-10A
2. Name and address of constructor	Laister-Kauffman Aircraft Corp., St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	F. N. G. DASHWOOD
5. Address of owner	3836 Neville St., South Burnaby, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 22nd day of May 1952, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Ottawa this 1st day of May 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

a/c sold to R.J. Buhlert - Certs not sent

24

AIR SERVICES
CIVIL AVIATION DIVISION

Refer to File Number

5008-32-23

CANADA
DEPARTMENT OF TRANSPORT

401 Winch Building,
Vancouver 1, B.C.
1st April, 1953.

BY HAND

Mr. R. J. Buhlert,
15 East 7th Avenue,
VANCOUVER, B.C.

Dear Sir:

This letter constitutes temporary Certificate of Registration and Airworthiness for L. K. Glider, Model 10A aircraft CF - KBW , to be not valid after 30th June, 1953, pending issuance of permanent Certificates of Registration and Airworthiness.

All-up weight of this aircraft is not to exceed 875 lbs. as a Glider. , VFR Day Flying Only.

This authority does not permit the operation of radio apparatus, unless this equipment has been duly licensed by the Department of Transport, Radio Division.

This authority does not include permission to operate this aircraft commercially for hire or reward unless you are in possession of a Licence issued by the Air Transport Board and also an Operating Certificate issued by the Department of Transport.

Yours truly,
Original Signed by
D. B. HODGKINSON

District Superintendent,
Air Regulations.

JB/ogc
cc: DAS

25 2444
8-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— ZBW SERIAL No. 36 2PCLM-C15

1. C. of A. No.....Expires.....C. of R. No.....Expires.....
AIRCRAFT DATA—Manufacturer LAISTER KAUFFMAN Model LK 10A (MOD)
Hours flown—Since New NOT KNOWN Since Overhaul 20
ENGINE DATA—Manufacturer NOT APPLICABLE Model.....

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3)		
(4)		

Date MARCH 27 - 53 *Signature of Applicant* C J Bustard

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Date March 27. 53 *Signed* [signature]
"B" ENGINEER

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date MARCH 22. *Signed* Peter M Van Gaen
TEST PILOT

4. The following documents are attached:
Certificate of Airworthiness ☐ Certificate of Registration ☐ Weight and Balance Report ☐ (when applicable)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No.....
and C. of A. No...../or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Date March 31/53 *Signed* [signature]
DISTRICT AIRCRAFT INSPECTOR

7. C. of A. and C. of R. renewed, not valid after (Date).....
Permissible Gross Weights— Wheels
Skis
Floats

Date.....
Other Action:—

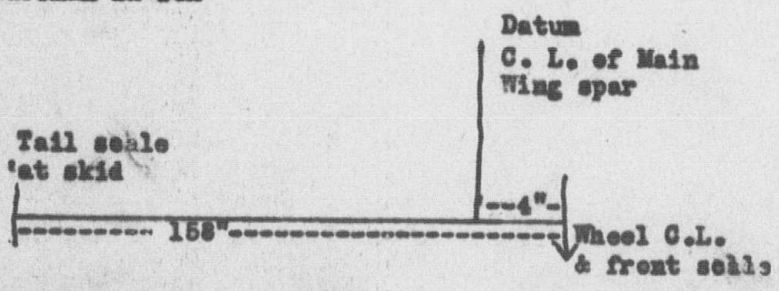
Signed G C Upson
DISTRICT SUPERINTENDENT, AIR REGULATIONS

8. H.Q. Action— C.A.R.
C.A.E.

March 27, 1953

WEIGHT AND BALANCE REPORT

Registration (Canadian) CF-ZBW
Type - Glider
Model - Laister-Kauffman LK-10A
Serial #36



Front scale - 437 lbs.
Tail scale - 49 lbs.

Totalempty weight-486 lbs.

C of G $\frac{49 \times 158}{486}$ = 15.9" - 4 = 11.9" Aft of Datum

	Most Rearward C of G			Most Forward C of G		
	WT	ARM	Moment	WT	ARM	Moment
Aircraft Empty	486	11.9	5753.4	486	11.9	5753.4
Pilot	170	30.5	5185.0	170	30.5	5185.0
Passenger	170	18.0	3060.0			
	Loaded			Loaded		
TOTAL	826	4.3	3628	656	.8	570.4

C of G Limits -1.69 Most forward and +5.69 Most rearward

WEIGHED BY _____

WITNESSED BY _____

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

30 2/8-52

Vancouver 1, B.C. (PLACE) 9th April, 1953. (DATE)

YOUR FIL	SUBJECT	OUR FILE
5008-[illegible]-23	Laister Kauffmann 1OA Glider - CF-ZBW	5008-Z2-23

TRANSPORT - RECORDS
APR 14 A.M. 1953
File 5008-Z-2-23

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

02427

Attention: Superintendent, Air Regulations.

1. Further to your letter dated 18th December, 1952, please be advised the marginally noted glider has recently been sold to Mr. R.J. Buhlert and the following documents are submitted in connection with the re-registration:

(a) Application for registration (duplicate);
(b) Bill of sale between F.N.G. Dashwood and R. J. Buhlert;
(c) Form 2444;
(d) Weight and Balance Report (duplicate);
(e) Temporary Certificates of Airworthiness and Registration dated 1st April, 1953, valid to 30th June, 1953.

2. As requested in your abovementioned letter, balance of registration fee of $10.00, i.e. $7.00, has been received, together with further sum of $5.00 to cover re-registration in name of R.J. Buhlert. Official Receipt No. 66003 covers these remittances.

3. This application now appears to be satisfactory, and if approved it is requested that formal Certificates of Registration and Airworthiness be issued.

Reregistration
11837(R)
3945(A)

/ District Controller of Air Services.

11837(R)
3945(A)

Encs: 7.

DESCRIPTION OF AIRCRAFT

AIRCRAFT CORP.

Heavier than, or Lighter than Air GLIDER made by KAISTER-KAUFFMANN

Type L.K. 10A Maker's No. 36

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	52' 0"	
Length o/a in feet	21' 6"	
Height o/a in feet		
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	493	
Total weight authorized (fully loaded) in lbs 875	Air speed 45	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments AIRSPEED, ALTIMETER, TURN + BANK, COMPASS, VARIOMETER COSIM
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 27th March, 1953 by W. L. Dobin, VRM-221

Particulars accurate as corrected Nil

Modifications from type are indicated on annexed sheet Nil

Registration recommended with the following special conditions Nil

Date 9th April, 1953.

Signature G C Clipsham
D.S.A.F.

Registration approved and Registration Mark C.F.-ZBW allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

29

2417

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration C.F. Z B W **$5.00** ✓

Certificate of Airworthiness **$5.00** ✓
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Robert James Buhlert

Date of Application April 1 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Robert James BUHLERT	18 East 7th Ave VANCOUVER BC	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station VANCOUVER BC

Date and place of manufacture or reconstruction 1942 St Louis, Mo.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

AIRCRAFT CORP.

Heavier than, or Lighter than Air GLIDER made by LAISTER-KAUFFMANN

Type LK. 10A Maker's No. 36

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	52' 0"	
Length o/a in feet	21' 6"	
Height o/a in feet		
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	493	

Total weight authorized (fully loaded) in lbs 875 Air speed 45 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments AIRSPEED, ALTIMETER, TURN & BANK, COMPASS, VARIOMETER COSIM
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 27th March, 1953 by W. L. Dobin, VRM-221

Particulars accurate as corrected Nil

Modifications from type are indicated on annexed sheet Nil

Registration recommended with the following special conditions Nil

Date 9th April, 1953.

Signature G C Watson
D.S.A.R.

Registration approved and Registration Mark C.F-ZBW allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

28

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration C F - X B V V $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Robert James Bublert

Date of Application April 1, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Robert James BUHLERT	18 East 7th Ave VANCOUVER B.C.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station VANCOUVER B.C.

Date and place of manufacture or reconstruction 1942 ST Louis, Mo.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, is $5.00, which certificate is re-issued on change of ownership without further fee.

SEAL

.....

My commission expires :

Notary Public.

Send the key and test wrapper with:
the same as this free one and book. Given under my Hand and
Telegraphic Bill to Sale and Exchange Establishment
of no known to be the person described in and who executed the
---- me personally appeared the above-named Sallie,
.....

SEAL

BILL OF SALE

For and in consideration of $1.00 and other considerations
the undersigned owner of the full legal and beneficial title of the
Aircraft described as follows : .....Sailplane.....

Aircraft Make : .Laister-Kauffmann 10A Serial No. : ..3k.....
Registration Number :.....CF..ZBW....

Does this ...11th... day of ....March..1953
Hereby sell, grant, transfer, and deliver all of his right, title, and
interest in and to such aircraft unto :

Name of Purchaser : .....Robert M. Buhlert.....

Address of Purchaser (Number, Street, City Zone, and Province)

.....18..East..7th..Avenue..Vancouver 10, B..C.....

And to .his. Executors, Administrators, and Assigns, to have and to
hold, singularly, the said aircraft forever, and certifies that same is
not subject to any mortgage or other encumbrance except:

Type of Encumbrance .....None..... Amount ..... Date .....

In favor of .....

.....

In testimony whereof ..I.. have set .my. hand and seal,

This .....11th..... day of .....March..... 1953.....

Name of Seller : .....Francis Noel Gay Dashwood.....

.....3836 Neville St., South Burnaby, B.C.

By (Signature in ink) : .....F.N.G. Dashwood.....

Title (if signed on behalf of a corporation or partnership or if
signed by an Agent.) .Secretary: Soaring Club of B.C. Inc.

ACKNOWLEDGEMENT

On this ..11th..... day of ....March....1953....
before me personally appeared the above-named seller,
to me known to be the person described in and who executed the
foregoing Bill of Sale and acknowledged that he executed
the same as his free act and deed. Given under my Hand and
Seal the day and year above written:

Notary Public.

~~My Commission Expires~~ .....

NOTARY PUBLIC IN AND FOR BRITISH COLUMBIA
RESIDING AT NEW WESTMINSTER

SEAL

34

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11837

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider LK-10A
2. Name and address of constructor	Laister-Kauffman Aircraft Corp., St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	R. J. BUHLERT
5. Address of owner	18 East 7th Ave., Vancouver, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of April 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Ottawa this 4th day of May 1953

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

35.

GJ/GA

OTTAWA, Ontario, May 7th, 1953.

5008-Z2-23 Leister-Kauffman 10A Glider - CF-ZBW 5008-Z2-23

REGISTERED

District Controller of Air Services,
401 Winch Bldg.,
VANCOUVER, B.C.

Att'n: District Superintendent, Air Regulations

1. Enclosed please find Certificate of Registration No. 11837 and Certificate of Airworthiness No. 3945, together with Journey and Aircraft Log Books for the above mentioned glider.

(C. T. Travers),
Superintendent, Air Regulations.

Encs.

O & J.

21/5/53

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-52

15th May, 1953. 34
401 Winch Bldg., Vancouver, B.C.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-23	Laister-Kauffman 10A Glider - CF-ZBW	5008-Z2-23

CAR
CAE

12266

TRANSPORT - RECORDS
MAY 21 A.M. 1953
File 5008-Z2-23

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Receipt is acknowledged of your letter of 7th May, 1953, enclosing Certificates of Airworthiness and Registration, together with Journey and Aircraft Log Book, for the marginally noted glider.

2. It is noted that validation date entered on page 4 of C. of A. No. 3945 is May 22/1953. May we be advised, please, if this is a typographical error as Form 2444, forwarded with other documents on 9th April, 1953, shows this aircraft to have been inspected and test-flown in March, 1953, and therefore it appears that date on page 4 of C. of A. should read 26th March, 1954.

G C Clipsem
District Controller of Air Services.

P.P. 2.5.1 (F).

JCF/MJL

37

OTTAWA, Ontario May 23rd, 1953.

5008-Z2-23

Laister-Kauffman 10A Glider
CF-ZBW

5008-Z2-23

District Controller of Air Services,
401 Winch Building,
Vancouver, B.C.

Attn:- District Superintendent, Air Regulations.

1. In reply to your letter, 5008-Z2-23, dated May 15th, 1953, on the subject of the validity date entered on Certificate of Airworthiness No. 3945, you are advised that this entry was not a typographical error.

2. The following information should clarify the validity date on the document:-

(a) Certificate of Airworthiness No. 3945 was based on and issued in lieu of Certificate of Airworthiness for Export No. E-13952 dated May 22nd, 1952.

(b) Form No. 2443 dated June 19th, 1952, by the D.A.I. confirmed that the aircraft was accepted for issue of formal Certificates of Registration and Airworthiness.

(c) Form No. 2444 did not have item 7 completed and it was decided to forward the documents anticipating that the additional endorsement would be made by your office prior to forwarding the Certificates to the owner.

3. Referring to the validity date of March 26th, 1954, mentioned in para. 2 of your letter, we believe that March 22nd, as noted on Form No. 2444 would be the correct date as defined in Inspection Instructions, Paragraph 2.5.1(h).

4. As cases of this type are quite remote, wherein the re-registration is effected before the formal Certificate of Airworthiness has been issued, we believe that you have sufficient information to endorse the Certificate and forward the documents to the new owner.

5. We have noted that two copies of the Weight and Balance Report are on our file and we are enclosing one copy for your retention or to enter in the Certificate of Airworthiness if it was omitted.

(C.H. Travers),
Superintendent, Air Regulations.

Encl.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

38 2/8-52

Vancouver 1, B.C. (PLACE) 27th May, 1953. (DATE)

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-23	Laister-Kauffmann 10A Glider - CF-ZBW	5008-Z2-23

14796

TRANSPORT - RECORDS
MAY 30 A.M 1953
File 5008-Z2-23

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to your letter dated 23rd May, 1953, please be advised that Certificate of Airworthiness No. 3945 for the marginally noted glider has this date been renewed to be not valid after 27th March, 1954.

2. Although the date entered in Item 3 of Form 2444 is not clear, it is taken to be March 27th, 1953, as in Items 1 and 2.

for District Controller of Air Services.

27 Noted

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	486	lbs.
	(b) Seaplane		lbs.
	(c) Skiplane		lbs.

WEIGHT OF FUEL AND OIL

26. Fuel		lbs.
(at 7·2 lbs. per gallon)		
(a) Number of tanks		
(b) Capacity of tanks	Imp. gals.	
27. Oil		lbs.
(at 9·0 lbs. per gallon)		
(a) Number of tanks		
(b) Capacity of tanks	Imp. gals.	
28. Weight allowed for crew		lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full		lbs.
32. Maximum total weight authorized		lbs.
Landplane		lbs.
Seaplane		lbs.
Skiplane		lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....Eight Hundred and Seventy-five Pounds
Skiplane.....

34. Minimum crew necessary.....One.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.-1.7.....inches and.....+5.7.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of ~~more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight, it~~ must never exceed.....

40. ~~The indicated air speed must never exceed~~ (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated.....May 22/1952.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this.....1st.....day of.....May.....19.....53

.....
Superintendent, Air Regulations.

THIS CERTIFICATE IS ISSUED IN LIEU OF UNITED STATES DEPARTMENT OF COMMERCE CERTIFICATE OF AIRWORTHINESS FOR EXPORT NUMBER E-13952 AND IS SUBJECT TO CONDITIONS SPECIFIED THEREIN.

VALID FOR DAY FLYING ONLY

33

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3945

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

VAN GROEN (28.5.54)

1. Surname of owner (or name of Company) ~~Deshwood --BUHLERT--(1.4.55~~ VAN GROEN
2. Christian name ~~F.N.G.~~ Peter M. ~~-R.I.~~
3. Address ~~5856 Neville St., South Burnaby, B.C.~~ 1023 East 14th Avenue, ~~18 East 7th Avenue,~~
4. Nationality Canadian ~~-Vancouver,-B.C.~~ Vancouver, B.C.

NAME OF CONSTRUCTOR

5. Name Laister-Kauffman Aircraft Corporation

NATIONALITY AND REGISTRATION MARKS

6. CF-ZBW

DESCRIPTION OF AIRCRAFT

7. Type Glider Series Laister-Kauffman LK-10A Constructor's No. 36
8. Place and year of construction of aircraft St. Louis 10, Missouri, U.S.A. 1942

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 50' 2"
16. Maximum length (in flying position) 21' 8"
17. Total height (with and without trolley in case of seaplanes) 3' 9"

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		May 22/1953 May 28, 1954 27.5.55	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

31

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
~~Engine Revolution Counter~~
Oil Pressure Gauge
~~Oil Temperature Gauge~~

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT FORMS PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT.

Note: This certificate is subject to Air Regulations, 1938, as amended, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

AC-5-132

ORIGINAL - HQ FILE NO. 22-23

DUPLICATE - DISTRICT FILE NO. 22-23

TRANSPORT [illegible]
JUN 23 P.M.
File 5008-Z2-23

DAS

AIRCRAFT LICENSING RECORDS

09007

1. Registration mark CF-ZBW 2. Old C of R No. 11937

3. New C of R No. 14827 Date 28th May 1954

4. C of A No. 3945 Category: Normal [X] Exp. [ ] Rest. [ ] Acro [ ]

5. Landplane X Seaplane [ ] Skiplane [ ]

6. Classification Changes (nil)
State [ ] to Commercial [ ] to Private [ ]
Commercial [ ] to State [ ] to Private [ ]
Private [X] to Commercial [ ] to State [ ]

Valid for Day [X] Night [ ]

7. Surname of owner VAN GROEN Citizen of Canada
Christian name Peter Marinos

8. Address of owner 1023 East 14th Ave., Vancouver, B.C.

Change of address to

9. Aircraft based at Vancouver, B.C.

10. Type	Weight empty	Max. gross weight
Land	486	875
Sea		
Ski		

11. Minimum crew	one	Maximum passengers	one	Pass with freight

12 Wt. and balance report [X] Date 27th March 1953 Copy attached [ ]

Wt. and balance amendment [X] Date 28th May 1954. Copy attached [X]

Amendment not otherwise covered

13. C of A valid from 28th May 1954 to 27th May 1955

Temporary authority from 28th May 1954 to 27th June 1954

Date 21 JUNE/54

District Superintendent Air Regulations

4 9

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 1 4827

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider
2. Name and address of constructor	Laister-Kauffman Aircraft Corporation St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	Peter Marinos Van Groen
5. Address of owner	1023 East 14th Ave., Van. 10, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 28th day of May 1954, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Vancouver this 21st day of June 1954

Original Signed by
D. L. [illegible]
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

39 2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11837

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider LK-10A
2. Name and address of constructor	Laister-Kauffman Aircraft Corp., St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	R. J. BUHLERT
5. Address of owner	18 East 7th Ave., Vancouver, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of April 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Ottawa this 4th day of May 1953

J. H. Baribeau
for Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

42

COPY 14757

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
SEP 14 A.M.
5008-Z2-23
File

ORIGINAL ON FILE 5008-2

COPY FOR FILE 5008-[illegible]10-17 5008-K15-13
-C9-16 -D25-10
-Z2-23

LEJG.

Vancouver, B.C. 8th September, 1954.

Your File
5008-2

Serial Numbers, Certificates of Registration

Our File
5008-1

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations.

1. With reference to your letter of September 1st, 1954, concerning the above, our records disclose that a report on form AC-5-132 in each case was submitted to Headquarters, together with a copy of the certificate of registration and the old certificate for cancellation, for the following aircraft:

Certificate of Registration No. 14801, Cessna 170 B CF-EJQ
" " " " 14802, DH82 CF-CIP
" " " " 14827, Laister-Kaufmann Glider CF-ZHW.

2. In the case of No. 14829 and 14833, they were shown in the register as having been given to Cessna 180 CF-ECM, but the aircraft was actually covered by C. of R. No. 14833. C. of R. No. 14829 is therefore available for issue and has today been allotted to Republic RC3 aircraft CF-MJ.

3. On several previous occasions forms AC-5-132 were inadvertently enclosed with the new formal documents and forwarded to the registered owners of the aircraft. Please advise if you have not received form AC-5-132 and attachments in respect of the aircraft mentioned in paragraph 1, above.

(Sgd)----------?
for District Controller of Air Services.

8
3-53

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

44

401 Winch Building,
Vancouver 1, B. C. (PLACE) April 13th, 1955. (DATE)

YOUR FILE | SUBJECT: Aircraft CF-ZBW | OUR FILE

TRANSPORT RECORDS
APR 15 P.M.
File 5008-Z2-23

2054

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations

1. Enclosed herewith please find Certificate of Registration #14827, covering the above-noted aircraft, returned for cancellation.

2. This aircraft has been sold to Mr. D. Terry, 1510 Palm Avenue, Seattle 16, Washington, U.S.A.

for District Controller of Air Services.

Enc.

C 1A ?

Printed

43

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 1 4827

NATIONALITY AND REGISTRATION MARKS CF-ZBW

1. Type and description	Laister-Kauffman Glider
2. Name and address of constructor	Laister-Kauffman Aircraft Corporation St. Louis 10, Missouri, U.S.A.
3. Constructor's serial number	36
4. Name of owner	Peter Marinos Van Groen
5. Address of owner	1023 East 14th Ave., Van. 10, B.C.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Vancouver, B.C.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 28th day of May 1954, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZBW and is of Canadian nationality.

Given at Vancouver this 21st day of June 1954

for *Superintendent, Air Regulations.*

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

JCF/MJL

45

OTTAWA, Ontario April 27th, 1955.

5008-Z2-23

LAISTER-KAUFFMAN GLIDER CF-ZBW

5008-Z2-23

District Controller of Air Services,
401 Wimsh Building,
Vancouver, B.C.

Attn:- District Superintendent, Air Regulations.

1. We acknowledge receipt of Certificate of Registration No. 14827 covering Laister-Kauffman Glider Serial No. 3, registration CF-ZBW for cancellation.

2. A Certificate of Airworthiness No. 3945 was issued for this aircraft on May 1st, 1953 and we require this document for cancellation and completion of our records covering this aircraft.

(C.F. Travers),
Superintendent, Air Regulations.

IF UNDELIVERED RETURN
TO POINT OF MAILING
OFFICE OF 401 WINCH BLDG.
VANCOUVER 1, B. C.

O. H. M. S.

REGISTERED



Director of Air Services,
Department of Transport,
#3 Temporary Building,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations.

R VANCOUVER, CANADA.
No. D.T. 126

DEPARTMENT OF TRANSPORT
CANADA
54

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

SD 2 8-52

401 Winch Building,
Vancouver 1, B. C. (PLACE) May 24, 1955. (DATE)

YOUR FILE	SUBJECT	OUR FILE
5008-Z2-23	Laister-Kauffman Glider CF-ZBW	5008-Z2-23

TRANSPORT - RECORDS
MAY 30 P.M.
File 5008-Z2-23

6715

REGISTERED

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations.

1. With reference to your letter of April 27th, enclosed please find Certificate of Airworthiness No. 3945 covering the above-noted aircraft which has been returned and forwarded for Headquarter's disposal.

J. District Controller of Air Services.

Enc. 1.

② Miss Jones
Please cancel registration
CF-ZBW. Aircraft exported to
the U.S.A.
JLeH 30/5/55.

ENGINES

18. ~~Number installed~~

19. Makes

20. Types

21. International power of the engine or engines at

(*a*) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(*b*) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (*a*).....(*b*).....

23. Oil: (*a*).....(*b*).....

24. Propellers { Number fitted.....Types.....No.....
{ Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(*a*) Landplane	486	lbs.
	(*b*) Seaplane		lbs.
	(*c*) Skiplane		lbs.

WEIGHT OF FUEL AND OIL

~~26. Fuel~~		~~lbs.~~
(at 7·2 lbs. per gallon)		
(*a*) Number of tanks		
(*b*) Capacity of tanks	Imp. gals.	
27. Oil		lbs.
(at 9·0 lbs. per gallon)		
(*a*) Number of tanks		
(*b*) Capacity of tanks	Imp. gals.	
28. Weight allowed for crew		lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full		lbs.
32. Maximum total weight authorized		lbs.
Landplane		lbs.
Seaplane		lbs.
Skiplane		lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane Eight Hundred and Seventy-five Pounds
Seaplane
Skiplane

34. Minimum crew necessary One

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of -1.7 inches and +5.7 inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. ~~Except in emergency, the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight, it must never exceed.....r.p.m.~~

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated May 22/1952 in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 1st day of May 19 53

M. Baribeau
for *Superintendent, Air Regulations.*

THIS CERTIFICATE IS ISSUED IN LIEU OF UNITED STATES DEPARTMENT OF COMMERCE CERTIFICATE OF AIRWORTHINESS FOR EXPORT NUMBER E-13952 AND IS SUBJECT TO CONDITIONS SPECIFIED THEREIN.

VALID FOR DAY FLYING ONLY

49

2462
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 3945

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) ~~Dashwood~~ ~~DUTLENT (i.e. Corp.)~~ VAN GROEN 21.6.54
2. Christian name ~~R.N.C.~~ ~~R.J.~~ Peter Marinos 21.6.54
3. Address ~~5856 Neville St., South Burnaby, B.C.~~ 1023 E. 14th Ave., Van. 10, B.C. ~~18 East 7th Avenue, Vancouver, B.C.~~
4. Nationality Canadian

NAME OF CONSTRUCTOR

5. Name Laister-Kauffman Aircraft Corporation

NATIONALITY AND REGISTRATION MARKS

6. CF-ZBW

DESCRIPTION OF AIRCRAFT

7. Type Laister-Kauffman Glider Series LK-10A Constructor's No. 36
8. Place and year of construction of aircraft St. Louis 10, Missouri, U.S.A. 1942

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 50' 2"
16. Maximum length (in flying position) 21' 8"
17. Total height (with and without trolley in case of seaplanes) 3' 9"

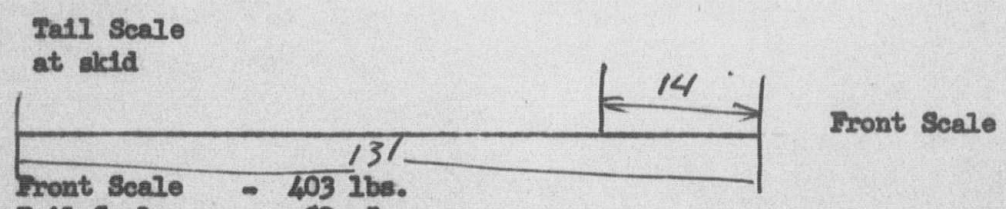
49

May 28,1954.

WEIGHT AND BALANCE REPORT.

Registration (Canadian) CF-ZBW
Type - Glider
Model - Laister-Kauffman LK-10A
Serial - #36

Datum
C.L. of Main Wing Spar



Front Scale - 403 lbs.
Tail Scale - 89 "

Total Empty Weight - 492 lbs.

C of G $\frac{89 \times 131}{492}$ - 23.7" - 14" = 9.7 " aft of Datum.

Weighed by - _____

Witnessed by _____

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		May 22/1953	
		March 27, 1954.	
		27th May 1955	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
~~Engine Revolution Counter~~
~~Oil Pressure Gauge~~
~~Oil Temperature Gauge~~

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT FORMS PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT.

Note: This certificate is subject to Air Regulations, 1933, as amended, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

FILE No. 5008 - Z3 - 2

VOLUME No. 1

VOL 1 5008 - Z3 - 2

DEPARTMENT OF TRANSPORT

FROM JULY, 1952

TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - ZCB - GRUNAU BABY 2B GLIDER.

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) SERVICES DATE LEFT OFFICE	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
NOV 3 1952	W/Warden 38778	CAR		WVS	NOV 6 1952
NOV 6 1952		CA1			MAY 9 - 1953
	Reg Mr Fink	CAR			NOV 7 1952
JUL 14 1953	Reg Mr Fink	CAR			JUL 29 1953
MAY 11 1954	5313	CAR			MAY 12 1954
MAY 12 1954		CAE		D.F.L.	MAY 12 1954
JUL 31 1958	Reg Miss Jones	ARL			JUL 31 1958

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER SECTION

1
(-8)

COPY

DEPARTMENT OF NATIONAL DEFENCE

ORIGINAL ON FILE.....5004-1.....

COPY FOR FILE.....5802-29.....
5008-2
5008-Z3-2
5008-Z3-3

27020

OFFICE OF THE DEPUTY MINISTER
O T T A W A

22 July, 1952.

Dear Sir:

The Navy possesses a number of gliders, two of which are on loan to the RCAF. Up to the present time, this equipment has been used entirely within Service Gliding Clubs. These Clubs have been handicapped by lack of qualified instructors, and ways and means are being sought whereby the co-operation of civilian Gliding Clubs might be obtained. As any such scheme would entail the piloting of the service gliders by civilian instructors, it is presumed the gliders should be licensed in accordance with Civil Regulations.

It would be appreciated if the relevant regulations, together with any appropriate application forms, could be fowarded.

Yours sincerely,

(C.M. Drury)
Deputy Minister.

The Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

8
10-50

July 23rd, 1952.

5004-1
5008-2
5008-Z3-2
5008-Z3-3
5802-29

Dear Sir:

Reference is made to your letter of July 22nd, 1952, your file NS 7801-110, regarding the registration of glider aircraft owned by the Royal Canadian Navy.

2. These gliders may be registered as state aircraft and no fee will be charged. Pending issue of the formal Certificates of Registration, temporary registration markings as follows may be applied to the aircraft.

CF-ZCB
CF-ZCC

3. Any pilot who has reached wings standard will be granted a Glider Pilots Licence on receipt of application and satisfactory completion of a written examination on airmanship.

4. Enclosed are application forms for Certificates of Registration and Airworthiness, Glider Pilots Licences, and Information Circular 0/18/50.

5. We would be pleased to assist in any way possible with the registration of the aircraft and examination of the personnel concerned.

Yours sincerely,

ORIGINAL SIGNED BY

A.T. COWLEY
for Deputy Minister.

Deputy Minister of National Defence,
Department of National Defence,
OTTAWA, Ontario.

Encls.

Gatineau Gliding Club Inc.

BOX 883

OTTAWA, ONTARIO

~~5~~ 3

5008-22-3

1 Aug 52.

Temporary Certificate

25174

Certified that German manufactured Grunau secondary type sailplane, Ser. 004445 when inspected by me 21 July 52 was airworthy and fit for soaring flight. This machine owned by the RCN was brought from RCN storage during the fall of 1951 is now being operated at the Gatineau Club for Service members.

The machine first flew in Pendleton October 51 after being many years in storage. The mainplanes were completely overhauled to ARB standards by Hawkridge Aircraft UK in 1947, repairs to fuselage were completed by naval personnel and Fairey Aircraft Canada. It has been under the care and supervision of the Gatineau Club's licensed engineer Mr. A. O. Boudreault who at this time is returning from the International Gliding Contest in Spain and will not arrive in Canada until Aug 4. This certificate rendered until a certification can be given by Mr. Boudreault.

A. N. LeCheminant

President

Spoke CAE
he concurs in issue
temp. authority pending
usual formalities. 1/8/52.

ENTERED ON CARDS
No. 8 Bldg.

4

5006-Z3-2

DDM/MM

OTTAWA, Ontario, August 1st, 1952.

The Royal Canadian Navy,
National Defence Headquarters,
OTTAWA, Ontario.

Gentlemen:-

1. Herewith, a temporary authority to operate your Grumman ZB Glider, Serial No. 00[illegible], CF-ZGN, for one month not valid after September 1st, 1952, pending the issue of formal Certificates of Registration and Airworthiness.

2. Upon the return of Mr. A.O. Boudreault, a proper inspection report should be completed by that gentleman and forwarded to the District Controller of Air Services, Attention: District Superintendent, Air Regulations, 260 Richmond Street, West, Toronto 2B, Ontario, in order that formal completion of inspection requirements may be made to facilitate issue of Certificates of Registration and Airworthiness.

Yours truly.

(C.T. Travers),
Superintendent, Air Regulations.

Given by hand to S/L. A.N. LeChevalier.

c.c. TORONTO

DDM/MM

OTTAWA, Ontario, August 1st, 1952.

Application for Registration
Grunau 2B, CF-ZCB.

5008-Z3-2(GAR)

District Controller of Air Services,
260 Richmond Street, West,
TORONTO 2B, Ontario.

Attn:- District Superintendent, Air Regulations.

1. Enclosed herewith please find Application for Registration from the Royal Canadian Navy for Grunau 2B, CF-ZCB, a secondary glider, a copy of a letter from S/L A.N. LeSheminant, President of Gatineau Gliding Club, Inc. and a copy of temporary authority for the operation of this aircraft pending completion of inspection formalities and issue of permanent Certificates of Registration and Airworthiness.

(G.T. Travers),
Encls. Superintendent, Air Regulations.

File: 5001-13
5008-Z3-2
5802-8578

AIRCRAFT ACCIDENT REPORT (TORONTO DISTRICT)

Toronto, Ontario
October 31, 1952
(Date)

SUBJECT: CF-ZCB (Aircraft Registration) Department of National Defence, R.C.N. (Owner)

1. As required under Information Circular No. O/36/50, which concerns the reporting of aircraft accidents in accordance with The Air Regulations, Part VIII, Paragraph 20, sub-paragraph (2), the accident involving the m/n aircraft has been investigated and the following information obtained, action taken and/or recommended:

1. Date of Accident: August 17, 1952

2. (a) Place: Pendleton, Ontario (b) Weather: Wind N/W 12; medium cloud

3. Type of Aircraft: Glider C. of A. and C. of R. Valid (Yes or No) No - Temporary authority valid to Sept.1/52.

4. (a) Pilot's name: Mrs. L. Dure (b) Passengers: Nil

Licence No. YZ-241 Valid (Yes,No) Yes

5. Number of people injured, (if any): Nil

6. Extent of injuries, (if applicable): N/A

7. Extent of damage to:

(a) Aircraft (b) Engine/s

Major damage to fuselage

8. Type of flying, (Private, Commercial, etc.): Private

9. Summary of events immediately prior to and including the accident:

Glider was being towed and while still on the ground, it developed a yaw. This was accentuated by the alternate tightening and slackening of the tow rope. One wing tip dug in causing severe stresses at the wing root fittings.

10. Opinion as to the cause of the accident:

Inexperience

11. Infractions of The Air Regulations: Nil

12. Disciplinary Action: Nil

13. (a) Pilot's report, copy attached (Yes, No) No (b) Owner's report, copy attached (Yes, No) No

Report from Gatineau Gliding Club attached.

14. General Comments:

Obvious

Entered on Accident Cards

Attach: (1)
H.Q. (2)

D W Saunders

(D. W. Saunders),
District Superintendent, Air Regulations,
Toronto.

6

Gatineau Gliding Club Inc.

Box 883

OTTAWA, Ontario.

Oct. 29, 1952
Your file: 5008-Z3-2

District Sup't., Air Regulations,
Department of Transport,
260 Richmond St. W.,
Toronto, Ont.

Dear Sir:

Mr. Smith has passed to me your letter of Oct 16 for reply.
The details you request are as follows:

1. Place of accident: Pendleton Airport, Ont.
2. Weather: Wind N/W 12, mild gustiness, 7/10 altostratus.
3. Pilot's Name: Mrs. Leonore I. Dure
4. Type of Flying: Gliding (Private)

In addition, you may require the time of day. This was 4:15 p.m.

Yours very truly,

GATINEAU GLIDING CLUB

(Signed) J.D. Dure

J. D. Dure

C O P Y

(Re accident involving Grunau Baby Glider CF-ZCB)

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

6 3 5-51

Toronto, Ontario, October 31st, 1952
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z3-2 5802-30987	Accident - CF-ZCB, Pendleton, Ontario, - August 17th, 1952. Pilot: Mrs. L. Dure.	5001-13 5008-Z3-2 ~~5802-3578~~

38778

TRANSPORT - RECORDS
NOV 1 AM 1952
File 5008-Z3-2

In Reply Refer to File

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. With reference to the m/n accident, enclosed herewith two copies of our accident report, which is self-explanatory.

2. It is not considered that further investigation is necessary, or required, please.

(D. W. Saunders)
District Superintendent, Air Regulations,
for District Controller, Air Services,
Toronto.

To be used for rebuilding CF-ZBD by Gatineau Gliding Club JCT 28/7/53

Enclosures.

COPY ON
5802-30987

G

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
9

Toronto, Ontario, May 10th, 1954.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z3-2	Grunau 2B Glider CF-ZCB	5008-Z3-2

In Reply Refer to File

TRANSPORT RECORDS
MAY 11 A.M.
File 5008-Z3-2

05313

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. This office has been advised by Mr. A. O. Boudreault, President of the Gatineau Gliding Club, that glider fuselage CF-ZCB has been permanently withdrawn from use.

2. For your attention and action, please.

W. R. Fenton
for District Superintendent, Air Regulations,
for District Controller, Air Services,
Toronto.

② Miss Jones
Please cancel registration CF-ZCB.
J.L.R. 11/5/54.

FILE No. 5008 - Z3 - 7

VOLUME No. 1

VOL. 1

5008 - Z3 - 7

DEPARTMENT OF TRANSPORT

FROM JULY 1954

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - ZCG SCHWEIZER GLIDER

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
DEC 28 1954	21590	CAR			JAN 13 1955
MAY 18 1955	8062	AR		LOJ	MAY 19
MAY 19 1955	—	CAI			MAY 26 1955
FEB 13 1956	26242	ARL		LT	FEB 15 1956
FEB 15 1956	—	RFL			FEB 15 1956
FEB 15 1956	—	CAI			
AUG 8 1955	14329	AKR		W.G.	NOV 13 1956
	—	ARL		LSJ	AUG 10 1955

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

P.H. [illegible] RCM

5008-ZE-7

DEPARTMENT OF TRANSPORT

TELECOMMUNICATIONS DIVISION

2032
2-53

SENT No.	SENT TO	SENT BY	RECEIVED BY	TIME SENT	CODE	CHECK
		MGM				

SEND THE FOLLOWING MESSAGE SUBJECT TO THE TERMS ON BACK HEREOF WHICH ARE HEREBY AGREED TO:

TO D.A.S. OTTAWA ATT: C.A.R.A. Toronto, July 26th 1954. 19

ART 385 REQUEST MARKING SCHWEIZER GLIDER SERIAL 32 AND LAISTER KOFFMAN GLIDER SERIAL 55 OWNER CHAS. YEATES.

D.W. SAUNDERS
DIST SUPT. AIR REGULATIONS

DS

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE
CORRESPONDANCE EXCLUSIVE AVEC WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

J. R. WHITE,
GENERAL MANAGER — GÉRANT GÉNÉRAL
TORONTO

CLASS OF SERVICE DESIRED GENRE DE SERVICE	
FULL RATE PLEIN TARIF	
DAY LETTER LETTRE DE JOUR	
NIGHT MESSAGE DÉPÊCHE DE NUIT	
NIGHT LETTER LETTRE DE NUIT	

PLACE X OPPOSITE SERVICE DESIRED
INDIQUEZ PAR UN X LE GENRE DE SERVICE DÉSIRÉ

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
JCF/LIT			TRANSPORT AIR 3712

Send the following message, subject to the terms on back hereof, which are hereby agreed to
Veuillez expédier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes

OTTAWA ONTARIO JULY 26 1954
5008-23-7
5008-23-8
5008-2

DISTRICT CONTROLLER OF AIR SERVICES
260 RICHMOND STREET WEST
TORONTO 2B ONTARIO
ATTENTION DISTRICT SUPERINTENDENT AIR REGULATIONS

CAR677 RETEL ART385 ZULU COCA GOLF ALLOTTED SCHWEIZER SERIAL 32 ZULU

COCA HOTEL ALLOTTED LAISTER KOFFMAN SERIAL 55

CIVIL AVIATION.

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.
VOTRE MESSAGE EST-IL CLAIR ET COMPLET? LES MOTS SUPPLÉMENTAIRES COÛTENT À PEINE QUELQUES CENTS.

5008-Z3-7

2

12514

11432

1954 JUL 26 PM 12 09

NR 12 VFT4/GD TORONTO CK 31DH JULY 26/54

DAS OTTAWA

ATTN CAR

ZCF

ART 385 REQUEST MARKINGS SCHWEIZER GLIDER SERIAL 32 AND LAISTER

ZCH

HOFFMAN GLIDER SERIAL 55 OWNER CHARLES YEATES

D W SAUNDERS DSAR 1134AM

COPY ON
5008-Z3-8

CF-ZCG 5008-2

CF-ZCH

4 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Toronto, Ontario, December 27th, 1954.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Schweizer SGU 2-22 Glider CF-ZCG	5008-Z3-7 5008-Z2-21

(1)

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

21590

TRANSPORT - RECORDS
DEC 28 A.M.
File 5008-Z3-7

(2)

C.A.R.

This appears to be a "request" performance by Yeates, despite your warning in para. 4 of your letter of 11 Sept 53 (folio 39 file 5008-Z2-21).

Recommend rejection outright; then if yr have to give way, we must have complete dismantling of the a/c and inspection by a 'B' cat. engineer and by cat. pilot that the a/c conforms in every respect to the type as approved by the C.A.R., is in proper condition and is airworthy: after that Pilots certificate and D.A.I. signature of acceptability as per 2443 should be forthcoming.

C.A.E. 6 Jan 54

1. We have on file an application for registration of the subject glider, submitted by Mr. Charles M. Yeates, and Aeroplane Inspection Release Certificate A.I.2 completed in favour of this aircraft.

2. Mr. Yeates is the registered owner of Schweizer TG-3A Glider CF-ZBU, which was imported from the United States without the requisite export documents of that country, and after considerable correspondence with this Department, was given a Certificate of Airworthiness and formally registered.

3. We have been advised by Mr. Yeates that the glider to which the letters CF-ZCG have been allotted was brought into Canada without a Certificate of Airworthiness for Export, by the Hamilton Air Force Association, who subsequently requested that he, Mr. Yeates, assume the responsibility for the operation of this glider in their interests. It has been represented by Mr. Yeates that the Hamilton Air Force Association plans to provide glider training for the local Air Cadet Squadron.

4. The Hamilton Air Force Association were not aware of the Certificate of Airworthiness for Export requirement when this glider was purchased in the U.S. and, therefore, Mr. Yeates has requested that concessions be made in this case similar to those given in the case of CF-ZBU.

5. Submitted for your information and necessary ruling, please.

A.K. Pinder

for District Superintendent, Air Regulations,
(for) District Controller, Air Services,
Toronto.

5008-Z2-21

5

JCF/JM

OTTAWA, Ontario, January 11th, 1955.

5008-Z2-21
5008-Z3-7

Schweizer SGU 2-22 Glider CF-ZCG

5008-Z3-7 ✓
~~5008-Z2-21~~

District Controller of Air Services,
260 Richmond Street West,
Toronto 2B, Ontario.

Attention: District Superintendent, Air Regulations.

1. Your letter 5008-Z3-7, dated December 27th, 1954, dealing with the importation of Schweizer SGU 2-22 Glider CF-ZCG, is acknowledged.

2. We require that an aircraft when imported be covered by Certificate of Airworthiness for Export and the owners of this Glider are to be informed accordingly.

3. The logical thing for them to do is to take their aircraft to the nearest Civil Aeronautics Administration Representative for certification for Export and upon its return with the valid document, registration can be proceeded with.

(C.T. Travers),
Superintendent, Air Regulations.

6

JCF/JM

OTTAWA, Ontario, January 12th, 1955.

5008-Z3-7
5008-Z2-21

Schweizer SGU 2-22 Glider CF-ZCG

5008-Z3-7
5008-Z2-21

District Controller of Air Services,
260 Richmond Street West,
Toronto 2B, Ontario.

Attention: District Superintendent, Air Regulations.

1. Your letter 5008-Z3-7, dated December 27th, 1954, dealing with the importation of Schweizer SGU 2-22 Glider CF-ZCG, is acknowledged.

2. We require that an aircraft when imported be covered by Certificate of Airworthiness for Export and the owners of this Glider are to be informed accordingly.

3. It is suggested that the owner should take his Glider to the nearest Civil Aeronautics Administration Representative for certification for Export.

(C.T. Travers),
Superintendent, Air Regulations.

COPY 8062

DEPARTMENT OF TRANSPORT

ORIGINAL ON FILE 5802-18450

COPY FOR FILE 5008-Z3-7
-Z3-8

TRANSPORT - RECORDS
7
MAY 17 A.M. 1955
File 5008-Z3-7

LEJG.

Your File
5008-Z3-7
5008-Z3-8

Toronto, Ontario, May 13th, 1955.

YEATES, Charles M.

Our File
5008-Z3-7
5008-Z3-8

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

1. The marinally noted has advised this office of his change of address which at present is as follows:

Carolyn Apt. 6,
Forster Crescent,
OAKVILLE, Ontario.

2. For your attention, please.

(Sgd) M. E. Louch
for District Superintendent, Air Regulations,
(for) District Controller, Air Services,
Toronto.

8
3-53

TO BE USED FOR NEW REGISTRATIONS AND AIRWORTHINESS.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

AC-6-133

ORIGINAL-HQ FILE NO. 11 5008-Z3-7

DUPLICATE-DIST. FILE NO.

TRANSPORT - RECORDS
FEB 13 A.M.
5008-Z3-7

AIRCRAFT LICENSING RECORDS

26242

Registration Mark CF- ZGG ..... Date ... July 12th 1954 .....

C of Registration-No. 16168 ..... Date Feb. 9th 1956 ..... Copy attached [x]

C of A No. 4665 ..... Date Feb. 9th 1956 ..... Copy attached [x]

Category Normal [x] Experimental [ ] Restricted [ ] Acrobatic [ ]

1. ~~Type approval or~~ specification No. G-18 ..... C of A for export No. E-26643 ....

2. Landplane [x] Seaplane [ ] Skiplane [ ]

3. Classification - State Commercial [ ] Private [x]

Valid for Day [x] Night [ ]

4. Surname of owner Toronto Gliding Club ..... Citizen of Canada ....

Christian name ....

5. Address of owner c/o 538 Deloraine Ave., Toronto, Ont. .....

.....

6. Aircraft based at Brantford, Ontario .....

7. Aircraft Mfg. No. 32 ..... Type Schweizer .. Series ... SGU-2-22

8. Engine Mfg. Nil ..... Type - .....

9. A/S Mfg. - ..... Pitched: Fixed [ ] Variable [ ]

10. Fuel capacity - .....Imp. Gals. 11. Oil capacity .....Imp. Gals.

12. Type	Weight empty	Max. gross weight
Land	459.25	830
Sea		
Ski		

13. Min. crew	1	Maximum passengers	1	Pass with freight	

14. Wt. and bal. report [x] Date 28.7.55 Copy attached [ ]

15. C of G range +11.4 ..... to +19.3 .....

16. Airplane flight manual [ ]

17. Operating limitations [ ]

18. Endorsements on C of A Page 3 - the conditions and limitations contained ... in aircraft C.A.A. Spec. G-18 must be complied with. .....

19. C of A valid from July 27th 1955 ..... to July 27th 1956 .....

Temporary authority from November 22nd 1955 to December 6th 1955. .....

CC: D.S.R. Toronto

Date February 9th 1956.

(D.W.Saunders)
District Superintendent, Air Regulations

10

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 16168

NATIONALITY AND REGISTRATION MARKS CF-ZCG

1. Type and description	Schweiser SGU-2-22
2. Name and address of constructor	Schweiser Aircraft Corporation Elmira, New York, U.S.A.
3. Constructor's serial number	32
4. Name of owner	Toronto Gliding Club
5. Address of owner	c/o 538 Deloraine Ave., Toronto, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 22nd day of November 1955, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZCG and is of Canadian nationality.

Given at ~~Ottawa~~ Toronto this 9th day of February 1956.

D L Saunders
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No.....
{ Pitch.....Diameter.....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane.....	.....lbs.
	(b) Seaplane.....	.....lbs.
	(c) Skiplane.....	.....lbs.

WEIGHT OF FUEL AND OIL

26. Fuel.....	.....lbs.
(at 7·2 lbs. per gallon)	
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
27. Oil.....	.....lbs.
(at 9·0 lbs. per gallon)	
(a) Number of tanks.....	
(b) Capacity of tanks.....Imp. gals.	
28. Weight allowed for crew.....	.....lbs.
29. Weight allowed for equipment, excluding wireless apparatus.....	.....lbs.
30. Weight of wireless apparatus.....	.....lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....	.....lbs.
32. Maximum total weight authorized.....	.....lbs.
Landplane.....	.....lbs.
Seaplane.....	.....lbs.
Skiplane.....	.....lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated.....July 27th 1955.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, 1938x

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at ~~Ottawa~~ Toronto this. .....9th.....day of.....February.....19.56.

.....
Superintendent, Air Regulations.

This Certificate is issued in lieu of United States Department of Commerce Certificate of Airworthiness for Export No. E-26643 and is subject to conditions specified therein.

Valid for Day Flying only.

9

2462

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 4665

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Toronto Gliding Club
2. Christian name
3. Address c/o 538 Deleraine Avenue, Toronto, Ontario
4. Nationality Toronto, Ontario

NAME OF CONSTRUCTOR

5. Name Schweizer Aircraft Corporation

NATIONALITY AND REGISTRATION MARKS

6. CF-ZCG

DESCRIPTION OF AIRCRAFT

7. Type Schweizer Series SGU- 2-22 Constructor's No. 32
8. Place and year of construction of aircraft Elmira, New York, U.S.A. 1949

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 43' 1"
16. Maximum length (in flying position) 25' 4"
17. Total height (with and without trolley in case of seaplanes) 9' 7"

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		July 27th 1956	D.B. Saunders

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

The documents listed hereunder form part of this Certificate of Airworthiness and must be carried in the aircraft during flight:

Weight and Balance Report

The conditions and limitations contained in aircraft C.A.A. Spec. G-18 must be complied with.

Note: This certificate is subject to Air Regulations, 1938, as amended, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 16168

NATIONALITY AND REGISTRATION MARKS CF-ZCG

1. Type and description	Schweizer SGU-2-22
2. Name and address of constructor	Schweizer Aircraft Corporation Elmira, New York, U.S.A.
3. Constructor's serial number	32
4. Name of owner	Toronto Gliding Club
5. Address of owner	c/o 538 Deloraine Ave., Toronto, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 22nd day of November 1955, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-ZCG and is of Canadian nationality.

Given at Toronto this 9th day of February 19 56.

D. Saunders
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed.....

19. Makes.....

20. Types.....

21. International power of the engine or engines at.....

(a) Sea Level.....H.P. at.....revolutions per minute.
(International number of revolutions)

(b) Rated Altitude.....H.P. at.....revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a).....(b).....

23. Oil: (a).....(b).....

24. Propellers { Number fitted.....Types.....No..... / Pitch.....Diameter.....

25.	Weight of aircraft empty (including water in the radiators):	(a) Landplane	.....lbs.
		(b) Seaplane	.....lbs.
		(c) Skiplane	.....lbs.

WEIGHT OF FUEL AND OIL

26.	Fuel..... (at 7·2 lbs. per gallon)	.....lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
27.	Oil..... (at 9·0 lbs. per gallon)	.....lbs.
	(a) Number of tanks.....	
	(b) Capacity of tanks.....Imp. gals.	
28.	Weight allowed for crew.....	.....lbs.
29.	Weight allowed for equipment, excluding wireless apparatus.....	.....lbs.
30.	Weight of wireless apparatus.....	.....lbs.
31.	Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full.....	.....lbs.
32.	Maximum total weight authorized.....	.....lbs.
	Landplane.....	.....lbs.
	Seaplane.....	.....lbs.
	Skiplane.....	.....lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full).....
Landplane.....
Seaplane.....
Skiplane.....

34. Minimum crew necessary.....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of.....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed.....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed.....r.p.m.

40. The indicated air speed must never exceed (a).....m.p.h. and (b).....m.p.h.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated....July 27th 1955.....in respect of the above-mentioned aircraft, in accordance with the Convention on International Civil Aviation, dated December 7, 1944, and with Air Regulations, ~~1938~~

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at ~~Ottawa~~ Toronto this. ....9th.....day of.....February.....1956.

D.W. Anders
.....
Superintendent, Air Regulations.

This Certificate is issued in lieu of United States Department of Commerce Certificate of Airworthiness for Export No. E-26643 and is subject to conditions specified therein.

Valid for Day Flying only.

15

2462

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS No. 4665

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Toronto Gliding Club
2. Christian name
3. Address c/o 538 Deleraine Avenue, Toronto, Ontario
4. Nationality Toronto, Ontario

NAME OF CONSTRUCTOR

5. Name Schweizer Aircraft Corporation

NATIONALITY AND REGISTRATION MARKS

6. CF-ZCG

DESCRIPTION OF AIRCRAFT

7. Type Schweizer Series SGU- 2-22 Constructor's No. 32
8. Place and year of construction of aircraft Elmira, New York, U.S.A. 1949

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Nil
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

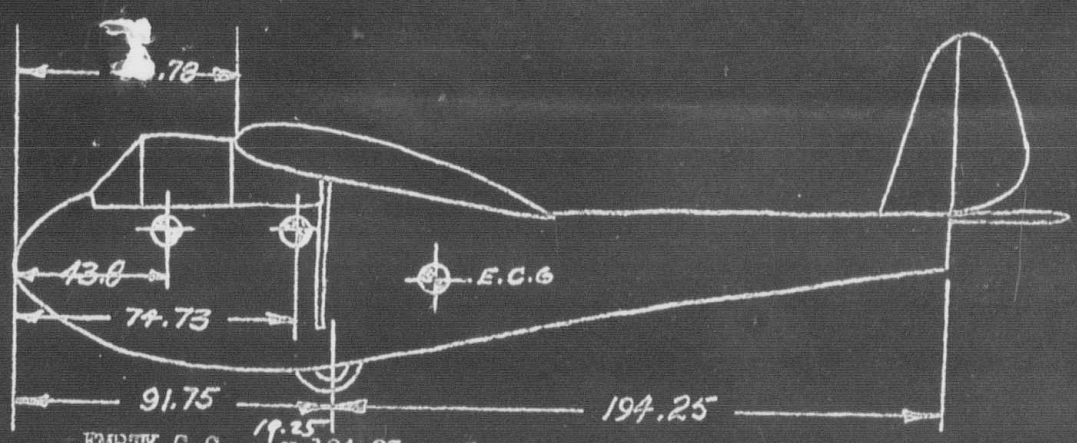
13. Category Normal
14. Subdivision "D"
15. Maximum span (in flying position) 43' 1"
16. Maximum length (in flying position) 25' 4"
17. Total height (with and without trolley in case of seaplanes) 9' 7"

Model:

SCHWEIZER AIRCRAFT CORPORATION
Elmira, New York

Serial No. 32

CF-ZCG



EMPTY C.G. = $\frac{19.25}{457.25} \times 194.25 = 8.14$ C.G. AFT OF WHEEL

8.14 - 91.75 = 99.89 AFT OF DATUM C.G. EMPTY

99.89 - 66.78 = 33.11 C.G. AFT OF WING L.E.

NET WEIGHTS
AS WEIGHED
Tail Weight 19.25
Wheel Weight [illegible]
Weight Empty 457.25
Useful Load 372.75
Gross WEIGHT 830

MINIMUM SOLO — MOST REARWARD C.G. CONDITION

	WEIGHT	ARM	MOMENT
GLIDER	457.25	99.89	45700
PILOT	150.-	43.8	6570
TOTAL	607.25		52270 = 86.1

607.25

MINIMUM FWD. PILOT DUAL CONDITION

	WEIGHT	ARM	MOMENT
GLIDER	457.25	99.89	45700
FWD. PILOT	100	43.8	4380
REAR PILOT	170.00	74.73	12700
TOTAL	729.25		62780 = 86.1

729.25

MOST FORWARD C.G. CONDITION

	WEIGHT	ARM	MOMENT
GLIDER	457.25	99.89	45700
FWD. PILOT	220	43.8	9650
REAR PILOT	150.75	74.73	11270
TOTAL	830		66620 = 80.50

830

:C.G. LIMITS 78.5" to 86.1 AFT OF DATUM :
:C.G. LIMITS 11.4" to 19.35 AFT L.E. WING:

SIGNED: [signature] DATE 7-28-55
APPROVED: [signature] DATE 7-28-55

EQUIPMENT LIST	WT.	ARM
Airspeed Indicator	Neglect	-44
Wheel Goodyear L6H/MBD With brake and 4 ply tire 16.5		-25.3

Form I 476

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public Transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		July 27th 1956	

(1) The periods of and reasons for suspensions and withdrawals of Certificates of Airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this certificate except in the manner and by the persons authorized for that purpose by the Minister.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Magnetic Compass
Altimeter
Airspeed Indicator
Engine Revolution Counter
Oil Pressure Gauge
Oil Temperature Gauge

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purpose of this certificate infants in arms under three years of age are not counted as passengers.

The documents listed hereunder form part of this Certificate of Airworthiness and must be carried in the aircraft during flight:

Weight and Balance Report

The conditions and limitations contained in aircraft C.A.A. Spec. G-18 must be complied with.

Note: This certificate is subject to Air Regulations, [redacted] and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

TO BE USED FOR MULTIPLE COPIES ONLY

3

17

TORONTO Ontario August 3, 1956

PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-Z3-7	Schweizer SGU2-22 CF-ZCG	5008-Z3-7
5008-Z2-14	London UTG-1 CF-ZBN	5008-Z2-14

Original on 5008-Z2-14

14329

TRANSPORT - RECORDS
AUG 8 A.M.
File 5008-Z3-7

Director of Air Services,
Department of Transport,
No. 3 Temporary Building,
OTTAWA.

1. The Toronto Gliding Club has advised that on June 1, 1956, at approximately 1800 hrs., their gliders CF-ZBN and CF-ZCG were destroyed on the ground, during a violent windstorm, and during this destruction no person was in the gliders and no one was hurt.

2. Attached hereto are the Certificates of Registration and Airworthiness, for these two gliders, for cancellation.

(D. W. Saunders),
District Superintendent, Air Regulations,
for District Controller of Air Services,
Toronto.

DWS/mh

Encls.

Noted
ES

FILE No. 5008 - Z 3 - 17 VOLUME NO. 1

5008 - Z 3 - 17 VOL. 1

DEPARTMENT OF TRANSPORT

FROM APRIL, 1956
TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF - ZCQ - FAUVEL AV-36

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
APR - 6 1956	414	ARL			APR - 6 1956
OCT - 1 1958	Ltr from Delaware	SRL			NOV 1 8 1958
OCT SEP 29	19176	AIS	21/10		OCT - 1 1958
	—	AIS			OCT 9 1958
	19904	AIG			OCT 9 1958
	19572 + 19574	AIG			OCT 9 1958
	19099	AIG			OCT 9 1958
OCT 9 1958 OCT 14 1958	MEMO TO	AIG (3)			OCT 29 1958
		CIG (4)			OCT 9 1958
OCT 9 1958	8/10/58	CORC			OCT 9 1958
OCT 10 1958		ARR (5)	20.10.58		OCT 14 1958
16/10	BF 20/10/58	SRL			OCT 30 1958
OCT 29 1958	Form 2448, Para 11	S.R.L.			OCT 30 1958
OCT 30 1958	BF 31/10/58	AIS			NOV 13 1958
NOV 14 1958	20926	SRL			
	Letter 17.10.58	SRL			NOV 18 1958
NOV 18 1958	Ltr Mr Butbour	SRL			18 1958

IMPORTANT—DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER SECTION

1
6-54

FWB/MJJ

OTTAWA, Ontario April 4th, 1956.

FAUVEL XV-36 Glider - Serial No. F36-091
Buckingham Gliding Club. 5008-Z3-17

District Controller of Air Services,
Department of Transport,
Montreal Airport,
Quebec.

Attn:- District Superintendent, Air Regulations.

1. Please be advised that registration marks CF-ZCQ have been allotted to the above referenced glider being constructed by the Buckingham Gliding Club of Buckingham, Quebec.

2. It is understood that application form 2413 and the required fee of $5.00 has already been submitted to your District office. The registration marks mentioned above have been allotted by this Headquarters and the Buckingham Gliding Club were advised by telephone this date. A copy of this letter is being sent to the gliding club as confirmation.

3. Your attention is drawn to the correct serial number of this glider. May your records be amended accordingly please.

ORIGINAL SIGNED BY
F. W. BONE

Superintendent, Air Regulations.

Copy to Brother Hormisdas
Buckingham Gliding Club,
Buckingham, Quebec.

ALLOTMENT OF REGISTRATION AC-5-77

2

REGISTRATION NUMBER CF-ZCQ

DISTRICT Montreal

DATE OF ISSUE 4.4.56

PART OF BLOCK ( )

414

TRANSPORT - RECORDS
APR 5 P.M.
File: 5008-Z3-11

TYPE OF AIRCRAFT Fauvel AV-36

SERIAL NUMBER F36-091

OWNERS NAME Buckingham Gliding Club

ADDRESS --

REQUESTED BY Telephone (x) DATE ( )

REQUESTED BY LETTER ( ) DATE ( )

DESPATCHED BY TELEGRAM ( ) TELETYPE ( ) LETTER ( )

Noted

CTT/ER

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Gov's AIG. 3 2 8-57

Ottawa, Ontario. September 29th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE 5008-Z3-17 (CIG)

SUBJECT: Accident - September 27th, at Buckingham, P.Q. to AV 36 Fauvel Glider - Pilot Russ W. Stephenson

19174

MEMORANDUM FOR FILE

1. The undersigned today received a report from Mr. George S. Lace regarding the above accident. Mr. Lace had received a telephone call from Brother Hormisdas, Buckingham, P.Q. and it was stated that Mr. Stephenson had struck a tree with the wing tip of the Fauvel Glider immediately prior to landing. Mr. Stephenson was bruised and suffered slight concussion and had been admitted to the Ottawa Civic Hospital.

2. The undersigned telephoned Mr. A.N. Le Cheminant, due to report for duty on Wednesday, October 1st, since it was known that he had been a founder of the glider movement in Canada. Mr. Le Cheminant volunteered to interview Mr. Stephenson in hospital and obtain his statement on the subject of the accident.

3. A telephone call was put through to Brother Hormisdas and further details obtained concerning the accident, as a result of which the wreckage was released to the owners.

C.T. Travers.

(C.T. Travers),
Chief, Accident Investigation.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

4 2/8-57

OTTAWA, Ontario, September 29, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		~~5008-23-20~~ 5008-23-17

SUBJECT: Accident- Glider Sawvel AV36 CF-ZCQ Buckingham P.Q., - September 28, 1958.

19176

MEMORANDUM TO: C.I.G.

1. In accordance with the verbal instructions from Inspector W.V. Gordon, Frere H'Ormisdas was contacted by telephone and the following information was obtained regarding the subject accident.

(a) Glider Sawvel AV36, CF-ZCQ; — FAUVEL
(b) Buckingham Flying Club;
(c) Mr. Russ Stevenson;
(d) September 28, 1958, 1500 E.S.T.;
(e) Buckingham P.Q. - Buckingham P.Q.;
(f) Buckingham P.Q.;
(g) Pilot seriously injured;
(h) Pilot was landing at the field used by the Buckingham Flying club and the right wing collided with a tree causing damage to nose and right wing of glider.

M.C.D. Dale
Inspector, Civil Aviation.

N/E. I spoke to Le Cheminant and Fr. Hermisdas about this and we should obtain full details. Mr. Le Cheminant will do this. McLellan has been told of the arrangement.
C.H. 30/9

Entered on Accident Cards
SEP 29 1958

5

C/C Gordon

A/C.

Miss Carter

Card pls.

30/9 Wds.

Records

B/F on file 31/10/58

30/9 Wds.

VOL A VOILE **BUCKINGHAM GLIDING CLUB**

BUCKINGHAM, QUEBEC

TRANSPORT - RECORDS
SEP 30 1958
File S&O 8-33-17

September 29 1958

19099

Report on the Glider Accident at the Buckingham Field on September 28 1958.

TO WHOM IT MAY CONCERN

Location: South end of the N-S runway on the field in use by the Buckingham Glidding Club at Buckingham
Date and Time. September 28 1958 about 4 p.m. Wind: NW light
Aircraft: Fauvel AV-36 " Flying Wing" CF-ZCQ belonging to the Club and test flown by Brother Hormisdas and Russ Stephenson. No characteristic stall; will "mush" at about 45 mi./hr. Glide Ratio 22-24. at 55 mi./hr. No spin tendency.

Accident. Russ Stephenson was towed to 3000 ft in around 10-12 min. Release was made. Soaring flight then began with some "zero sink" evident. It lasted 20-25 min. He made a pass over the airfield at about 1000 ft in the northward direction then made a 180 degree turn to the west in a wide sweep and neared the landing leg at the south end of the runway with an altitude of about 300 ft. He decided to make an S-turn towards the east then back to runway facing NW whereupon he closed spoilers and made a level flight over the bushy section of the approach. Over the edge of this bush he pushed stick forward to get more speed for the round-off but at that very instant his left wing contacted a tree top protruding slightly above the surroundings. This contact had the effect of swerving the glider around 150 degrees to the south and over the extreme end of the runway. By this moment the right wing was almost to the ground and the glider came to rest upside down on its two fins and rudders. Russ had a bleeding wound on his right temple and was unconscious. He was rushed to the B'ham hospital in about 10 min.

Damage; Broken D-box in the right wing. Pod demolished up to the main frame under the main spar. Signs of stresses on the D-box near pod attachment. Main spar intact at first glance.

This is what I observed being stationed about 500 ft away from the scene of the accident.

Note: All through the flight the glider was under perfect control.

Brother Hormisdas
C. F. I.

G. JACQUEMIN
22 MALDAVER
P.O. BOX 504
STREETSVILLE
ONTARIO - CANADA

FRERE HORMIDAS

ECOLE SUPERIEURE ST. MICHEL

BUCKINGHAM .

P. Q

G. JACQUEMIN
22 MALDAVER
P.O. BOX 504
STREETSVILLE
ONTARIO - CANADA

BROS. HORMIDAS

ECOLE SUPERIEURE ST. MICHEL

BUCKINGHAM

QUE.

Il faut que vous passiez très attention à la ventilation du cockpit : l'air doit s'évacuer tout à l'arrière du profilage de tête. Il faut ménager des trous assez large autour de l'appuie tête pour évacuer l'air de ventilation vers l'arrière D'après votre photo, il semble que ceci n'ai pas été fait. Il faut aussi soigner l'avant du canopy à son raccordement avec le nez du fuselage en employant du balsa pour remplir les creux ; couvrez de madapolam et peinture.

Faunel a secoué Frebel et j'espère que les amortisseurs ne tarderont pas à arriver

Vous ne me verrez pas à Montreal, après 3 ans d'université, mes moyens ne me permettent pas de faire le voyage aussi y ai-je renoncé pour cette année.

Si vous avez quelque question, n'hésitez pas à écrire.

Bien Cordialement.

G. Jacquin

Streetsville.
Box 504
Feb 23 - 58

Cher Frère Hamidas.

Je vois que vous avez quelques difficultés pour obtenir le C of A de notre AV-36. N'allez pas trop vite car je suis en train de revoir la question avec le DOT pour connaitre des poids plus elevees et les nouvelles positions du CG. Tout ceci sera clarifié avant le debut de la saison.

L'excès de poids est un inconvenient pour les conditions marginales, mais pour la distance pure, c'est un avantage. Les battements de la profondeur ne devraient pas être dus au jeu dans la commande. En general, ils sont dus a un mauvais ecoulement de l'air autour du cockpit. Verifiez les joints du Canopy qui doivent être bien profilés et ne pas fuire. Ce sont ces fuites d'air qui cause de la turbulence et et secoue le plan de profondeur.

Streetsville Avril 8-58.

Cher Frere

Je me veux que vous envoyer un mot
tès court aujourd'hui car les examens
viennent comme vous le savez avec les
premiers bourgeons.

D'après les notes que vous m'envoyez, votre
centrage est encore trop en avant bien que vous
soyez dans les limites maximum requises.

Ajoutez du ballast en arrière pour amener
le CG dans les limites optimum indiquées
sur la feuille de centrage ci-jointe (Aug 1956).

Je n'ai pas encore pu regler la question avec
le DOT faute de temps libre; la demande de
changement de centrage sera deposée dans le courant
de Mai, c'est le mieux que je puisse faire.

Bien amicalement.

G. Jacques

P.S. s'il y a du jeux dans votre commande de

profondeur, vous devez l'éliminer. De toutes manières, les battements proviennent uniquement d'un mauvais écoulement autour du cockpit. Si vous avez toujours des ennuis, il faudra mettre des fils de laine et observer l'écoulement en vol (en regardant à la jumelle depuis un autre planeur ou un avion. Une fois que la zône turbulente sera repérée il sera facile de trouver la cause et d'y remedier.

J. Bob Mowry. ME-1-1861 Local 604

AC-12-5

AIRCRAFT INSPECTION RELEASE CERTIFICATE

(For Production Aircraft having Canadian Type Approval)

AI-1, ISSUE 2

Registration .....

Aircraft Type ..... Landplane / Seaplane / Skiplane Model .....

Manufacturer ..... Serial No. .....

Type Approval No. .....

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required)

CATEGORY	
Normal	(a - Public transport passenger (b - " " mails (c - " " goods
Semi-Acrobatic	(d - Private (e - Aerial work
Acrobatic	(f - Demonstration (g - Racing or record
Special	(h - Research or experimental

RECORD OF APPROVED MAJOR MODIFICATIONS EMBODIED SUBSEQUENT TO

APPROVAL OF TYPE AIRCRAFT

DRAWING AND ISSUE NO.	DESCRIPTION

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aircraft described herein ~~has been constructed under my supervision, that it~~ conforms to the drawings and specifications of the approved Type Aircraft, that the materials entering into its construction conform to those specifications, that all workmanship is sound and in accordance with accepted aircraft practice.

Signed ..... Date .....
Chief Inspector

~~Ltd.~~

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aircraft described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air engineer and that the aircraft is airworthy and an entry in the log book to this effect has been made.

Signed ..... Air Engineer ..... Chief Inspector

..... Date

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aircraft described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aircraft.

Signed ..... Date .....
Test Pilot

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., CIVIL AVIATION

The aircraft described herein has been properly inspected and tested, and an accurate Weight and Balance report is contained in the Flight Manual. This Manual and other necessary documents are supplied with the aircraft. The issue of a Certificate of Airworthiness in Category Subdivision is recommended.

Signed .....
Resident Inspector, A.I.D.
Civil Aviation

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date)

Signed .....
District Inspector, Civil Aviation

AC-12-5

AIRCRAFT INSPECTION RELEASE CERTIFICATE

(For Production Aircraft having Canadian Type Approval)

AI-1, ISSUE 2

Registration .....

Aircraft Type ..... Landplane / Seaplane / Skiplane Model .....

Manufacturer ..... Serial No. .....

Type Approval No. .....

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required)

CATEGORY	
Normal	(a - Public transport passenger
	(b - " " mails
	(c - " " goods
Semi-Acrobatic	(d - Private
	(e - Aerial work
Acrobatic	(f - Demonstration
	(g - Racing or record
Special	(h - Research or experimental

RECORD OF APPROVED MAJOR MODIFICATIONS EMBODIED SUBSEQUENT TO

APPROVAL OF TYPE AIRCRAFT

DRAWING AND ISSUE NO.	DESCRIPTION

CERTIFICATE OF CHIEF FACTORY INSPECTOR

I hereby certify that the aircraft described herein ~~has been constructed under my supervisory inspection, that it~~ conforms to the drawings and specifications of the approved Type Aircraft, that the materials entering into its construction conform to those specifications, that all workmanship is sound and in accordance with accepted aircraft practice.

Signed ..... Date .....
Chief Inspector

..... Engineer.

(The following certificate to be executed on the day of test flight)

I hereby certify that the completely assembled aircraft described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air engineer and that the aircraft is airworthy and an entry in the log book to this effect has been made.

Signed ..... Air Engineer ..... Chief Inspector

..... Date

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aircraft described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aircraft.

Signed ..... Date .....
Test Pilot

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., CIVIL AVIATION

The aircraft described herein has been properly inspected and tested, and an accurate Weight and Balance report is contained in the Flight Manual. This Manual and other necessary documents are supplied with the aircraft. The issue of a Certificate of Airworthiness in Category Subdivision is recommended.

Signed .....
Resident Inspector, A.I.D.
Civil Aviation

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date)

Signed .....
District Inspector, Civil Aviation

8

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER

Ser. # F-36-091

CF-ZCQ

Montreal Airport, Que.
29th March 1956

Buckingham Gliding Club,
Buckingham, Que.

Plan #91

Dear Sirs,

Receipt is acknowledge of application for Registration of a Glider Fauvel AV-36 together with a fee of five dollars.

In connection with the above please supply this office with markings and particulars of this machine as soon as possibly convient.

Yours truly,

J.P. Fournier,
District Superintendent,
Air Regulations.

FWB/MJJ

9

OTTAWA, Ontario April 4th, 1956.

FAUVEL AV-36 Glider - Serial No. F36-091
Buckingham Gliding Club. 5008-Z3-17

District Controller of Air Services,
Department of Transport,
Montreal Airport,
Quebec.

Attn:- District Superintendent, Air Regulations.

1. Please be advised that registration marks CF-ZCQ have been allotted to the above referenced glider being constructed by the Buckingham Gliding Club of Buckingham, Quebec.

2. It is understood that application form 2413 and the required fee of $5.00 has already been submitted to your District office. The registration marks mentioned above have been allotted by this Headquarters and the Buckingham Gliding Club were advised by telephone this date. A copy of this letter is being sent to the gliding club as confirmation.

3. Your attention is drawn to the correct serial number of this glider. May your records be amended accordingly please.

ORIGINAL SIGNED BY
F. W. BONE

Superintendent, Air Regulations.

Copy to Brother Hormisdas
Buckingham Gliding Club,
Buckingham, Quebec.

MCD/MD

O T T A W A, Ontario, September 29, 1958.

~~5008-3-28~~ 5008-33-17

Accident- Glider Sawvel AV36 CF-ZCQ Buckingham P.Q., - September 28, 1958.

MEMORANDUM TO: C.I.G.

1. In accordance with the verbal instructions from Inspector W.V. Gordon Frere H'Ormisdas was contacted by telephone and the following information was obtained regarding the subject accident.

(a) Glider Sawvel AV36, CF-ZCQ;
(b) Buckingham Flying Club;
(c) Mr. Russ Stevenson;
(d) September 28, 1958, 1500 E.S.T.;
(e) Buckingham P.Q. - Buckingham P.Q.;
(f) Buckingham P.Q.;
(g) Pilot seriously injured;
(h) Pilot was landing at the field used by the Buckingham Flying Club and the right wing collided with a tree causing damage to nose and right wing of glider.

M.C.J. Dale
Inspector, Civil Aviation.

VOL A VOILE BUCKINGHAM GLIDING CLUB
BUCKINGHAM, QUEBEC

In view of this confusing situation, the Fauvel has not been flown by members of the Club except by myself and Russ Stephenson for the purpose of making Test Pilot Report. I had four flights and did so as C.F.I. and Russ had five flights; he had a private power Licence, glider pilot licence and an Instructor's rating (D.O.T.) The purpose of this accidental flight of Sunday 28 was to check the elimination of an elevator flutter by giving a streamline adjustment to the canopy-fuselage junction, as counceled by Mr. Jacquemin.

As stated elsewhere the Fauvel was to all evidence under complete control throughout this whole flight down to the landing moment when the extreme left wing tip caught a tree top and caused the glider to swerve into a loop to the ground. A moment's attention would have averted the whole tragedy.

Should you need any further comment or information, I will send them gladly.

Truly Yours,

Brother Hermidas C.F.I.

11

VOL A VOILE BUCKINGHAM GLIDING CLUB

BUCKINGHAM, QUEBEC

St.Michael's High School,
Buckingham P.Q.

TRANSPORT - RECORDS
OCT 3 A.M. 58
File 5008-23-17

Mr. T. Travers,
Chief, Accident Investigation Div.
D.O.T. No.3 Temp. Bldg.,
Ottawa, Ont.

19572

Attention: Mr. J.P. Pelletier, Insp.

AIG

Dear Mr. Pelletier,

Please find enclosed documents relative to the registration of the Fauvel and the situation of the C. of A. concerning this aircraft.

This Fauvel was completed and ready for fabric coverin June 1957. Mr. Beveridge of the Laurentian Air Services kindly accepted to carry out the final inspection. For this end I trailored the Fauvel to Uplands and left it there for three days. When I called for it again, he told me that he considered the aircraft well constructed and perfectly safe to fly. Yet, he told me that he could not sign the Form AC-12-5 because of the phrase " has been constructed under my supervisory inspection". I got in touch with J. Coderre in Sherbrooke who had had his Fauvel approved and signed for, in Montreal several weeks before, to inquire about details for the C. of A. It must be stated here that the construction of the Fauvel here was undertaken as a Club Group Project with the Sherbrooke and McGill Clubs. It was our share to build the fuselages, fins, rudders, skis, nose piece ailerons and spoilers. The Sherbrooke built all the ribs and the McGill Univ. group built the main spars. Our Fauvel was then an exact duplicate of J.Coderre's and just as licenceable. Finally I decided to make a special trip to meet Mr. Noury at Montreal in order to clarify the whole situation. I had all papers and forms made ready for licencing the Fauvel inthe Ultra Light Category but Mr. Noury objected that it would be better with a regular C. of A. and for that purpose prepared the two copies of AC-12-5 which he requested me to present to Mr. Beveridge. When I handed them personnally to Mr. Beveridge he commented:"This is unacceptable to me, Mr. Noury has no authority to modify this paragraph". There we were after three years of hard labor-about 600 hours per year-and a $1000 of expenses, before a paradoxal situation; besides the coming Fall would not allow us to go on with the fabric job if things cleared out. So, we decided to complete the glider, carry out the weight and balance and determine its C.G. Any part of the glider could be readily examined even with the fabric on any how. Several test flights were made by me in Oct. I passed all this on to Mr. Jacquemin; he is Mr. Fauvel's representative in Canada in all matters pertaining to this glider. In his first reply dated Feb 83 he advises me to hold back for a while in my request for the C. of A. The reasons are given in his letter which I enclose. He refers to this matter again in another letter dated April 8. I have not heard from him since and my last letter dates back to July.

REGISTERED
AIR CANADA
NO. 2 RECD.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ~~Lighter~~ Heavier made by Buckingham Gliding Club

Type Fauvel AV-36 Maker's No. 91

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	40 ft	40 ft.
Length o/a in feet	8 ft	8 ft.
Height o/a in feet	4 ft	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	235 lbs.	
Total weight authorized (fully loaded) in lbs	470 lbs Air Speed 75 miles per hour average	

EQUIPMENT—(Give number and type).

1. Instruments altimeter, variometer, air speed ind.
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes yes
7. Tools
8. Other Equipment

ENGINES—

	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	—			
Pusher or Tractor	—			
Right or Left Hand	—			
No. of Cylinders	—			
H.P.	—			
Bore	—			
Stroke	—			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

12

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Air worthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ✓ $5.00

Certificate of Airworthiness (See note below) $5.00

The particulars given below are true in every respect.

Signature of Applicant Brother Hermsdorf

Date of Application March 6 1956

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Buckingham Gliding Club	Buckingham P.Q.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
Prime Berthel	Pres.	Buckingham P.Q.	Canadian
William Living	Dir.	"	"
Antoine Bouladies	Dir	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Club gliding

Usual Station Buckingham P.Q.

Date and place of manufacture or reconstruction Buckingham P.Q. March 1956

Crew required one

Accommodation for what number of passengers none

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier than made by Buckingham Gliding Club

Type Fauvel AV-36 Maker's No. 91

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	40 ft	—
Length o/a in feet	8 ft	—
Height o/a in feet	4 ft	—
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	230 lbs.	
Total weight authorized (fully loaded) in lbs	470 lbs. Air Speed 75 miles per hour average	

EQUIPMENT (Give number and type).

1. Instruments altimeter, variometer, air speed ind.
2. Gauges ✓
3. Lights ✓
4. Signals ✓
5. Fire Extinguishers ✓
6. Parachutes yes
7. Tools ✓
8. Other Equipment ✓

ENGINES

	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	✓			
Pusher or Tractor	✓			
Right or Left Hand	✓			
No. of Cylinders	✓			
H.P.	✓			
Bore	✓			
Stroke	✓			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

13

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration	$5.00 ✓
Certificate of Airworthiness (See note below)	$5.00

The particulars given below are true in every respect.

Signature of Applicant Brodie Hornibrook

Date of Application March 6 1936

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Buckingham Gliding Club	Buckingham	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
Prime Berthel	Pres.	Buckingham P.Q.	Canadian
William Living	Dir.	"	"
Antoine Bouladi-	Dir.	"	"

Purpose for which aircraft is to be use (State, Commerc Passenger, Freight or Private) Club gliding

Usual Station Buckingham P.Q.

Date and place of manufacture or reconstruction Buckingham P.Q. March 1936

Crew required one

Accommodation for what number of passengers —

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re issued on change of ownership without further fee.

J008-Z3-17 14

Montreal Airport, Que.
29th March 1956

Buckingham Gliding Club,
Buckingham, Que.

Dear Sirs,

Receipt is acknowledge of application for Registration of a Glider Fauvel AV-36 together with a fee of five dollars.

In connection with the above please supply this office with markings and particulars of this machine as soon as possibly convient.

Yours truly,

J.P. Fournier,
District Superintendent,
Air Regulations.

JAG/ab
cc: CR
DCAS

95969

M		ACCT. FWD.
	Montreal Airport	
	23 April	6
	Buckingham Students Flight Buckingham	
	Application for Staff A	5.00
5		
6	CF-ZCQ	
7		
8		
9		
10	OR 189625	
11		
12	B	
13		
14		
15	21	

MODEL BUSINESS FORMS LTD.

16 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

OTTAWA, Ontario April 4th, 1956.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	FAUVEL AV-36 Glider - Serial No. F36-091 Buckingham Gliding Club.	5008-Z3-17

09651

[illegible] MONTREAL

File 5x 8-23-17

District Controller of Air Services,
Department of Transport,
Montreal Airport,
Quebec.

Attn:- District Superintendent, Air Regulations.

1. Please be advised that registration marks CF-ZCQ have been allotted to the above referenced glider being constructed by the Buckingham Gliding Club of Buckingham, Quebec.

2. It is understood that application form 2413 and the required fee of $5.00 has already been submitted to your District office. The registration marks mentioned above have been allotted by this Headquarters and the Buckingham Gliding Club were advised by telephone this date. A copy of this letter is being sent to the gliding club as confirmation.

3. Your attention is drawn to the correct serial number of this glider. May your records be amended accordingly please.

Fred W. Lowe

Superintendent, Air Regulations.

17

5008-Z3-17

Montreal Airport, Que.
April 23, 1956

Buckingham Gliding Club,
Buckingham, Que.

Dear Sir,

Attached please find Sales Slip No. 95969
which acknowledges your recent payment of $ 5.00
for Certificate of Airwhothiness. for CF-ZCQ.

Yours very truly

Encl.

J.P. Fournier,
District Superintendent,
Air Regulations.

DAI - Plse advise when you are ready to recommend issue of C of A

23-4-56

DSAR No recommendation for C of A can be made until receipt of documents.
Jas April 24/56

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
OTTAWA, CANADA

35 Issue 1/9
Fauvel A.V.36

AIRCRAFT TYPE APPROVAL

August 15, 1955.

Designer: Mr. Charles Fauvel,
72 Blvd. Carnot,
Cannes, A.M., France.

1. **Model:** A.V. 36 - Single Place Sailplane

Type: Acrobatic Category Glider

Airspeed Limits: (T.I.A.S.)

Glide or Dive	137 mph	Calm Weather
	98 mph	Rough Weather
Airbrakes Open	81 mph	
Airplane Tow	112 mph	Calm Weather
	79 mph	Rough Weather
	65 to 68 mph	Very Rough Weather

C.G. Range: Forward Limit 6.3 inches (160 m/m) Forward of Front Face of Wing Spar
Aft Limit 5.12 inches (130 m/m) Forward of Front Face of Wing Spar

Levelling Means: Wing Spar Front Face and Fuselage Main Bulkhead are Vertical.

Maximum Weight: 496 lbs. (225 Kg.)

No. of Seats: One.

Baggage: None.

Ballast: In Box on Nose Pylon. See Note 2.

Control Surface Movements:

Elevator	26° up	16° down
Aileron	22½° up	14° down
Rudder	45° outboard	15° inboard
Airbrakes	0° up	90° down

Serial Nos. Eligible: F-36-001 and up

Required Equipment: Airspeed indicator

Certification Basis: British Civil Airworthiness Requirements, Section E.

... 2

18

Note 1. The following airspeed placard must be displayed in front and in clear view of the pilot:

"Weather

	Speed - MPH	
	Calm	Rough
Glide or dive	137	98
Airbrakes	81	81
Winch Tow	56	
Aero Tow	112	79
Aero Tow Opt. Climb	56	66 (very rough)"

Note 2. Ballasting Chart to be placed on the front face of canopy fixed fairing.

Note 3. Empty weight range 235 lbs. to 258 lbs.
If empty weight range is exceeded, special approval will be required.

H. S. Rees,
Chief Aeronautical Engineer,
Department of Transport.

2

File 5008-X3-17

Montreal Airport, Que.
June 6, 1956

Buckingham Gliding Club
Buckingham, Que.

Attention: Brother Hermidas

Gentlemen:

We acknowledge receipt of your application for registration of Fauvel AV-36 Glider CF-ZCQ.

However, before we may formally register this glider, we will require that you supply us with:-

1) Proof of ownership.

2) Weight and Balance Report in two copies.

3) Complete the enclosed release certificate Form A1-2

4) If the components were imported, proof that the required duties have been paid.

Yours very truly,

J.P. Fournier,
District Superintendent,
Air Regulations.

Encl.
JAM/GM
cc.to: CR
DCAS

21 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Que., October 6, 1958
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident to Fauvel AV-36 Aircraft	5008-Z3-17 (ARQ)

A VG

19904

TRANSPORT - RECORDS
OCT 7 A.M.
File 5008-Z3-17

Director General of Air Services,
No. 3 Temporary Building,
Ottawa, Ontario.

Attention: Chief Accident Investigation Division

1. Reference is made to our telephone conversation concerning the accident which occurred to Fauvel AV-36 Glider CF-ZCQ.

2. Attached, for your information, is a photostat copy of the complete file on this glider in the Montreal Region.

Dan Kellan

for - Regional Director,
Air Services

Encl.

2

JP/LH

22

2
8—57

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

OTTAWA, Ontario. October 7th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-Z3-17 (AIG) ~~5002-28818~~

SUBJECT: Accident - Fauvel AV36 Glider, Aircraft CF-ZCQ
- Buckingham, P.Q., - September 28th, 1958.

MEMORANDUM TO: ~~C.F.G.~~ C.T.

23567

1. The following are the salient points concerning the subject aircraft accident:

(a) DATE : - September 28th, 1958;

(b) CASUALTIES : - (i) crew, pilot killed;
(ii) passengers, nil;
(iii) third party, nil;

(c) DAMAGE : - (i) to aircraft, substantial;
(ii) third party, nil;

(d) CAUSE : - pilot error - error of judgment - "S" turn carried out at a low altitude on final approach resulted in port wing of aircraft striking a tree-top, followed by a steep spiral to port and collision with ground;

(e) INFRACTIONS : - sections 200 and 210 of the Air Regulations. (No C. of R. and C. of A. issued for the aircraft);

(f) BLAME : - nil;

(g) PUBLIC INTEREST:- believed to be nil;

(h) RECOMMENDATIONS:- (i) the matter of infractions to be referred to C.O.R. for any action they may see fit to take;
(ii) A Departmental Board of Inquiry is not considered necessary;

(i) REMARKS : - nil.

W.V. Gordon

(W.V. Gordon)
A.I.G.

Concur (L) C.T. 8/10

J.P.

7. Number of persons (a) killed One (b) seriously injured

8. Nature of accident COLLISION WITH ~~GROUND~~ J.P. OTHER OBJECTS - AC Port WING HIT TREE-TOP FOLLOWED BY A COLLISION WITH GROUND.

9. Type of flying (Private, non-scheduled, ferry, etc.) Private

10. Opinion as to the cause of the accident (Use ICAO Manual of Accident Investigation) PILOT ERROR (See REMARKS)

11. Damage SUBSTANTIAL; Cabin demolished, Starboard wing leading edge: fabric torn and ribs broken at several points - minor damage to twin fins and rudders.

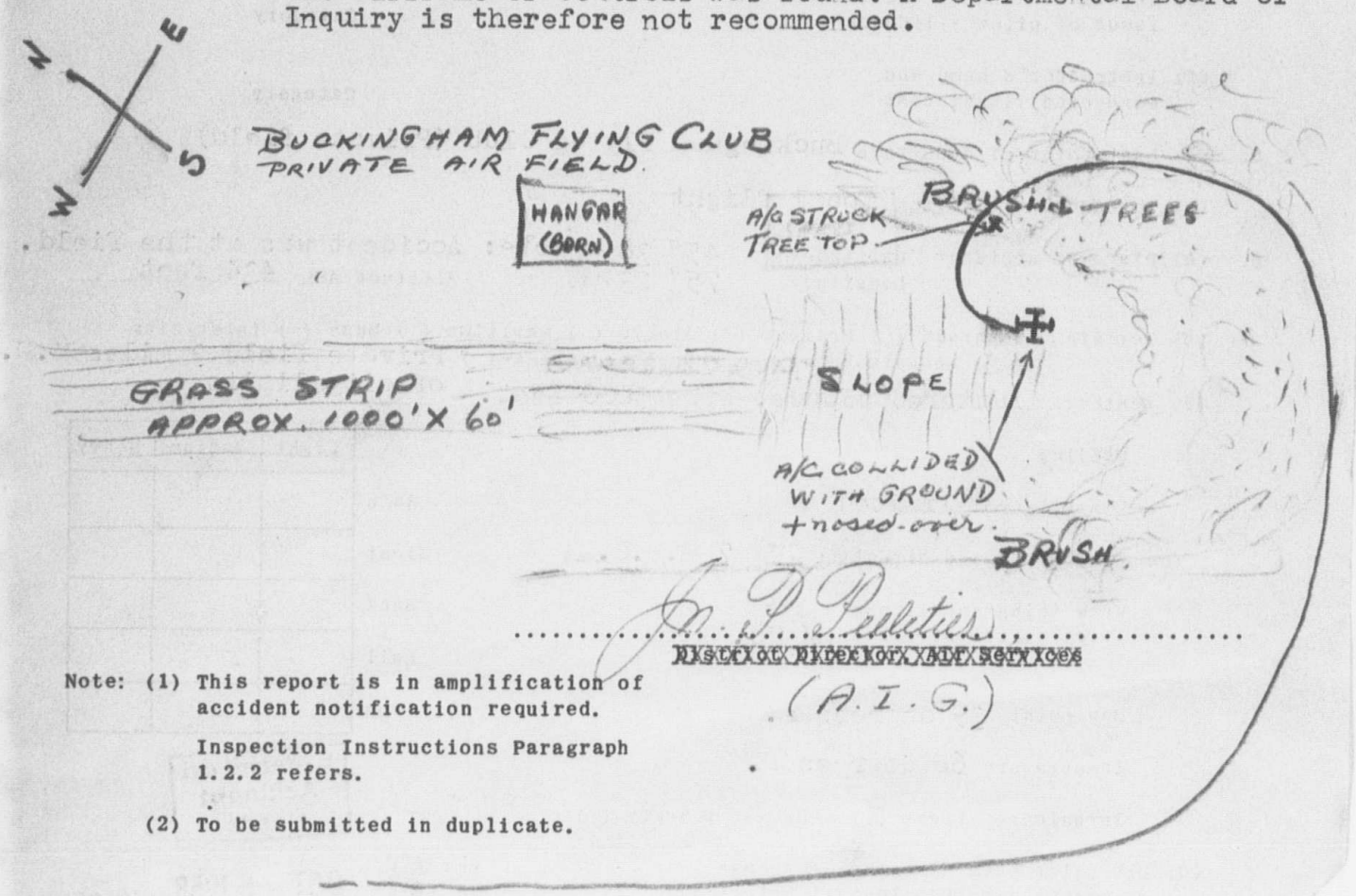
12. Infractions of: (a) The Air Regulations THE AIR REGULATIONS; Sections 200 and 210.

(b) Air Navigation Orders Nil

13. Disciplinary action proposed taken Recommend matter of Infractions be referred to C.O.R. for their consideration and action.

14. REMARKS - While on the final stage of his landing approach, the pilot began to execute a "S" turn at a very low altitude, when the port wing hit a tree-top and the aircraft stalled. A steep spiral dive to port followed during which the glider collided with the ground and nosed over. The angle at which the glider collided was estimated to be about 60 degrees from the horizontal.
Brother Hormisdas, C.F.I. for the Club was standing on the field and observing the aircraft as it flew around for about 20 minutes, soaring having started from about 3000 feet. He was standing about 500 feet away from the scene of the accident when it happened. He stated that the glider was under perfect control until during an unnecessay "S" turn (there was about 1000 feet of landing space), it collided with a tree-top at slow speed and this caused the aircraft to spiral down to the ground. - An error of judgement on the part of the pilot appears to be the only cause of this accident. The wreckage was examined by the undersigned. No evidence of malfunctioning of the airframe or controls was found. A Departmental Board of Inquiry is therefore not recommended.

15. Sketch



J. P. Pelletier
~~District Inspector of Air Services~~
(A.I.G.)

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

2448
8-57

CANADA

Date:- 6/10/58 25

HEADQUARTERS
~~District~~ File No. 5008-Z3-17 ⟵
5802-28808

AIRCRAFT ACCIDENT REPORT

To: Director General, Air Services
Department of Transport
Ottawa, Ontario

Headquarters ___ District

Attention: Controller, Civil Air Regulations

1. (a) Date 28 SEPT. 1958 (b) Time (standard): Use 24-hour clock 1500 E.S.T.

2. (a) Type of Aircraft Fauvel AV36 (Glider) (b) Nationality and Registration Marks CF-ZCQ

(c) C. of A. Valid to None issued. (d) C. of R. Valid Yes ( ) No (X) None issued.

3. Name of Owner, Operator or Hirer BUCKINGHAM FLYING CLUB (Member of SOARING CLUB ASSOCIATION)

4. (a) Crew information

AIRCRAFT ACCIDENT ANALYSIS FORMS COMPLETED MAR 14 1960

Name	Duty	Age	Licences & Ratings				Experience	
			Type	No	Expiry date	Total	On type: Total	On type: Within 90 days
STEPHENSON Russel W.	Pilot	33	Private Pilot	P2092	5/9/59	?	unknown	unknown
			Glider Pilot	GP28				

Note: Total experience of 200 hours as per last medical report.

(b) Now enrolled in Approved School Yes ( ) No (X) Approved School graduate Yes (X) No ( )

(c) Name and location of school EDMONTON FLYING CLUB

(d) Instructor's name Category

(e) Instructor's name who recommended issue of pilot's licence Category

(f) Instructor's name who conducted flight test Category

5. (a) Last point of departure Buckingham Flying Club (Private field)

(b) Intended destination Local flight

6. (a) Place of accident Latitude 45° 38 'N. Longitude 75° 23 'W. Note: Accident was at the field. Altitude ASL 434 feet

(b) Terrain: Mountain ( ) Prairie ( ) Arctic ( ) Maritime ( ) Bush ( ) Inter-city -populated or semi-populated areas- ( ) Private field 3 miles N.E. of city limits.

(c) Weather: scattered clouds, base 5000 feet.

Ceiling

Visibility unlimited

Wind Speed and direction WNW 7 M.P.H.

Were icing conditions encountered? Yes ~~( )~~ No. No ( )

Dew point 39 degrees F.

Temperature 68 degrees F.

Turbulence: light (X) medium ( ) heavy ( )

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

Entered on Accident Cards
OCT 6 1958

(d) Did pilot obtain weather forecast or attend a meteorological briefing Yes ( ) No (X)

(Over)

CTT/BR

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

21 2 8—57

Ottawa, Ontario. October 8th, 1958.
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE 5008-Z3-17 (CIG) 5802-28508

SUBJECT: Accident - Glider, CF-ZOQ
Buckingham, P.Q. September 28th, 1958.

235th

Memorandum to: C.O.R.

1. Your attention is requested to the attached report of the above accident in which Mr. Russell Stephenson was killed.

2. It will be noted that no Certificate of Registration or Certificate of Airworthiness had been allotted (in accordance with our letter of April 4th, 1956).

3. It is not known whether a permit had been issued by the Montreal Region for the operation of this glider but it will be noted that this did not have any bearing on the cause of the accident.

C.T. Travers.

(C.T. Travers),
Chief, Accident Investigation.

Attach.

21

Ottawa October 10, 1958

5008-23-17 SRL

Accident - Glider CF-ZCQ Buckingham, P.Q. September 28th, 1958

Regional Director, Air Services,
Department of Transport,
Montreal Airport, Quebec.

1. Would you please advise Headquarters whether any flight permit had been issued for the operation of the subject noted glider.

~~Director~~ of Civil Aviation.

CA Form

b c.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

28 2 10-56

Montreal Airport, Que., October 16th, 1958.
PLACE DATE

OUR LETTER DATED	YOUR FILE	OUR FILE
Oct. 10th, 1958	5008-Z3-17(SRL)	5008-Z3-17(ARQ)

SUBJECT

Accident - Glider CF-ZCQ Buckingham, P.Q. - September 28th, 1958

20926

TRANSPORT - RECORDS
OCT 17 A.M.
File 5008-33-17

SRL

Director General, Air Services,
No. 3 Temporary Bldg.,
OTTAWA.

ATTN: Controller, Civil Air Operations and Regulations.

1. With reference to your letter dated October 10th, 1958, please be advised that this office has never issued any flight permit for the operation of the subject noted glider.

S. Rousselle

for Regional Director, Air Services.

CAB/LH

29

OTTAWA, Ontario. October 29th, 1958.

5008-Z3-17 (ARQ) 5008-Z3-17 (SRL)

Glider Accident - Fauvel AV36, CF-ZCQ - September 28, 1958.

Regional Director, Air Services,
Department of Transport,
Montreal Airport, P.Q.

1. On September 28th, 1958 Fauvel Glider CF-ZCQ, piloted by R.W. Stephenson, holder of a valid Glider Pilot Certificate GP-28, crashed near Buckingham, Quebec. Mr. Stephenson died a short time later as a result of injuries received in the accident.

2. The cause of the crash has been established as an error in judgment on the part of the pilot.

3. There were two technical breaches of the Air Regulations involved in the flight mentioned above, although they have no direct bearing on the accident.

4. It would appear that Fauvel Glider CF-ZCQ lacked a Certificate of Airworthiness and Registration and it is requested that you investigate, and submit your recommendations and/or report together with evidence of any action taken.

Director of Civil Aviation.

CANADA

DEPARTMENT OF TRANSPORT

IN REPLY
QUOTE FILE NUMBER

5008-Z3-17(ARQ)

Montreal Airport, Que.,
November 5th, 1958.

Buckingham Gliding Club,
BUCKINGHAM
QUE

ATTN: Brother Hormisdas.

Dear Sir,

On September 28th, 1958, Fauvel Glider CF-ZCQ piloted by Mr. R.W. Stephenson, holder of a valid Glider Pilot Certificate GP- 28, crashed near Buckingham, Que.

At the time of the accident, it would appear that Fauvel Glider CF-ZCQ lacked a Certificate of Airworthiness and Registration. This constitutes breaches of the Air Regulations under Sections 210 and 200 respectively.

Since your Club was then operating this glider in contravention with the Air Regulations, your written explanations are immediately requested in this matter.

Yours very truly,

J. Ransell

A/Regional Superintendent, Air Regulations.

Les Frères de l'Instruction Chrétienne

ÉCOLE SUPÉRIEURE·SAINT-MICHEL

BUCKINGHAM, P. Q., CANADA

31

November 7 1958

TRANSPORT - RECORDS
NOV 12 P.M.
File 5a8-33-17

Mr. C.T. Travers,
Chief Accident Invest. Div.,
D.O.T. #3 Temporary Bldg.,
Ottawa, Ont.

23445

Dear Mr. Travers,

Please find enclosed a request of Mr. Rousselle. Since you have the information on this situation I would appreciate your taking up the matter with him. I remarked to him however that the glider Fauvel is registered and that at the time of the accident Russ was flying it as a test pilot. Moreover, Russ himself was in charge of the C. of A.'s of the Club's aircrafts.

I sincerely hope that your comments will if nedessary settle the matter and that I will be spared the disgustful obligation of starting all over again reporting about this irrational accident.

Truly Yours,

Brother Hermidas

This appears to be an enforcement matter

WMJ AIC 13 58 11

Records P.A

50
32

Maurice.

I spoke to Pelletier and he states that the a/c was flown for test purposes only, at all times and no one else than Stephenson or Br. Kosinados flew it. Pelletier doesn't know if C.T.T. gave any verbal authority.

I don't feel any useful purpose would be served by further pursuing, and suggest we send a copy of the Pathus letter to UC and tell them to drop the matter.

17.10.58

CAB/LH

31 33.

OTTAWA, Ontario. November 17th, 1958.

5008-Z3-17 (ARQ) 5008-Z3-17 (SRL)

Glider Accident - Fauvel AV36, CF-ZCQ - September 28th, 1958.

Regional Director, Air Services,
Department of Transport,
Montreal Airport, P.Q.

1. Reference is made to our letter of October 29th, 1958 concerning the subject noted accident, wherein you were requested to investigate further for possible violations of the Air Regulations.

2. Attached is a copy of a letter received from Brother Hormisdas which was directed to Headquarters, and which was in reply to your request of November 5th.

3. In view of the circumstances involved, it has been decided that no useful purpose would be served by pursuing the matter and you may consider the case closed.

Director of Civil Aviation.

Attach.

FILE No. 5008 - Z 3 - 19 VOLUME No. 1

VOL. 1 5008 - Z 3 - 19

DEPARTMENT OF TRANSPORT

FROM JUNE, 1956
TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF - ZCS - BOWLUS SAILPLANE

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUN 29 1956	11081	ARL		ST	JUL 3 - 1956
NOV 15 1956	22075	ARL		ST	NOV 19 1956
NOV 19 1956	—	RFL			NOV 20 1956
NOV 20 1956	—	CAI	3/12/57		NOV 21 1956
DEC 3 1956	TBF 3/12/56	CAI	7/2/57		JAN 9 1957
FEB 6 1957	BF 7/2/57	CAI			
FEB 12 1957	22075	OSP			FEB 13 1957
JUL 18 1957	11581	ARL		ST	JUL 30 1957
APR 1958	1891	ARL			MAY 1958
MAY 5 1958	—	OSP			MAY 21 1958
MAY 21 1958	—	SAEA			MAY 22 1958
JUL 23 1958	12335	ARL		ST	JUL 23 1958
AUG 6 1958	Reg Mr Gordon ART683	AIG	12-9-58		AUG 12 1958
AUG 12 1958	AUG 21 1958 (H) ART683	A.R.L.	30.9.58	ST	AUG 13 1958
AUG 25 1958	AUG 27 1958 15624	AIG			NOV 4 1958
	Memo d 25 Aug 58	CIG ①			AUG 26 1958
AUG 26 1958	—	COR ①			AUG 27 1958
11-9	NOV 5 1958 12/9/58	AIG ½			NOV 6 1958
	29/9 BF 30/9/58	AKL			OCT 30 1958
	15895	AIG			OCT 30 1958
OCT 30 1958	Memo 29/10 Trans Dev	SRL 1.			NOV 4 1958
	— Misc file	SRL 2.			NOV 4 1958
NOV 4 1958	—	DT 3.		MN	NOV 4 1958
NOV 4 1958	—	CRRO			NOV 4 1958
NOV - 4 1958	NOV 6 1958 —	SAEA			JAN 20 1965

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

2-55

ALLOTMENT OF REGISTRATION AC-5-77

REGISTRATION NUMBER CF-ZGS PART OF BLOCK ( )

DISTRICT Toronto

DATE OF ISSUE 28.6.56 11081

TYPE OF AIRCRAFT Bowlus Sailplane

SERIAL NUMBER 154

OWNERS NAME Albert M. Pow

ADDRESS

REQUESTED BY ~~WIRE~~ Phone (x) DATE (28.6.56)

REQUESTED BY LETTER ( ) DATE ( )

DESPATCHED BY TELEGRAM ( ) TELETYPE ( ) LETTER ( )

TRANSPORT - RECORDS
JUN 28 P.M.
File Su8-23-14

Mokd 12 I

PART "B"

I hereby certify that complete legal evidence of ownership including any hidden agreements, liens, encumbrances or mortgages will be submitted to the Department of Transport, Air Services Branch: That the described aircraft is not registered in any foreign country: That the owner now applying for registration conforms in full with the ownership and citizenship requirements of the Air Regulations.

Signature of Applicant..... Albert M Pow

Witness..... Flossie Gatman

PART "C"

If the aircraft is equipped with a radio, list the Make and Model of each unit of apparatus:

A. Transmitter(s).....

B. Receiver(s).....

C. Miscellaneous (ADF, ILS, Etc.).....

Radio Licence Number..... Date of Issuance.....

PART "D"

(For Use of the Department only)

Application checked for acceptance..... INITIAL [mgm] Date..... October 2nd 1956

Registration and Identification Marks CF— ZCS Allotted [H.Q.] initial mgm

All documents including ~~Form No. 2443~~ submitted and checked [mgm] initial

Registration and the issue of a Certificate of Airworthiness (if required) approved for issue as applied for.

Dated at Toronto, Ontario

this 12th day of Nov. 19 56

District Superintendent, Air Regulations.

INFORMATION TO APPLICANTS FOR REGISTRATION OF AN AIRCRAFT

Before an aircraft will be registered and certified as airworthy, the following documentation must be submitted to the Department of Transport.

1. Evidence of ownership (Bill of Sale, etc.) affidavits if applicable.
2. Registration Fee of $5.00.
3. Certificate of Airworthiness Fee of $5.00.
4. Weight and Balance Report (in duplicate).
5. Airplane Flight Manual.
6. Certificate of Airworthiness for export or equivalent document.
7. Operating limitations.
8. Customs clearance Form B.1.
9. Certification of Aircraft imported complete Form No. 2443.

60

2413
1-56

2

CANADA

CF 2es

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

THE DISTRICT CONTROLLER OF AIR SERVICES,
DEPARTMENT OF TRANSPORT

25 ST. CLAIR AVE E.
TORONTO, ONT.

(Parts A, B and C must be completed by the applicant)

PART "A"

Application is hereby made for the registration under the Air Regulations of the aircraft described below and the issue of a Certificate of Airworthiness if required.

Nationality and Registration Marks	Manufacturer	Manufacturers Designation of Aircraft	Aircraft Serial No.
UNITED STATES N22442	BOWLUS	~~Laister Kauffman~~ BA 100	154
			Date of manufacture
			1940

The aircraft is to be certificated and operated as a (~~State, Commercial~~, Private) aircraft

The proposed base of operation is BRANTFORD, ONT.

The minimum Flight Crew required is ONE

The maximum take-off weight applied for is 505 Lbs.

The Airworthiness Certification (~~will be~~/has been) made under { Aircraft Type Approval No. AIRCRAFT LISTINGS
C.A.A. Spec. No. PAGE 109 T.C-8

Type of engine(s) installed is/are NONE

The Weight and Balance Report to be submitted is for LAND ☑ SEA ☐ SKI ☐
All documentation and clearances will be submitted prior to inspection of the aircraft for acceptance ☑
The Registration Fee of $5.00 is enclosed ☑
The Certificate of Airworthiness Fee of $5.00 is enclosed ☑

OWNER, OR OWNERS OF AIRCRAFT

Print or Type Name in Full	Permanent Address	Nationality (Citizen of)
ALBERT M. POW	300 ASHLAND AVE	CANADA.
	LONDON, ONT.	

I certify that the foregoing facts are to the best of my knowledge and belief true and correct.

Signature of Applicant Albert M Pow

Date of Application JUNE 25/56

NOTE:—The Fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for a Certificate of Airworthiness is $5.00.

(SEE REVERSE SIDE)

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

2462
2-56

SERIAL NO. 5641

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF-ZCS	Laister-Kauffman Aircraft Corporation (Formerly Boulus) BA-200	154

(4) CATEGORY

Private — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL, THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

VALID FOR DAY FLYING ONLY

(6) NOT VALID AFTER June 2 2nd 1957

DATE OF ISSUE June 2 2nd 1956

SEAL

SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

2444
6-56

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval _____

REGISTRATION – CF – ZCS SERIAL NO. 154

1. C. of A. No. 5841 Expires JUNE 22/57 C. of R. No. 16567 Expires _____
Aircraft Data—Manufacturer LAISTER-KAUFFMAN Model BA-100
Hours flown—Since New 479 Since Overhaul _____
Engine Data—Manufacturer _____ Model _____

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3)		
(4)		

Signature of Applicant G M Parr

Date July 6/57

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated _____ Signed D Woodcraft
"M" Licence No. YZM397

Serial No. of last Service Bulletin incorporated _____ Date July 6/57

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date July 7/57 Signed [illegible] Ring
Pilot

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days. Glider pilot licence YZ G-150

4. The following documents are attached: Certificate of Airworthiness ☑ Certificate of Registration ☑
Weight and Balance Report ☑

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 16567 and C. of A. No. 5841, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Date July 15/57 Signed J. W. Haynes
District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after. Date: July 7, 1958

Permissible Gross Weights—Wheels 505 Lbs. Skis _____ Floats _____

Amendment or other Action:

Noted
ESJ

Date July 16, 1957 Signed [illegible]
District Superintendent, Air Regulations

8. H.Q. Action C.A.R.

C.A.E.

11.Q.V

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE 4 ☒
COMMERCIAL ☐
STATE ☐

NO. 16567

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-ZCS	Laister-Kauffman Aircraft Corporation (Formerly Bowlus) BA-100	154

TRANSPORT - RECORDS
NOV 15 A.M.
File 308-23-19

(4) NAME OF OWNER Albert M. Pow 22075

(5) ADDRESS OF OWNER 300 Ashland Avenue, London, Ontario

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL NATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

ADDED
1
ACTION TAKEN
FEB 13 1957
OSC No. 3

DATE OF ISSUE October 2nd 1956

SEAL

SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus installed:-

A. Transmitters. (Give Frequencies).....

B. Receivers..... NOT APPLICABLE .....

C. Miscellaneous. (ADF, ILS, etc.) .....

Radio Licence No. (if A/C previously registered in Canada) .....

PART "D"

I hereby certify 1. (a) That I am the sole owner of the aircraft described herein,

~~(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)~~

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at LORNE PARK ..... this 14 ..... day of APRIL ..... 19 58...

Witness..... C.F. Cates ....

Designation:- ....

(Signature of Applicant(s))

.....

(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by ☐ (initial) Date:- ..... 19.....

Registration Marks CF-..... allotted ☐ (initial)

Documentation required as listed below has been checked and is satisfactory ☐ (initial)

Fee $5.00 (Registration) received ☐ (initial) Fee $5.00 (Airworthiness) received ☐ (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY ☐ and NIGHT ☐ flying.

Dated at.....this ..... day of .....19 .....

.....

District Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

☐ (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)

☐ (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)

☐ (III) Fee of $5.00 for Certificate of Airworthiness.

☐ (IV) Aircraft Weight and Balance Report. (In duplicate.)

☐ (V) Aeroplane Flight Manual, Operation Limitations.

☐ (VI) Certificate of Airworthiness for Export or equivalent document.

☐ (VII) Customs and Excise Clearance Form B.1.

☐ (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).

☐ (IX) D.O.T. Approved Release notes, where applicable.

☐ (X) Certification of Aircraft Imported Complete. (Form 2443.)

☐ (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

The District Director, Air Services.
Department of Transport.

(Parts A, B, C & D must be completed by the applicant.)

.....

PART "A"

Application is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particulars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF-ZCS	LAISTER-KAUFFMAN AIRCRAFT CORP. (FORMERLY BOWLUS)	BA-100	154	NOT KNOWN.

Aircraft is to be registered as:- STATE ☐ COMMERCIAL ☐ PRIVATE ☑

Proposed base of Operation: BRANTFORD, ONTARIO..... **Certificate of Airworthiness or Flight Permit Number in force.** 5841
(If applicable)

OWNER OR OWNERS OF THE AIRCRAFT:- ....NORMAN....RING.....
(All names to be listed)

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.
Norman Ring	CANADA	Box 258 LORNE PARK, ONTARIO	Private owner

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- A/C Type Approval No.....
C.A.A. Specification No.....

Weight and Balance Report submitted is for:- LAND ☐ SEA ☐ SKI ☐

Type Engine/s installed. ..... **Max. Gross Weight Authorized:-** ..... lbs.

Minimum Flight Crew:- ..... **Total Number of Persons to be carried** .....
(including crew)

Nav. Lights ☑ **Landing Lights** ☐

2413
1-57

Coded KA
24/4/58

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
2-56

11581

SERIAL NO. 5843

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- Z C S	Laister-Kauffman Aircraft Corporation (Formerly Bowlus) BA-100	154

(4) CATEGORY

Private — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL, THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER July 7, 1958

DATE OF ISSUE June 22, 1956

SEAL

TRANSPORT - RECORDS
JUL 18 A.M.
File 5008-Z3-19

SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

VALID ONLY FOR DAYFLYING

1 H Q

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE ☒
COMMERCIAL ☐
STATE ☐

NO. 19533

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-G C S	Leister-Kauffman Aircraft Corporation (Formerly Doulus) PA-100	154

ADDED 1/4

TRANSPORT · RECORDS
APR 18 A.M
File S008-33-19

(4) NAME OF OWNER Norman Ring 1891

(5) ADDRESS OF OWNER Box 258, Lorne Park, Ontario

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT ENGAGED IN TRADE OR BUSINESS AND THAT THE STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

ACTION TAKEN
MAY 20 1958
OSC No. 3

DATE OF ISSUE April 17th 1958

SEAL

SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

2462
9-56

CANADA

SERIAL NO. 5841

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- Z C S	Lefeber-Kauffman Aircraft Corporation (Formerly Dgwius) BA-100	154

(4) CATEGORY

Normal — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

VALID ONLY FOR DAY FLYING

TRANSPORT RECORDS
JUL 23 A.M.
File 5008-33-19

(6) NOT VALID AFTER July 12, 1959 12335

DATE OF ISSUE July 22, 1958

SEAL

SUPERINTENDENT, AIR REGULATIONS
Minister of Transport

SEE REVERSE SIDE

2444
4-57

8

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval _____

REGISTRATION – CF – ZCS SERIAL No. 154

1. C. of A. No. 5841 Expires JULY 7/58 C. of R. No. 19533 Expires —
   Aircraft Data—Manufacturer LAISTER KAUFFMAN Model BA-100
   Hours flown—Since New 519 Since Overhaul _____
   Engine Data—Manufacturer _____ Model _____

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)		
(2)		
(3)		
(4)		

Signature of Applicant Norman Ray

Date July 18/58

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated _____ Signed Aldwoodcroft

"M" Licence No. YZM 397

Serial No. of last Service Bulletin incorporated _____ Date July 11/58

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date July 12/58 Signed Norman Ray (Pilot)

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days. PILOT LICENCE YZG-150

4. The following documents are attached: Certificate of Airworthiness ☐ Certificate of Registration ☐
   Weight and Balance Report ☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 19533 and C. of A. No. 5841, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Date July 22/58 Signed J. Wayner (District Aircraft Inspector)

7. C. of A. and C. of R. renewed, not valid after. Date: July 12, 1959

Permissible Gross Weights—Wheels _____ Skis _____ Floats _____

Amendment or other Action: Noted ESI

Date July 22, 1958 Signed _____ (District Superintendent, Air Regulations)

8. H.Q. Action Noted ESI C.A.R.

C.A.E.

FORM 2195

DEPARTMENT OF TRANSPORT
DEPARTMENTAL COMMUNICATIONS

FILE NO. 5008-25-19

DATE AUGUST 8 1958

13

OTTAWA ONTARIO

WVG/ac

MEDAS
TORONTO
ONTARIO

AIRLAY METAL ARROWS ACCIDENT ZULU CHARLIE SIERRA
CONFIRM YOUR RECOMMENDATION

for W.V.G.
DIRECTOR CIVIL AVIATION

82

FILE COPY

5-008-Z3-19

CANADIAN NATIONAL TELEGRAPHS

1 2

CNT019 84/73

KI TORONTO ONT 5 106PME

DIRECTOR GENERAL AIR SVCS

DOT OTTAWA

ART683 INSPECTION INSTRUCTIONS ONE TWO TWO ONE FURTHER TO TELEGRAM AUGUST 3RD 58

(A) LAISTER KAUFFMAN BA100 ZULU CHARLIE SIERRA

(B) NORMAN RING

(C) NORMAN RING

(D) 03 1500

(E) BRANTFORD BRANTFORD

(F) NEAR FERGUS ONTARIO

(G) PILOT KILLED

(H) WHILE ON CROSS COUNTRY FLIGHT AIRCRAFT FAILED TO MAINTAIN ALTITUDE DUE TO LACK THERMALS STRUCK TREE WHILE ATTEMPTING TO LAND AIRCRAFT DESTROYED PLACE AND BELL INVESTIGATED RECOMMEND REGIONAL INVESTIGATION AND REPORT ON 2448

REGIONAL DIRECTOR AIR SERVICES

~~ART683 3 58~~ BA100 ~~03 1500 2448~~

LAISTER

(250P)...

GTC

714

AIG.

Concur

C.H.

Entered on Accident Cards

AUG 5 1958

5008-Z3-19

CANADIAN NATIONAL TELEGRAPHS

11

1958 AUG 5 AM 8 59

CNT001 62/57 4 EXTRA

FD TORONTO ONT 3 618PME

DIRECTOR GENERAL OF AIR SERVICES

DOT OTTAWA

ACCIDENT REPORT (A) GLIDER CF-ZPPLPP (ZULU) COCOA SIERRA. (B) NORMAN RING. (C) NORMAN RING. (D) THREE AUGUST 58 1600E. (E) BRANTFORD. (F) VICINITY FERGUS ONTARIO. (G) ONE KILLED. (H) NATIONAL SOARING CHAMPIONSHIP FLIGHT BRANTFORD FERGUS ST MARYS BRANTFORD. NO DETAILS NATURE OF ACCIDENT RECEIVED INSPECTOR PLACE AND TECHNICAL ADVISER INVESTIGATING RECOMMENDATIONS TO FOLLOW

PINDER FOR REGIONAL DIRECTOR AIR SERVICES TORONTO

CF- ~~ZPPLPP 58 1600E~~

(705A)

14724

C18 ✓

495 Wreck

2 A/c

Entered on Accident Cards

AUG 5 1958

August 5th, 1958

1

The following telegram was received from the C.P.R. Telegraph Office at 2030 hours, August 3rd, 1958, by Insp. Pelletier.

Accident Report.

A- Glider CF-ZPP LPP

Coca Sierra

B-Norman Ring

C-Norman Ring

D-3 Aug 58, 1600 E

E-Brantford

F-Vicinity Fergus Ont.

G-One killed

H-National Soaring Championship Flight Brantford Fergus StMary's Brantford. No details Nature of accident received. Inspector Place and Technical Advisor investigating. Recommendations to follow.

Signed: Pinder for R.D.A.S.

Entered on Accident Cards
AUG 76 5 1958

Regional Superintendent Air Regulations,
Department of Transport,
25 St. Clair Avenue East,
Toronto, Ontario.

August 11, 1958.

I was not present at the airport on the day of the accident, but a number of glider pilots informed me that during the morning prior to his last flight Mr. Ring had had a severe headache, and had taken at least four Frosst "222's". On his second last flight, made locally, he landed very fast and after touching down ground-looped through about 360°.

In reply to your request for recommendations, I would make the following suggestions:

1. Glider pilots should be required to pass medical examination at least equal to that required for a private pilot's license.

2. In all fatal accidents in which the pilot of an aircraft is killed, a post mortem on the pilot, including examination of the brain, should be obligatory.

3. Flying personnel should be informed of the danger of flying after a period of hours has elapsed since the last meal, because of the possibility of post-absorptive hypoglycemia.

   In this regard it should be recommended that on long flights some form of quickly assimilable food, such as candy or chocolates, should be carried, and the currently popular breakfast flight (actually pre-breakfast) should be discouraged.

Yours truly,

Walter F. Wright

Walter F. Wright,
M.D., D.Psych.,
Aviation Medical Examiner

WFW:mb

16109

AIR SERVICES REGISTRY
TORONTO
AUG 15 1958
File S002-139

Walter F. Wright, M.D., D.Psych.
29 Dickson Street,
Galt, Ontario.

August 11, 1958

Regional Superintendent Air Regulations,
Department of Transport,
25 St. Clair Avenue East,
Toronto, 7, Ontario.

Attention: Mr. Burleton

Dear Sir:

I am submitting the following information as you requested during our telephone conversation on August 7th, concerning the crash of CF-ZCS in which Mr. Norman Ring was killed.

On Saturday, August 2nd, the day prior to the accident, Mr. Ring informed me that for about the last two years he had been suffering from pain and stiffness in both lower limbs. These symptoms involved the muscles of both thighs and both legs, affecting all aspects. They occurred at the end of a working day which involved much walking, and were relieved by his removing his shoes and walking in his bare feet. They also occurred after a period of sitting, especially in the cockpit of CF-ZCS, in which both ankles were slightly dorsi-flexed. There was no occurrence of actual knot-like cramps. The pain and stiffness occurred in all muscle groups, rather than following dermatomes or peripheral nerve distribution. There were no accompanying symptoms in the upper limbs and no numbness or tingling in limbs or lips.

As Mr. Ring was not consulting me professionally, but was simply talking as a friend, I did not examine him, but felt that the differential diagnosis should include (1), a lumbo-sacral lesion affecting nerve roots, (2), an anomaly of the arterial configuration affecting circulation in certain positions of the limbs, (3), early arterial sclerosis, and (4), hypocalcemic tetany, especially since Mr. Ring stated that he drank almost no milk.

FORM L.E. 39

ONTARIO PROVINCIAL POLICE

CRIME REPORT

1/6 GHQ FILE

ONTARIO PROVINCIAL POLICE RECEIVED AUG 7 1958 MOUNT FOREST

GUELPH DETACHMENT

NO. SIX DISTRICT MOUNT FOREST DATE AUGUST 6th 1958

RE RING, Norman OF 1105 ALGONGUIN DRIVE, LORNE PARK, ONTARIO, FATALLY INJURED IN CRASH OF AIR GLIDER, WEST GARAFRAXA TOWNSHIP, WELLINGTON COUNTY.

FIRST AND FINAL REPORT	D.H.Q. FILE #6 C.R. 297-58.	DETACHMENT FILE C.R.64-58

to Brantford. Instructors of the Club also at the scene, were at a loss to explain why RING would attempt to land at this particular point as the field was unsuitable for landing, and a pilot with the experience of RING, must have been aware of this.

7. Inspector William PLACE, 25 St.Clair St., Toronto, of the Dept. of Transport (Canada) advised of the crash, arrived Sunday p.m. to conduct an investigation for his Department. A copy of this report is enclosed for his information.

8. As the investigation could not be completed by Dept. of Transport until Monday, August 4th, the Glider was guarded overnight by members of the Soaring Club, and on release, it was also removed from the farm and transported to Brantford by members of the Club.

9. There was no Post Mortem on the body, Dr. Pickard attributed death due to numerous injuries, fractured skull, chest caved in, legs and arms broken in numerous places. The body was later taken to Skinner and Middlebrook Funeral Home at Port Credit, and the remains are to be cremated on Wednesday, August 6th, 1958, disposition to be made by his family. Wellington County Crown Attorney J.M. KEARNS Q.C. advised there will be no inquest.

10. Personal belongings of RING found with the body were turned over to James JOSS and receipts are attached. Pictures were taken at the scene, and forwarded to Cpl. Erskine of our Identification Branch at Mount Forest, for developing.

Respectfully submitted,

Extra copy attached for:
Dept. Transport, 25 St.Clair St., Toronto
Copy forw, direct to Crown Att. Guelph.

Gordon Craig
PROV. CONSTABLE
CPL. GORDON CRAIG

TO THE COMMISSIONER OF POLICE FOR ONTARIO
TORONTO, ONTARIO

FORWARDED for your information, please. Duplicate receipt for return of personal belongings attached, copy on file at D.H.Q. Copy of this report forwarded direct to Dept. of Transport, 25 St. Clair Ave., East, TORONTO for their information and record.

Mount Forest, ONTARIO
Aug. 7, 1958.
FS/DMP.

Lou Scott
DISTRICT INSPECTOR

MOORE BUSINESS FORMS LTD.

FORM L.E. 39

ONTARIO PROVINCIAL POLICE

17 GHQ FILE

CRIME REPORT

ONTARIO PROVINCIAL POLICE RECEIVED AUG 7 1958 No. 6 D.H.Q. MOUNT FOREST

GUELPH DETACHMENT

NO. SIX DISTRICT MOUNT FOREST DATE AUGUST 6th, 1958

RE RING, Norman OF 1105 ALGONQUIN DRIVE, LORNE PARK, ONTARIO, FATALLY INJURED IN CRASH OF AIR GLIDER, WEST GARAFRAXA TOWNSHIP, WELLINGTON COUNTY.

FIRST AND FINAL REPORT	#6 D.H.Q. FILE C.R. 297-58.	DETACHMENT FILE C.R.64-58

With reference to the above noted subject, the following report is submitted for your information, please.

1. On Sunday, August 3rd, 1958, at 3.55 p.m., information was received at the Guelph Detachment Office by phone to the effect that an airplane had crashed on the farm of James WATSON, a short distance north of the Village of Fergus. The operator of the plane was believed trapped in the plane. Accompanied by Prov. Const. Chapitis, in Dept. Car 613, I proceeded at once to the scene, arriving at 4.10 p.m. same date.

2. The crash had occurred at the north line fence of a farm owned by James WATSON, Lot 29 Con. 1 West Garafraxa Twp., R.R.#4 Fergus, about .5 mile north of Fergus Village limits.

3. On arrival, it was found that the pilot of the craft, Norman RING, age 38, 1105 Algonguin Drive, Lorne Park, Ontario, was dead and Dr. Craig of Fergus in attendance at the scene, advised that the Coroner, Dr. T.R. Pickard of Guelph had been called. After Dr. Pickard investigation, the body was taken to the Pattison Funeral Home at Fergus, identification made by an acquaintance, James JOSS of Box 145 Brantford, and the body later claimed by his wife, Winnifred RING, same address as deceased.

4. There were no witnesses to this accident, but residents of the area described hearing a sound as if the tin roof of a barn had fallen in, and on investigating, noticed what appeared to be an airplane in a tree at the rear of the Watson farm. James Watson, one of the first at the scene, states on his arrival at the crash, the body of RING was squatted at the base of the tree with his back to the tree. It was still in this position on our arrival.

5. The position of the glider, described as a "BOWLUS" make, Regn. #CF-ZCS, in the tree, indicated the pilot had been making a sharp bank to the left, possibly in the act of landing, when the left wing tip of the Glider struck the ground, and the cabin of the Glider ran directly into a large upright branch of the elm tree, about 10' above the ground. The cabin of the Glider was completely demolished, all the instruments and contents of the cabin, including the body of RING, fell to the ground at the base of the tree. The Glider remained suspended in the tree.

6. James JOSS, Box 145, Brantford, Secretary of the Southern Ontario Soaring Association on arrival at the scene advised that RING was a member of the association, owned the Glider involved, and was a licensed pilot, particulars unknown. RING was an experienced pilot of some years, and on this date, was taking part in a long distance competition between twelve Gliders, a distance of 125 miles, from Brantford to Fergus, then St. Mary's and return

PROV. CONSTABLE

1st

I. Karl Watson was ~~t~~ inside my home on the afternoon of Sunday the third of Aug. when I heard a crash. I then went outside and saw my Brother in law Mr James Crane running across the field to a tree where a glider had crashed which is about 500 ft north west of the house. The time was about 1600 hrs. When we got to the scene, the pilot was in a sitting position at foot of tree, the glider was caught in the tree 10 or 15 feet above him. Immediatly I went back to the house to see if the Doctor and Police had been phoned. The Police were here 10 or 15 minutes after they were phoned, and the Doctor arrived about 5 minutes after he was phoned. We did not attempt to move him before the Doctor arrived.

Karl Watson

Q Did you see the glider before the accident.

A. No.

Q Did you see any gliders flying to-day.

A. No.

Q Was there any thunder storms around that time.

A. No the sky was clear.

Q Was there any wind.

A. Yes the wind was gusty

Q Was the wind very strong

A. No, other than gusty.

Kw

2nd

I James Crane was in a new house under construction which is south of the crash scene about 1/4 of a mile when I heard a loud noise.

I then looked out of a window and saw something against a tree.

I then assumed it was a glider so my brother & two nefews ran up to the scene and my brother in law came up shortly after, having heard the noise also. We saw the pilot up against the tree trunk in a slumped sitting position on the ground. and the glider was in the tree about 10 or 15 feet up. We did not touch anything but took steps to call Dr Craig and the Provincial Police.

This took place Sunday afternoon Aug 3/58 about 5 minutes to 4 oclock.

J. Crane

Q. Did you see any other gliders flying around.

A. No.

Q Was there any thunder storms around.

A. No.

Q. Was the wind very strong.

A. I wouldn't call it very strong.

Q What direct was the wind.

A. I did not notice.

3rd.

14

I Jack Walkey was on my farm the afternoon of Aug 3 approximalley 3.30 oclock, which is about 1/2 mile east of the scene of the accident. I raise turkeys and heard a disturbance among them and I looked up and saw a glider flying west over the field at about 60 ft altitude. I watched him and he continued in the same direction until he passed out of sight behind some trees and then it was only a matter of 10 or 15 seconds until I heard the crash.

Jack Walkey

Q Did he appear to be in difficulty.
A. No, wings were level no dipping or diving.

Q Did you see him make a turn
A. No.

Q Was there a strong wind
A. No, just light breze.

Q Was there any thunder storms.
A: No, a clear sky.

Q Did you see any other gliders
A No.

Jack Walby

I, James Walkey, was on my farm the afternoon of August 3 approximately 3:30 o'clock which is about ½ mile east of the scene of the accident. I raise turkeys and heard a disturbance among them and I looked up and saw a glider flying west over the field at about 60 feet altitude. I watched him and he continued in the same direction until he passed out of sight behind some trees and then it was only a matter of 10 or 15 seconds until I heard the crash.

Q. Did he appear to be in difficulty?

A. No, wings were level, no dipping or diving.

Q. Did you see him make a turn?

A. No.

Q. Was there a strong wind?

A. No, just light breeze.

Q. Were there any thunderstorms?

A. No, a clear sky.

Q. Did you see any other gliders?

A. No.

(sgd) Jack Walkey

CERTIFIED TRUE COPY ..R.W.B. for R.W. Place.

25

I, James Crane, was in a new house under construction which is south of the crash scene about a quarter of a mile when I heard a loud noise.

I then looked out of a window and saw something against a tree. I then assumed it was a glider so my brother and two nephews ran up to the scene and my brother-in-law came up shortly after, having heard the noise also. We saw the pilot up against a tree trunk in a slumped sitting position on the ground and the glider was in the tree about 10 or 15 feet up. We did not touch anything but took steps to call Dr. Craig and the Provincial Police.

This took place Sunday afternoon, August 3, 1958, about five minutes to four o'clock.

Q. Did you see any other gliders flying around?

A. No.

Q. Were there any thunder storms around?

A. No.

Q. Was the wind very strong?

A. I wouldn't call it very strong.

Q. What direction was the wind?

A. I did not notice.

(sgd) J. Crane

CERTIFIED TRUE COPY ..... for R.W. Place

I, Karl Watson, was inside my home on the afternoon of Sunday the third of August when I heard a crash. I then went outside ans saw my brother-in-law, Mr. James Crane, running across the field to a tree where a glider had crashed which is about 500 feet north west of the house. The time was about 1600 hours. When we got to the scene the pilot was in a sitting position at foot of tree, the glider was caught in the tree 10 or 15 feet above him. Immediately I went back to the house to see if the Doctor and Police had been phoned. The Police were here 10 or 15 minutes after they were phoned, and the Doctor arrived about five minutes after he was phoned. We did not attempt to move him before the doctor arrived.

Q. Did you see the glider before the accident?

A. No.

Q. Did you see any gliders flying today?

A. No.

Q. Were there any thunder storms around that time?

A. No the sky was clear.

Q. Was there any wind?

A. Yes, the wind was gusty.

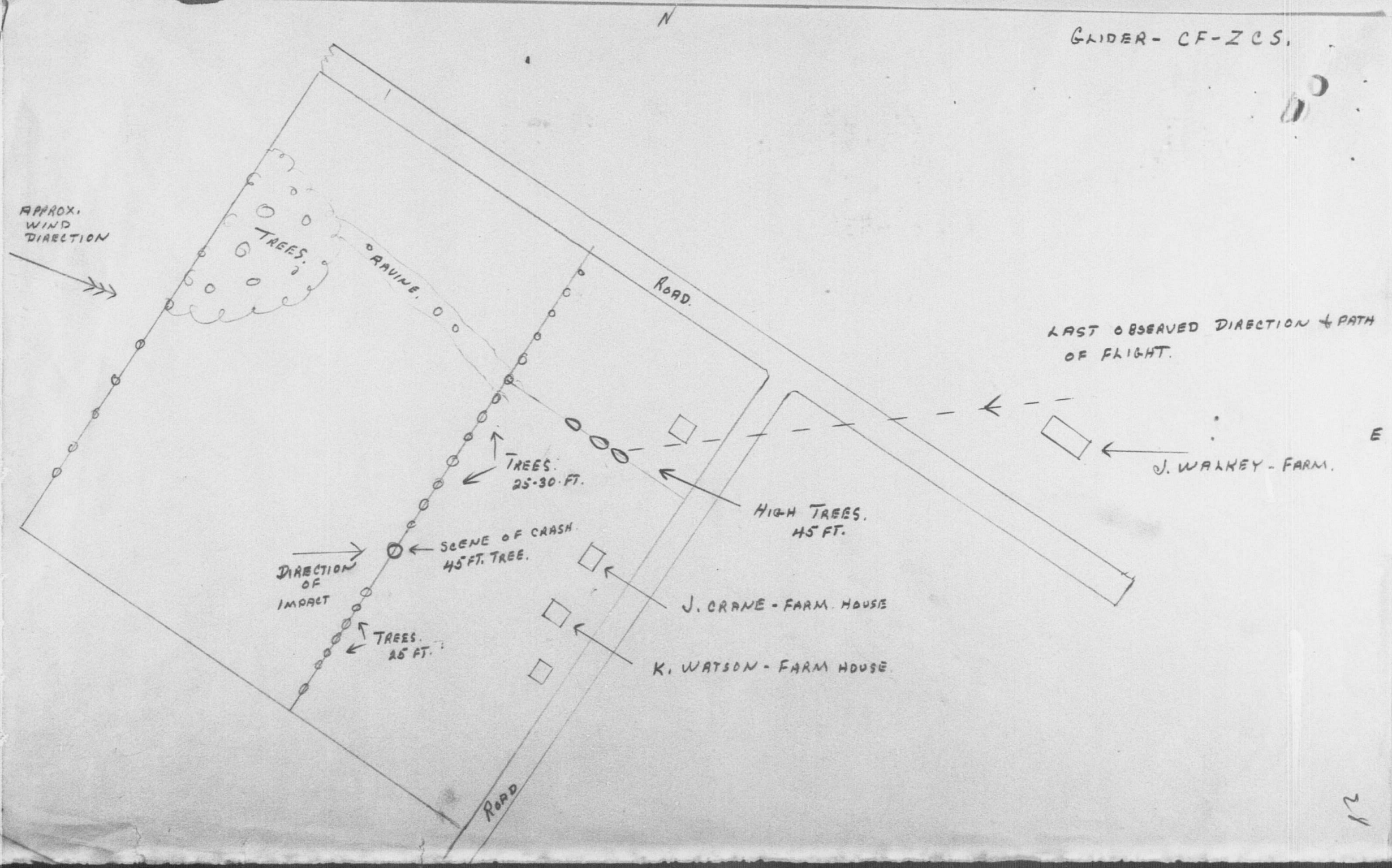
Q. Was the wind very strong?

A. No, other than gusty.

(sgd) Karl Watson

CERTIFIED TRUE COPY ..... for R.W. Place.

GLIDER - CF-ZCS.



21

6. The cockpit was completely demolished and the inspector was informed by the Coroner that the body was found on the ground at the base of the tree directly below the demolished cockpit, still strapped to portions of the seat.

7. There was no evidence to be found that the aircraft had come in contact with the ground at any time prior to striking the tree.

8. The aircraft was then inspected by Inspector D. Bell and then released for removal.

9. There were no witnesses found to the actual crash, however, one witness was found who had observed its flight up to a few seconds prior to the crash who's statement was received and is attached.

10. Inspectors Place and Bell then returned to Toronto.

R.W. Place.

(R.W. Place),
Inspector, Civil Aviation.

RWP/fs
Attach.

30 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Toronto, Ontario, August 6th, 1958.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident Kauffman BA 100 CF-Z C S, August 3rd, 1958	5002-139 5802-14555 5008-Z3-20

Report of Investigating Inspector

1. On August 3rd, 1958, Inspector R.W. Place, who was Duty Inspector, received a phone call at 17:00 hours from Constable Humphries of the Guelph O.P.P. that there had been a fatal glider crash just north of the town of Fergus, Ontario.

2. Inspector A. Pinder was then informed of the accident who volunteered to send the necessary wire to Headquarters and Inspector Place proceeded to the scene by car, arriving there at 20:20 hours.

3. He was met at the scene by Constable L.J. Chapitis, and with darkness approaching, it was decided to protect the wreckage until it could be examined in daylight. An attempt was made to locate any witnesses to the accident to no avail. The inspector then returned to Toronto and arrangements were made for return to scene on the morning of August 4th, 1958, with an A.I.D. inspector.

4. The inspector returned to the scene on August 4th, 1958, with Inspector Dave Bell after first contacting Coroner Dr. T.R. Pickard of Guelph, who verbally released the wreckage, and pictures of the scene were then taken.

5. The aircraft was found suspended approximately 12 to 15 ft. up the tree at about an angle of bank of 40 to 45 degrees. It would appear that the aircraft was traveling in an easterly direction in a banked attitude at time of impact, and the cockpit had struck the main trunk of the tree first. It would appear that the aircraft settled about one foot after impact, as there were no broken twigs or branches to believe otherwise.

....2

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3/ 2
10-56

Toronto 7, Ontario 21 August 1958
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-Z3-19

SUBJECT: Technical Advisers Report
Laister-Kauffman BA-100 Glider - CF-ZCS

1. The above mentioned glider was inspected by the writer at Fergus, August 4th, 1958.

2. The nose and cockpit were completely demolished on contact with a tree trunk.

3. Fuselage boom broken.

4. Both wings broken in two.

5. Tail planes O.K.

6. Controls were checked, no indication of malfunction prior to accident.

7. The sprocket chain to left aileron control cable was found broken, however, it is my opinion that this chain broke after the glider had made heavy contact with the tree trunk, as there is no sign of fatigue failure.

D Bell

D. Bell,
Regional Aircraft Inspector,
Toronto.

7. Number of persons (a) killed One (b) seriously injured Nil

8. Nature of accident While on a cross-country flight the aircraft failed to maintain altitude apparently through lack of thermals, and struck a tree when pilot attempted to land in a field.

9. Type of flying (Private, non-scheduled, ferry, etc.) Private

10. Opinion as to the cause of the accident (Use ICAO Manual of Accident Investigation) Error of judgment - pilot misjudged his approach when committed for a landing, aircraft struck a tree head on.

11. Damage Destroyed.

12. Infractions of: (a) The Air Regulations Nil

(b) Air Navigation Orders Nil

13. Disciplinary action proposed taken Nil

14. Remarks See investigating inspector's report

15. Sketch See diagram attached to report of the investigating inspector.

Technical Advisors report
" Attach: Investigating Inspector's report
Diagram
--- Photographs
Witness' statements (3)
O.P.P. report (photostat)
Letter from Dr. Walter F. Wright
Aircraft log book

for District Director, Air Services
Regional

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

2448
8-57

CANADA

Date:- August 19, 1958.

District File No. 5002-139
5008-Z3-19
5802-14555

AIRCRAFT ACCIDENT REPORT

To: Director General, Air Services
Department of Transport
Ottawa, Ontario
Attention: Chief, Accident Investigation

Toronto District

1. (a) Date August 3, 1958 (b) Time (standard): 1500 hrs. Use 24-hour clock

2. (a) Type of Aircraft Laister-Kauffman BA-100 (b) Nationality and Registration Marks
(c) C. of A. Valid to July 12, 1958 (d) C. of R. Valid Yes (x) No ( )

AIRCRAFT ACCIDENT ANALYSIS FORMS COMPLETED MAR 7 1960

3. Name of Owner, Operator or Hirer Norman Ring

4. (a) Crew information

Name	Duty	Age	Licences & Ratings			Experience		
			Type	No	Expiry date	Total	On type	
							Total	Within 90 days
RING, Norman	Pilot	38	Glider	YZG-150	N/A	N/K	36:00	10:00

(b) Now enrolled in Approved School Yes ( ) No ( ) N/A Approved School graduate Yes ( ) No ( ) N/A

(c) Name and location of school N/A

(d) Instructor's name J.W. Anis Category Glider instructor

(e) Instructor's name who recommended issue of pilot's licence J.W. Anis Category "

(f) Instructor's name who conducted flight test N/A Category ---

5. (a) Last point of departure Brantford

(b) Intended destination Brantford

6. (a) Place of accident Latitude 43 ° 42 'N. Longitude 80 ° 22 'W. Near Fergus Ontario Altitude ASL 1500 ft. approx

(b) Terrain: Mountain ( ) Prairie ( ) Arctic ( ) Maritime ( ) Bush ( ) Inter-city -populated or semi-populated areas- (x)

(c) Weather: Toronto Malton 2000Z

Ceiling 4000 ft. scattered

Visibility 12

Wind Speed and direction N 13

Were icing conditions encountered? Yes ( ) No (x)

Dew point 71

Temperature 62

Turbulence: light ( ) medium (x) heavy ( )

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

Entered on Accident Cards

(d) Did pilot obtain weather forecast or attend a meteorological briefing Yes (x) No ( )

AUG 25 1958

(Over)

33 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Toronto, Ontario, August 21, 1958.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident: Laister Kauffman BA100 Glider CF-ZCS August 3, 1958	5002-139 (ART) 5008-Z3-19 5802-14555

TRANSPORT - RECORDS
AUG 22 A.M.
File 5008-33-19

15624

Director General, Air Services,
Department of Transport,
No. 3 Temporary Building,
Ottawa, Ontario.

1. Attached hereto is the report of the Regional Investigation into the subject accident.

2. Attention is drawn to the letter from Dr. Walter F. Wright, an approved Department medical examiner, who is also a member of the Brantford Gliding Club. An autopsy was not carried out on the pilot who was killed in this accident, and the body was cremated on August 6, 1958, it is therefore not possible to determine whether any of the symptoms described by Dr. Wright were contributing factors in the accident. However, the suggestion that all glider pilots should be required to pass a medical examination on the same basis as a private pilot is concurred in and a strong recommendation to this effect is made.

3. It is suggested that C.A.M. may wish to comment on the above and on Dr. Wright's recommendation that a post mortem should be required in all cases when a pilot is killed.

for Regional Director, Air Services,
Toronto.

COPY ON
5802-10242

Attach.

MCJD/RG

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8—57

OTTAWA, Ontario, August 25th, 1958. 34

PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE 5008-Z3-19 (AIG)

SUBJECT: Accident - Laister Kauffman BA100 Glider CF-ZCS - Aug. 3rd,1958 - - 43° 42' N - 80° 22' W.

MEMORANDUM TO: C.J.G.

23340

1. The following are the salient points concerning the subject accident:

(a)	DATE	:	August 3rd, 1958;
(b)	CASUALTIES	:	(i) crew - pilot killed; (ii) passengers - nil;
(c)	DAMAGE	:	(i) aircraft - destroyed; (ii) third party - nil;
(d)	CAUSE	:	pilot error - pilot misjudged his approach and struck a tree head on;
(e)	INFRACTIONS	:	nil;
(f)	BLAME	:	not stated;
(g)	PUBLIC INTEREST	:	not indicated;
(h)	RECOMMENDATIONS	:	further investigation is not considered necessary;
(i)	REMARKS	:	reference is made to the memo of August 21st, 1958, (folio 15624). It is suggested that this matter be brought to C.O.R.'s and C.A.M.'s attention for their information and any necessary action.

2. C.O.R. Discussed with Mr. Barlow with whose views I am in agreement. C.H. 26/8/58.

for (W. V. Gordon),
A. I. G.

MCJD/RG

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8—57

OTTAWA, Ontario, August 25th, 1958. 34
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-Z3-19 (AIG)

SUBJECT: Accident - Laister Kauffman BA100 Glider CF-ZCS - Aug. 3rd,1958 - - 43° 42' N - 80° 22' W.

MEMORANDUM TO: C.J.G.

23330

1. The following are the salient points concerning the subject accident:

(a)	DATE	:	August 3rd, 1958;
(b)	CASUALTIES	:	(i) crew - pilot killed; (ii) passengers - nil;
(c)	DAMAGE	:	(i) aircraft - destroyed; (ii) third party - nil;
(d)	CAUSE	:	pilot error - pilot misjudged his approach and struck a tree head on;
(e)	INFRACTIONS	:	nil;
(f)	BLAME	:	not stated;
(g)	PUBLIC INTEREST	:	not indicated;
(h)	RECOMMENDATIONS	:	further investigation is not considered necessary;
(i)	REMARKS	:	reference is made to the memo of August 21st, 1958, (folio 15624). It is suggested that this matter be brought to C.O.R.'s and C.A.M.'s attention for their information and any necessary action.

2. C/R Discussed with Mr. Baribeau with whose views I am in agreement. C.H. 26/8/58.

for (W. V. Gordon),
A. I. G.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

35 2

Toronto, Ontario, August 25, 1958.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Accident: Laister Kauffman BA 100, CF-ZCS, August 3, 1958.	5008-Z3-19 (ART)

[redacted]

AIG

REGISTERED

TRANSPORT - RECORDS
AUG 26 A.M.
File 5m 8-33-19

Director General, Air Services,
Department of Transport,
No. 3 Temporary Building,
Ottawa, Ontario.

15895

1. Herewith the log book for the subject aircraft which was omitted from the attachments to the report of the investigation.

for Regional Director, Air Services,
Toronto.

Enc.

AC-5-46

ACCIDENT MEMORANDUM

Date October 29th, 1958.

File No: 5008-Z3-19 ← 5802-10242

SUBJECT

Accident:
Pilot - Norman RING

Aircraft & Reg. - BA-100 CF-ZCS

Date - August 3rd, 1958.

Injuries - [Fatal], Serious, Minor, Nil

Damage - [Destroyed], Substantial, Minor, Nil

MEMORANDUM TO: S.R.L. (Airmen Licensing). X....
S.R.L. (Aircraft Licensing) .X.
D.T. .....X.
O.S.P. .....

1. May action be taken as indicated below with regard to the subject accident:-

(a) Airmen Licensing

Cancellation of -

(i) Pilot Licence ....

(ii) Aircraft Maintenance Engineer Licence ....

(iii) Flight Engineer Licence ....

(iv) Flight Navigator Licence ....

(v) Glider Licence ....

(vi) Other ....

(vii) Return of Pilot Licence .... and Pilot's Log Book .... to the D.S.A.R. for transmission to the owner .....
or .....

(b) Aircraft Licensing

(i) Cancellation of C. of A. and C. of R. ..X

(ii) Return of C. of A....C. of R....
Aircraft Log Book ..X. Engine Log Book ....
and Propeller Log Book ....
to the D.S.A.R. for transmission to the owners.

S.R.L. 3.11.58

(iii) Return as in (ii) above, but with the request that they be kept as required by the Air Regulations, Paragraph 824.X.

(iv) Other

(c) D.T.

(i) Cancellation of Radio Operator's Certificate (if applicable ..X..

(ii) Cancellation of Aircraft Station Licence .....

(d) O.S.P.

(i) Deletion of pilot's name from the Information Circular distribution list ..X..

Comments: Glider Pilot Norman Ring's Glider Pilot Licence No. YZG-150 has been transferred to his 5802-10242 file.

W.V. Gordon

(W.V. Gordon),
~~Inspector, Air Regulations.~~
Accident Investigation.

NOTE: When applicable, individual forms will be submitted for each crew member.

See attachments .....

INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, powerplant, propeller or appliance. After the repair and/or alteration has been inspected and item 6 completed, the original copy of this form will be made available to the aircraft owner for retention as part of the aircraft records. The duplicate copy is retained by the CAA for administrative purposes.

See CAM 18 for detailed instructions concerning the information to be furnished with this form and instructions concerning its preparation.

8. DESCRIPTION OF WORK ACCOMPLISHED.*

All repairs made in accordance with C.A.R. Manual #18 See attached drawings.

Aircraft weighed for weight + balences

Co

	Wt	Arm	Moment
Aircraft W.E. as weighed	286 lbs	+ 24.8	7092.8
Pilot	212 lbs	- 9.3	1971.6
	498		5121.2

$\frac{5121.2}{498} = +10.2$ Forward C.G. extreme

*If additional space is needed attach additional sheets bearing aircraft nationality and registration mark and date work completed.

Check block if additional sheets are attached. ☑

U. S. GOVERNMENT PRINTING OFFICE 16—54010-4

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R052.4.

MAJOR REPAIR AND ALTERATION FORM (AIRFRAME, POWERPLANT, PROPELLER OR APPLIANCE)

1. AIRCRAFT	MAKE: Bowlus BA 100	MODEL: ~~Utility~~ Sailplane	SERIAL NO.: 154	NATIONALITY AND REGISTRATION MARK: N22442
2. OWNER	NAME (*First, middle, last*): Leo P. Smaglinski	ADDRESS (*Street and number, city, zone and State*): 943 Horey Grand Rapids, Michigan		

3. COMPLETE ONLY FOR UNIT REPAIRED AND/OR ALTERED. DESCRIBE WORK ACCOMPLISHED ON REVERSE IN ACCORDANCE WITH CIVIL AERONAUTICS MANUAL 18.

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (*Check*) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				
b. POWERPLANT					
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER				

4. AIRCRAFT WEIGHT AND BALANCE DATA
**AFTER the repairs and/or alterations described below were made.*

This item must be completed by repair or alteration agency. However, in the case of a spare component, it will not be completed until such component is installed in an aircraft. At this time, it will be completed by the installing agency, if applicable.

CATEGORY	EMPTY WEIGHT (*Pounds*)*	EMPTY CENTER OF GRAVITY (*Inches from datum*)*	USEFUL LOAD (*Pounds*)*
	286	24.8	219

5. CONFORMITY STATEMENT (*Complete and check*)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Charles E Dear	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	472906

d. I certify that the repair and/or alteration made to the unit(s) identified under item 3 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 18 of the U. S. Civil Air Regulations and that the information furnished herein is true and correct to the best of my knowledge.

May 23, 1955 — (Date repair and/or alteration completed)

Charles E Dear A+E 472906 — (Signature of authorized individual)

6. APPROVAL FOR RETURN TO SERVICE (*Check and complete appropriate items*)

Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator and is

☒ APPROVED ☐ REJECTED } BY { ☐ CAA Designee ☐ Manufacturer ☐ Canadian Department of Transport Inspector of Aircraft ☒ CAA Aviation Safety Agent ☐ Repair Station ☐ Other (*Specify*)

5-31-55 — (Date of approval or rejection)

(Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☐ Accepted _____ (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

KC-257-8 — (CAA designation number)

Ray P Williams — (Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

	MINUTES	ALTITUDE	IN. H			OCT.
METO*	---	---	--	---	---	--
SEA LEVEL TO	TO	--	---	---	---	--
ALTITUDE FROM	FROM	---	--	---	---	--

TRUE INDICATED AIR SPEED	M. P. H. LAND	M. P. H. SEA
CLIMB OR LEVEL FLIGHT	---	---
GLIDE OR DRIVE *(Smooth Air Only)*	65	---
~~PROPELLER THROWN~~ Airplane Tow	65	---
Auto Winch Tow	50	---

*METO—MAXIMUM EXCEPT TAKE-OFF

TAKE-OFF WEIGHT		LANDING WEIGHT	
LAND	SEA	LAND	SEA
505	---	505	---

C. G. LIMITS

LAND	SEA
+10.2 TO +15.1	- - - - -

WEIGHT

SEE WEIGHT AND BALANCE DATA FOR LOADING INFORMATION

DATUM

LEADING EDGE OF WING AT ROOT.

LIMITATIONS

EMPTY WEIGHT 286.
EMPTY E.C.G.--24.8.
USEFUL LOAD-- 219.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE [X] (41)
COMMERCIAL [ ]
STATE [ ]

NO. 19533

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-Z C S	Laister-Kauffman Aircraft Corporation (Formerly Bowlus) BA-100	154

(4) NAME OF OWNER Norman Ring

(5) ADDRESS OF OWNER Box 258, Lorne Park, Ontario

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE April 17th 1958

SEAL

SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

4° 2462 9-56

SERIAL NO. 5841

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- Z C S	Lister-Kaufman Aircraft Corporation (Formerly Bowlus) BA-100	154

(4) CATEGORY: Normal — LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

VALID FOR DAYFLYING ONLY

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER July 12, 1959

DATE OF ISSUE July 22, 1958

SEAL

SUPERINTENDENT, AIR REGULATIONS
Minister of Transport

SEE REVERSE SIDE

COPY OF WEIGHT & BALANCE REPORT

GLIDER TYPE - BOWLUS BA100
REG - CF-ZCS
SERIAL - 154

	WT	ARM	MOMENT
A/C W.E. AS WEIGHED	286 LBS	+24.8	7092.8
PILOT	212 LBS	-93	1971.6
	498 LBS		5121.2

$\frac{5121.2}{498} = +10.2$ FORWARD C.G. EXTREME

[redacted]

LM/MHK

Ottawa, Ontario, November 3rd, 1958.

5008-23-19 (SRL) 42

Accident: Laister-Kauffman BA-100 - CF-ZCS
August 3rd, 1958.

Regional Director, Air Services,
25 St. Clair Avenue East,
Toronto 7, Ontario.

1. We are enclosing herewith the Journey and Aircraft Log Book which was forwarded to this office in connection with the investigation into the subject accident. Please ensure that this log book is returned to Mr. Norman Ring's next of kin for retention in accordance with paragraph 814 of the Air Regulations.

2. The Certificates of Registration and Airworthiness contained in the pocket of this log book have been removed and are being retained on our file for cancellation.

Director of Civil Aviation.

92

FILE No. 5008 - ALL

17-9-65

VOLUME No. 1

VOL. 1

5008 - ALL

DEPARTMENT OF TRANSPORT

FROM APRIL 1959

TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - ALL BEECH E18S

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

Cancelled Registered

IMPORTANT — Do not fail to NOTIFY RECORDS whenever a File is passed direct to another section.

GP-3001 (1)

FILE No. 5008 - ~~A12 - 12~~ ALL VOLUME No. 1

VOL. 1

5008 - ~~A12~~ ALL

DEPARTMENT OF TRANSPORT

FROM APRIL, 1959
TO

SUBJECT AIRCRAFT - INSPECTION & ~~REGISTRATION~~
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - ALL BEECH E18S

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUL 17 1959					
JUL 20 1959	Miss Jones	SRL		GJ	AUG 10 1959
DEC 21 1959	41326	SRL		GJ	DEC 22 1959
FEB 15 1960	memo Dec 8, 1959	SRL	11.5.60	GJ	FEB 16 1960
MAR 31 1960	Miss Jones	SRL		GJ	APR - 1 1960
MAY - 6 1960	Reg. Mr. Pattatucci	AIR		JRP	MAY - 9 1960
	BF 11/5/60	SRL		GJ	
MAY 11 1960	6367	SRL		GJ	MAY 11 1960
	12879	CAE		JRP	
JUL 15 1960	15368	SRL	~~16.9.60~~	GJ	JUN 27 1960 JUL 18 1960
SEP 14 1960	BF 16/9/60	SRL	11.5.61	GJ	SEP 15 1960
	22816	SRL			SEP 20 1960
SEP 20 1960	SEP 16 1960 GL.	Records		GL	SEP 20 1960
SEP 20 1960	SEP 21 1960	SAE/A		BT	SEP 21 1960
SEP 21 1960		DATA.		RK	SEP 21 1960
JAN 12 1961	Reg. Mr. Lecheminant	AIR		LC	FEB 28 1961
MAY 10 1961	BF 11/5/61	SRL		GJ	MAY 10 1961

FILE No. 5008 - L 16 - 4 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM APRIL, 1959
TO

CROSS REFERENCES

SUBJECT AIRCRAFT INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - LPD - BEECH E18

VOL. 1 5008 - L 16

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
APR 30 1959	(SOS-A12-12) 4298	SRC		JJ	MAY - 7 1959
APR 30 1959	(SOS-A12-12) 4632; 4662	SRC	22.6.59	P.	MAY - 7 1959
	(SOS-A12-12) BF 22/5/59	SRL			JUN 2 - 1959

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
10-56

TORONTO Ontario April 28, 1959
PLACE DATE

YOUR LETTER DATED	YOUR FILE	OUR FILE
		5008-L16-4 (ART)

SUBJECT: Registration, Beechcraft E18 aircraft, CF-LPD (NOW CF-ALL)

TRANSPORT - RECORDS
APR 29 A.M
File 5008-L16-4

Director General, Air Services,
Department of Transport,
No. 3 Temporary Building,
Ottawa, Ontario

4162

1. The m/n aircraft was recently sold by Flightair of Hamilton to Lamothe Ltd., Noranda, Que., at which time the registration markings CF-LPD were allocated to the aircraft.

2. We have now received a request that the markings "CF-LPD" be changed, the purchaser desiring to obtain, if possible, registration markings "CF-ALL".

3. Would you please advise if there are any objections, by Headquarters, to the requested change of registration.

M E Lonch
Regional Director, Air Services.

Marks CF-ALL were cancelled in 1935.
(a/c sold to Lam Wing Yam & Co - Hong Kong, China)
Discussed with SKL. OK to allocate ALL. and withdraw. - LPD

2

VAA 58 CYHQ

VFN 13 VAA

CYUL RO 5 291513Z

SRL 78

1959 APR 29 AM 11 42

JJ DIGEN OW ATTN COR

BT

4632

ARQ 512 FOLLOWING TELEGRAM RECEIVED AT THIS OFFICE QUOTE HAVE YOU CERTIFICATE OF REGISTRY GIVING REGISTRATION MARKING FOR 1955 SUPER E18 BEECHCRAFT IN THE NAME OF D LAMOTHE LTD OF NORANDA QUE STOP FOR PURPOSES OF INSURANCE WOULD YOU REPLY SOONEST W A CURTIS CO LTD 67 YONGE ST TORONTO UNQUOTE PLEASE REPLY IF POSSIBLE AS INFORMATION UNAVAILABLE AT THIS OFFICE

REDAS MONTREAL

FORM 2195

DEPARTMENT OF TRANSPORT
DEPARTMENTAL COMMUNICATIONS

5008-L16-4
FILE NO. ~~5008-2~~ SRL

DATE April 29 1959

3

OTTAWA

Pa 151

REDAS - MONTREAL

SRL 433 REUR ARQ 512 REGISTRATION MARKS FOR 1955 SUPER E18 BEECH-CRAFT IN NAME OF D. LAMOTHE LTD. NOT ALLOCATED BY THIS HEADQUARTERS SUGGEST YOU CONTACT TORONTO REGIONAL OFFICE.

DICAV.

GJ*rm

c.c. RDAS Toronto

FILE COPY

4 HQ

ALLOTMENT OF REGISTRATION AC-5-77

REGISTRATION NUMBER CF-LPD now CF-[illegible] PART OF BLOCK ( )

DISTRICT Toronto, Ontario

DATE OF ISSUE 23.4.59

TRANSPORT - RECORDS
APR 30 1959
File 5081-16-4

TYPE OF AIRCRAFT Beech E18

SERIAL NUMBER BA-104

OWNERS NAME Flightair Limited

ADDRESS Hamilton, Ontario

4298

REQUESTED BY ~~WIRE~~ phone ( ) DATE (23.4.59)

REQUESTED BY LETTER ( ) DATE ( )

/mgm DESPATCHED BY TELEGRAM ( ) TELETYPE ( ) LETTER (x) 2445

GJ/MHK

Ottawa, Ontario, May 6th 1959.

5008-L16-4(ART)

~~5008-L16-4~~
5008-A12-~~4~~ (SRL)

Beechcraft E18 Aircraft, CF-LPD.

Regional Director, Air Services,
25 St. Clair Avenue East,
Toronto 7, Ontario.

1. With reference to your letter of April 28th, 1959, we wish to advise that the request for the use of registration Marks CF-ALL on Beech E18, Serial No. BA-104, is approved.

2. These marks have been reserved and may be allocated by you to replace CF-LPD.

3. The marks CF-LPD may be re-allocated when they are removed from the above-mentioned aircraft.

Director of Civil Aviation.

1+2

2462-A
9-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CATEGORY.-PRIVATE 6 ☒
COMMERCIAL ☐
STATE ☐

CERTIFICATE OF REGISTRATION OF AIRCRAFT

NO. 20989

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-AIL	Beech Aircraft Corporation Beech E18S	BA-104

TRANSPORT - RECORDS
MAY 28 A.M.
File 8648

(4) NAME OF OWNER Lamothe Transport Limited

(5) ADDRESS OF OWNER Noranda, P.Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE 25th May 1959

Original Signed by
D. R. SINCLAIR

SEAL

SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

7

M/JS

Ottawa, June 4, 1959.

5008-A12-12
~~5008-E10-19~~

Beech E18S Aircraft, CF-ALL and Fairchild M62A-3 Aircraft CF-IJS

Regional Director, Air Services,
25 St. Clair Ave. E.,
Toronto 7, Ont.

1. We acknowledge receipt of form 2413 and Certificate of Registration for Beech E18S aircraft, CF-ALL.

2. Our records indicate that the number on the Certificate of Registration, 20989, has already been assigned to the Certificate of Registration covering aircraft CF-IJS.

3. Will you please check your records and advise us of the correct Certificate of Registration number allotted aircraft CF-ALL in order to complete our records.

Director of Civil Aviation.

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus installed:-

A. Transmitters. (Give Frequencies). Lear LVTR-36, ABC-T11

B. Receivers. Lear LVTR-36, Two ABC-15's

C. Miscellaneous. (ADF, ILS, etc.) .. Lear ADF-14A

Radio Licence No. (if A/C previously registered in Canada) .....

PART "D"

I hereby certify 1. (a) ~~That I am the sole owner of the aircraft described herein.~~

(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at Mount Hope, Ontario ..... this 12th .. day of ..... May ..... 19 .59....

Witness..... .....

Designation:- ....

(Signature of Applicant(s))

.....

(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by [ngm] (initial) Date:- ..May 25th..... 19.59..

Registration Marks CF-AIX.. allotted [ngm] (initial) per 12, 14 Q.

Documentation required as listed below has been checked and is satisfactory [ngm] (initial)

Fee $5.00 (Registration) received [ngm] (initial) Fee $5.00 (Airworthiness) received [ngm] (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY [X] and NIGHT [X] flying.

Dated at Incorporated 1940 Toronto .....this . ...25th..... day of ..... May .....19 .59.....

.....

District Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

- ☐ (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)
- ☐ (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)
- ☐ (III) Fee of $5.00 for Certificate of Airworthiness.
- ☐ (IV) Aircraft Weight and Balance Report. (In duplicate.)
- ☐ (V) Aeroplane Flight Manual, Operation Limitations.
- ☐ (VI) Certificate of Airworthiness for Export or equivalent document.
- ☐ (VII) Customs and Excise Clearance Form B.1.
- ☐ (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).
- ☐ (IX) D.O.T. Approved Release notes, where applicable.
- ☐ (X) Certification of Aircraft Imported Complete. (Form 2443.)
- ☐ (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

The District Director, Air Services.
Department of Transport.

(Parts A, B, C & D must be completed by the applicant.)

25 St. Clair Ave. E.

PART "A"

Application is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particulars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF- ALL	BEECHCRAFT	E18S	BA-104	1955

Aircraft is to be registered as:- STATE [ ] COMMERCIAL [ ] PRIVATE [x]

Proposed base of Operation:- Noranda, P.Q. ..... Certificate of Airworthiness or Flight Permit Number in force. .....
(If applicable)

OWNER OR OWNERS OF THE AIRCRAFT:- Lamothe Transport Ltd.
(All names to be listed)

If Owner/s is a Corporation, particulars of President or Chairman and all Directors are as follows:-

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.
P.D. Lamothe	Canadian	Noranda, P.Q.	President
L. De Cole	"	"	Director
A. Lamothe	"	"	"

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- A/C Type Approval No.... TC765
C.A.A. Specification No... A-765

Weight and Balance Report submitted is for:- LAND [x] SEA [ ] SKI [ ]

Type Engine/s installed P&W R-985's ..... Max. Gross Weight Authorized:- ... 9300 lbs ..... lbs.

Minimum Flight Crew:- ... One ..... Total Number of Persons to be carried . Seven .....
(including crew)

Nav. Lights [x] Landing Lights [x]

2413
1-57

Coded Lo
1.6.59

Noted C.P.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
2-56

9

SERIAL NO. 7976

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- A L L	Beech Aircraft Corporation Beech E18-S	BA-104

(4) CATEGORY: Normal

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER 11th May 1960

DATE OF ISSUE 25th May 1959

SEAL

Original Signed by
D. R. SINCLAIR
SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

5008-A12-12

25 St. Clair Ave. E.
Toronto Ontario
June 8th 1959

Lamothe Transport Limited
Noranda, P.Q.

Dear Sirs;

Herewith amended Certificate of Registration No. 20990 issued for your Beech E18S aircraft, CF-ALL.

Please return to this office the Certificate of Registration No. 20989 which has the wrong serial number.

Yours truly,

D. R. SINCLAIR

Regional Superintendent, Air Regulations

1+Q

2462-A
9-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.-PRIVATE ☒
COMMERCIAL ☐
STATE ☐

11

NO. 20990

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-AIL	Beech Aircraft Corporation Beech E18S	BA-104

TRANSPORT - RECORDS
JUN 9 AM
File 5008-A12-12

(4) NAME OF OWNER Lamothe Transport Limited

(5) ADDRESS OF OWNER Rouyn, P.Q.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE June 8th 1959

SEAL

Original Signed by
D. R. SINCLAIR
SUPERINTENDENT AIR REGULATIONS

SEE REVERSE SIDE

12

ENGINE FAILURES AND UNSCHEDULED REMOVALS

Date JUNE 25, 1959.

Regional Aircraft Inspector
Room 36, Trans-Atlantic Bldg.
Montreal Airport, Que.

Engine installed in aircraft CF-ALL Type BEECH E18S

Date of Failure JUNE 25, 1959.

Engine Type and Model P&W R985-AN14B

Engine Serial Number JP 210530

Total Time Since New UNKNOWN.

Total Time since Overhaul 153:45

Last Overhaul by EIGHTH AIR DEPOT, SEBRING, FLORIDA.

Engine will be overhauled by CANADIAN PRATT & WHITNEY

Reason for failure SUPERCHARGER BEARING FAILURE.

MICARTA FOUND IN MAIN SUMP. FLAKING AND CHIPPINGS FOUND IN MAIN SCREEN. HIGH OIL CONSUMPTION, CONSISTENT OIL RESIDUE IN INDUCTION SYSTEM.

(Timmins Aviation Limited)

Engineer's signature

ULM89

13

CANADIAN PRATT & WHITNEY AIRCRAFT CO. LIMITED

INSPECTION REPORT SUMMARY

CUSTOMER: Timmins Aviation Ltd.

SUBJECT: R-985-AN1/3

SERIAL No. JP 210530

TIME SINCE LAST O/H: 153:45

PREVIOUS O/H BY: 8th Air. 1958.

TOTAL TIME: Unknown

DATE INSPECTED: June 30/59.

REASON FOR O/H OR REPAIR:

Impeller bearing failure.

LIST OF MAJOR PARTS REQUIRED:

ITEM No.	DESCRIPTION	REASON FOR REQUIREMENTS

REMARKS:

The blower section was dismantled and the impeller center bearing ball cage was found broken. Plain type bearings were installed.

No. 6 cylinder was removed and, except for slight wear, of the oil control rings, appeared satisfactory. Compression was checked and found within limits on all cylinders.

The engine was re-assembled and tested and the oil consumption was within manufactures specified limits and performance was satisfactory.

KJD:TMCC:db
July 1, 1959.

K.J. Dawson,
Assistant Service Manager.

C.P.W.A 1077 REV.

14
2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Que., July 13th, 1959
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Engine Failures and Unscheduled Removals P&W R.985-AN/14B - Ser. #JP.210530 - CF-ALL	5010-6-50 (AIQ) 5008-A.12-12

TRANSPORT - RECORDS
JUL 15 A.M.
File 5008-A12-12

Director General, Air Services
No. 3 Temporary Building
Ottawa, Canada

Attention Chief Aeronautical Engineer

14757

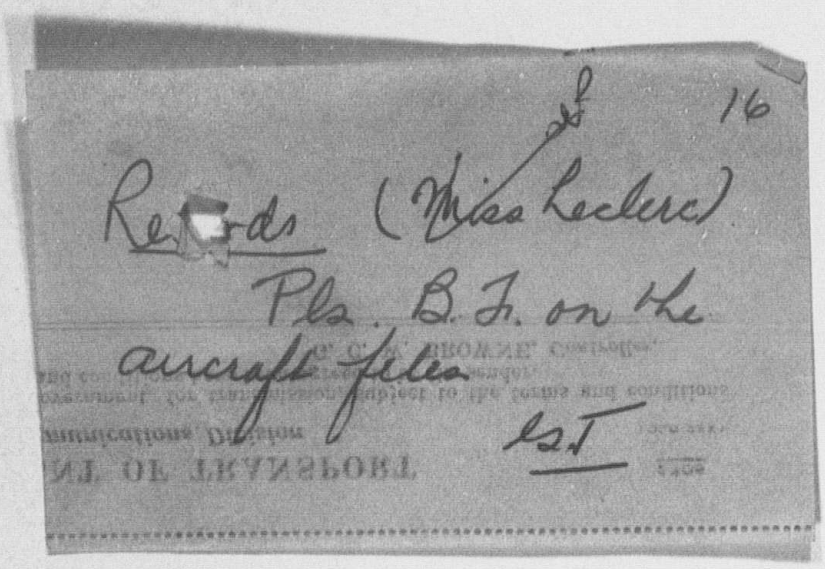
1) Enclosed is a report from Timmins Aviation Limited dated June 25th, 1959, on the failure of the subject aircraft aero-engine.

2) Also enclosed is Canadian Pratt & Whitney's Inspection Report Summary to cover this engine.

3) Submitted for your information and records.

(J.O. Noury)
for
Regional Director, Air Services

Encl. 2


Records (Miss Leclerc)
Pls. B.F. on the
aircraft files
16

MEMORANDUM

GOVERNMENT OF CANADA

~~ACTION REQUEST~~

CGSB 6-GP-12
P.P.&S. Cat. 3433

TO: R. L. (Miss G. Jones) 15

LOCATION

FOR:

5008-A12-12 ←

FILE NO. ~~5002-842~~

	ACTION		NOTE & FORWARD
	APPROVAL		NOTE & RETURN
	COMMENTS		REPLY, PLEASE
	DRAFT REPLY		SEE ME, PLEASE
X	INFORMATION		SIGNATURE
	INVESTIGATION		TRANSLATION
	MORE DETAILS		YOUR REQUEST
	NOTE & FILE		

PREPARE MEMO TO:

Noted [illegible]

REPLY FOR SIGNATURES OF:

REMARKS:

CF-ALL forced landed on the Bell River about sixty-five miles north of Val d'Or, P.Q., on December 4,1959.

File 5002-842 refers.

FROM	PHONE	LOCATION	DATE
I. G.			December 8,1959.

5008
~~5008~~-A12-12 (ARQ)

DECEMBER 18th 19 59

FULL RATE COLLECT

TRANSPORT - AIR SERVICES
DEC 21 A.M.
File 5008-A12-12

41326

LAMOTHE TRANSPORT LTD.
c/o AIRCRAFT INDUSTRIES,
ST. JOHN, P.Q.

ARQ 185 THIS WILL CONSTITUTE YOUR TEMPORARY AUTHORITY TO HAVE BEECH E18S AIRCRAFT CHARLIE FOXTROT ALFA LIMA LIMA FERRIED FROM BELL RIVER TO ST JOHN VALID UNTIL JANUARY 17 1960 SUBJECT AIRCRAFT FLOWN DAY VFR BY QUALIFIED PILOT AND AIRCRAFT CERTIFIED FIT FOR FLIGHT BY QUALIFIED ENGINEER

FOR RIDAS MONTREAL

RL/mea

c.c. HQ
RCCA

A.Q.

5008-A12-12 A1

TRANSPORT - RECORDS
MAY 10 A.M.
5008-A12-12
File

5008-
6367

Montreal Airport, P.Q.
May 9, 1960.

Lamothe Construction Co.,
Noranda,
P. Que.

Dear Sir:-

The Certificate of Airworthiness for your aircraft CF-ALL has been renewed to read valid until May 11, 1961 and is returned herewith.

This aircraft is presently valid for operation as a land-plane X skiplane____ seaplane____. Should you desire to operate this aircraft in any other configuration than as indicated above, then it will be necessary for you to forward the documentation as required by the Engineering and Inspection Manual to the Regional Aircraft Inspector for his approval.

Please note that during the validity of this Certificate the Weight and Balance Report for this aircraft must be kept up to date, and that the Centre of Gravity location must remain within the prescribed limits under all loading conditions while the aircraft is being operated.

Yours very truly,

/mm
cc HQ

Original Signed by
G. BERNARDIN

(T. M. SAUNDERSON)
Regional Superintendent, Air Regulations.

P.S. The Certificate of Registration for this aircraft is also returned herewith. YES_____ NO X_____.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
9-56

19

SERIAL NO. 7976

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
ALL	Beech Aircraft Corporation Beech E18-S	BA-104

(4) CATEGORY: Normal

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER May 11, 1961.

DATE OF ISSUE May 6, 1960.

SEAL

Original Signed by
G. BERNARDIN
SUPERINTENDENT, AIR REGULATIONS

SEE REVERSE SIDE

Minister of Transport

A.Q.

2444
3-58

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval TC 765

REGISTRATION – CF – ALL SERIAL No. BA-104

1. C. of A. No. 7976 Expires 11/5/60. C. of R. No. 20990 Expires -
Aircraft Data—Manufacturer Beech Aircraft Corp. Model Beechcraft E18S - 9700
Hours flown—Since New 2225:55 Since Overhaul N/A
Engine Data—Manufacturer Canadian Pratt & Whitney. Model R 985-AN-14B

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	8120	Unknown	252:20
(2)	JP 207296	"	00:00
(3)			
(4)			

Signature of Applicant [signature]

Date

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy. The fixed equipment is as listed in the attached Weight and Balance Report, which is currently up to date.
Serial No. of last A/W/D incorporated 56-20-1 Signed [signature]
"M" Licence No.
Company Approval 8-58.

Serial No. of last Service Bulletin incorporated SB #42 Date 22-Apr-60

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.
Date 23/4/60 Signed R Henderson
Pilot

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached: Certificate of Airworthiness [X] Certificate of Registration [ ]
Weight and Balance Report [X]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. 7976, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.
Date May 6/60 Signed [signature]
Regional Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after. Date: May 11, 1961

Permissible Gross Weights—Wheels X Skis Floats

Amendment or other Action:

Noted & Coded ESL

Date May 9, 1960 Signed [signature]
Regional Superintendent, Air Regulations

8. H.Q. Action C.A.R.

C.A.E.

original on 5010-10-38
5008-A-12-12

21 2

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

Montreal Airport, Dorval, Que. June 21, 1960
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Super Beechcraft E.18-S, CF-ALL - Electronics	5010-1-5 (AIQ) 5008-A 12-12

12 879

Asst. Deputy Minister, Air
No. 3 Temporary Building
Ottawa, Canada

Attention Chief Aeronautical Engineer

TRANSPORT - RECORDS
5008 - A 12-12
JUN 23 A.M.
~~5010-10-38~~
File

1) Aircraft Industries of Canada Ltd. Report #AI-RE-01, dated June 14/60, covers the entire electronics installation in CF-ALL, and has been approved as indicated.

2) Pages A, B & C, attached to the Cover Sheet, describe the scope of the work and list all the equipment, which includes Communication and Navigation Equipment, C-2 Gyrosyn Compass, Audio, Power Supplies for the Radio and Instruments, and "Anti-Ice" Light.

3) Approval of all the Wiring Diagrams has been consolidated by stamping of the Master Diagram, Drawing No. AI-E-7104, which lists Drawings AI-E-7105 to -7122 inclusive. These do not include those for the main aircraft electrical system which was unchanged.

4) Drawings included in the report consist of a G.A., showing the layout and connections for all the equipment, No. AI E-7107, and Drawing No. AI-E-7103, Sheets 1 & 2, covering the installation of loop antennae.

5) Photographs A to Z show the project as a whole, the inter-relationship between the items, and structural details, both in process and as completed.

6) As you are probably aware, the aircraft itself has been destroyed.

COPY ON
5008-A 12-12

C.H. Skelton

(C.H. Skelton)
for
Regional Director, Air Services

Encl.

ZC

GOVERNMENT OF CANADA

MEMORANDUM

~~ACTION REQUEST~~

CGSB 6-GP-12
P.P.&S. Cat. 3433

TO

LOCATION S. R. (Miss G. E. Jones) 22

FOR:

TRANSPORT RECORDS

5008-412-12 ←

FILE NO. ~~5002-1005~~

5008-412-12

	ACTION	File	NOTE & FORWARD
	APPROVAL		NOTE & RETURN
	COMMENTS		REPLY, PLEASE
	DRAFT REPLY		SEE ME, PLEASE
X	INFORMATION		SIGNATURE
	INVESTIGATION		TRANSLATION
	MORE DETAILS		YOUR REQUEST
	NOTE & FILE		

15368

PREPARE MEMO TO:

REPLY FOR SIGNATURES OF:

REMARKS:

CF-ALL was damaged in an accident in the vicinity of Val d'Or, P.Q., on June 16, 1960.

File 5002-1005 refers.

FROM	PHONE	LOCATION	DATE
A. I. G.			June 27, 1960.

23

5008-14A

File

Regional Director, Air Services,
Montreal Airport, P.Q.

5008-A12-12
(ARQ)

Beech E18S, CF-ALL

September 14, 1960

1. The undersigned investigated the accident which occurred to this aircraft in the vicinity of Val d'Or, Quebec, and it is noted that the aircraft was completely consumed by fire. The Certificate of Airworthiness and the Certificate of Registration cannot be found and it is presumed it was destroyed in the fire.

Regional Accident Investigator

DAM/lt
c.c. RCCA

RCCA

MEMORANDUM • GOVERNMENT OF CANADA

TO: Asst. Deputy Minister, Air,
Department of Transport,
No. 3 Temporary Bldg., Ottawa, Ont.

YOUR FILE No: 24

FROM : Regional Director, Air Service,
Montreal Airport, Dorval, P.Q.

OUR FILE No:
5008-A12-12(ARQ)

SUBJECT: Beech E18S - CF-ALL

DATE:
Sept. 14th, 1960.

TRANSPORT - RECORDS
SEP 16 P.M.
File 5008-A12-12

22816

5008-14A

1. Attached please find a copy of a memo from the Regional Aircraft Accident Investigator with reference to the subject aircraft.

2. Accordingly, will you please take the necessary action to remove this aircraft from the Canadian Civil Aircraft Register.

Encl.

for.. Regional Director, Air Service

Certs. cancelled
LD
20.9.60.

Coded & Noted
LD
20.9.60

CGSB Standard 6—GP—22; P P & S Cat. No. 3590

FILE No. 5008 - BMM

18-10-68

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM DEC. 27, 1945

TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BMM - CESSNA T50

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

Cancelled

IMPORTANT — Do not fail to NOTIFY RECORDS whenever a File is passed direct to another section.

FILE No. 5008 - BMM

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM DEC. 27, 1945
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION
FILE TITLE CF - BMM CESSNA T50

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
OCT 5 1953	42103	CAR	~~15.6.54~~	[illegible]	OCT 6 1953
NOV 4 1953	BF 3/11/53	CAR		[illegible]	NOV 6 1953
JUN 14 1954	BM 15/6/54	CAR	~~15.10.54~~	[illegible]	JUN 14 1954
OCT 13 1954	BM 15/10/54	CAR		[illegible]	OCT 14 1954
OCT 23 1963	24421	ARL		[illegible]	OCT 24 1963
OCT 25 1963	Cancellation	(G.L) Records		[illegible]	
OCT 24 1963		SAE/A		[illegible]	OCT 25 1963
OCT 25 1963	—	REPRO/3		[illegible]	OCT 25 '63

FILE No. 5008 - B13 - 13

VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM Dec 27, 1945

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BMM CESSNA T50.

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JAN 14 1946	34993	S.A.R.		GJ	JAN 16 1946
JAN 18 1946	35145, 35146	S.A.R.		GJ	JAN 21 1946
JAN 23 1946	38807	S.A.R.		[illegible]	FEB 8 1946
FEB 8 1946		Treas. ①		J.	FEB 11 1946
FEB 11 1946		S.A.R. ②		[illegible]	
FEB 21 1946	39255	S.A.R.		[illegible]	FEB 15 1946
FEB 28 1946	40130	S.A.R.		[illegible]	MAR 6 1946
FEB 24 1947	71930	C.A.R.		GJ	FEB 26 1947
APR 30 1947	8061	C.A.R.		[illegible]	APR 23 1947
MAY 12 1947	4760, 4764	C.A.R.		[illegible]	MAY 16 1947
MAY 20 1947	5532	C.A.R.		[illegible]	MAY 26 1947
JUN 30 1947	10303	C.A.R.		[illegible]	JUL 10 1947
		C.A.I. ①		[illegible]	JUL 10 1947
JUL 10 1947		Treas.		[illegible]	JUL 16 1947
JUL 19 1947	12569	C.A.R.		GJ	
		C.A.E.		[illegible]	JUL 22 1947
SEP 9 - 1947	Requested Microfilm	C.A.R.		GJ	SEP 9 1947
JUN 13 1949	10392	C.A.R.		[illegible]	JUN 14 1949
APR 27 1950	3599.	C.A.R.	~~APR 27 1951~~	[illegible]	APR 28 1950
MAR 30 1951	BF 1/4/51	C.A.R.	~~MAR 30 1952~~	[illegible]	MAR 31 1951
MAR 31 1952	BF 1/4/52	C.A.R.	~~MAR 31 1952~~	[illegible]	APR 21 1952
MAY 15 1952	7746	C.A.R.		GJ	MAY 16 1952
MAY 31 1952	BF 1/6/52	C.A.R.	~~MAY 31 1952~~	[illegible]	JUN 2 1952
SEP 30 1952	BF 1/10/52	C.A.R.	~~SEP 30 1952~~	[illegible]	OCT 7 1952
OCT 17 1952	34522	C.A.R.		[illegible]	OCT 17 1952
NOV 28 1952	BF 1/12/52	C.A.R.	~~NOV 28 1953~~	[illegible]	NOV 29 1952
SEP 30 1953	BF 1/10/53	C.A.R.	~~SEP 30 1953~~	[illegible]	OCT 1 1953

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED
FULL RATE MESSAGE
DAY LETTER
NIGHT MESSAGE
NIGHT LETTER
EVENING & SUNDAY
PLACE X OPPOSITE SERVICE DESIRED

RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
	10:00 AM	402 Blowey-Henry Bldg. Edmonton

Send the following message, subject to the terms on back hereof, which are hereby agreed to

DECEMBER 27 1945

TRANSPORT-RECORDS
DEC 31 A.M.
File 5008-B13-13

FLT. LIEUT. GARDNER
NO. 10 REPAIR DEPOT
R.C.A.F.
CALGARY

E35 REQUIRE MAKERS SERIAL NUMBER CESSNA PURCHASED BY DONALD REVIE

A33249

PREPAID
cc: Hq.

DISTRICT INSPECTOR AIR REGS.

1481
CF-BMM

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	X
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

Ottawa, 31st December, 1945.

DISTRICT INSPECTOR AIR REGULATIONS
402 Blowey Henry Bldg.,
Edmonton, Alta.

CF-BMM

AR72 REGISTRATION CF-BAKER MIKE MIKE ALLOTTED CESSNA SERIAL 1481

DONALD NEVIN

CIVIL AVIATION

File Copy

PHONED 12:00 HRS. 31-12-45/GM

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	3
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			3

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message to the ~~[illegible]~~ which are hereby agreed to

1945 DEC 31 PM 12 04

402 BLOWEY HENRY BLDG EDMN

AR72 REGISTRATION CF-BAKER MIKE MIKE ~~[illegible]~~ ALLOTTED CESSNA

SERIAL 1481 DONALD REVIE

CIVIL AVIATION

CIVIL AVIATION
TRANSPORT AIR
2221
CN
RM 106 BRYSON BLDG

Rec'd copy

2

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-44

Edmonton, Alberta, December 28, 1945.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Cessna T50, Maker's Serial No. 1481. Purchased by Donald Revie	1-445

TRANSPORT-RECORDS
DEC 31 AM
File

AIRMAIL

Controller of Civil Aviation,
OTTAWA.

1. We are in receipt of application for registration of Cessna T50, Maker's Serial No. 1481, purchased from War Assets at Calgary by Donald Revie of Cranbrook, B.C.

2. May we receive by wire, please, the registration marking for this aircraft.

K. F. Saunders,
A/District Inspector,
Air Regulations.

KFS/mp

CF-BMM

4

W-37

JAN 14 A.M. 1946
File 5808-B13-13

402 Blowey-Henry Bldg.,
Edmonton, Alberta,
January 9, 1946.

F. T. Rudge-Williams, Esq.,
Suite 2, Yale Apartments,
2121 5th St. W.,
CALGARY, Alberta.

A34297

Dear Sir:

This letter will constitute your authority to ferry Cessna T50, BMM, Calgary to Edmonton for the purpose of weighing and inspection for C. of A., CFR day flying, on flight plan and with one passenger only. This authority to be not valid after January 14th, 1946.

It is pointed out for your information that it will be the owner's responsibility to arrange for scales for the purpose of weighing, and the arrangement of a B & D Engineer for the purpose of inspecting the aircraft; and in this connection we suggest that you contact either Western Airmotive, whose phone number is 83541, Mr. J.M. Keith - President, or Northwest Industries Limited, phone number 27141, Mr. L. Brintnell - President.

From the telegram received today from F/L Gardner, it would appear to us that you are counting on having this work carried out during the course of one day or so, and for your information it is likely to take considerably longer.

When arrangements have been made for the weighing we recommend that you advise us your time of arrival in advance so that we will endeavor to be present.

Yours truly,

K. F. Saunders,
A/District Inspector, Air Regulations.

KFS/mp
cc: F/L Gardner

6

L-445

402 Blowey-Henry Bldg.. A35145
Edmonton, Alberta.
January 14, 1946.

TRANSPORT-RECORDS
JAN 18 A.M. 1946
File 5008-B13-13

Don Revie, Esq.,
c/o Mr. Rudge-Williams,
Suite 2 Yale Apartments,
2121 5th St. W.,
CALGARY, Alberta.

Dear Sir:

Pending issue of formal Certificate of Registration and Certificate of Airworthiness by our Headquarters, this letter constitutes your temporary authority to operate the aircraft Cessna CF-BGM, commercially, for a period of 46 days, to be not valid after February 28, 1946.

The aircraft is to be flown within the following weight limits, day flying only:

Landplane Empty.....3836 lbs.
Landplane Gross.....5100 lbs.

The aircraft is to be signed out airworthy by a licensed Air Engineer every thirty hours or seven days, whichever is the shorter.

Yours very truly,

K. F. Saunders,
A/District Inspector,
Air Regulations.

KFS/M
cc: D.I.A.R. Vancouver
Ca

TO HEADQUARTERS: for your information and records please.
H.Q.: File: 5802-B13-13 APPLICATION To Follow.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

7 2
6-44

Edmonton, Alberta, January 14, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Cessna T50 CF-BMM	1-445

TRANSPORT-RECORDS
JAN 18 AM 1946
File 5808-31 3-13

Controller of Civil Aviation,
Ottawa.

1. The subject aircraft was given three separate weighings this date, empty as a Landplane, and the following weights arrived at:

1st Weighing.....3825 lbs.
2nd Weighing.....3855 lbs.
3rd Weighing.....3828 lbs.

A35146

Average mean empty weight therefore is 3836 lbs. ✓

2. Submitted for your information and records please.

K. F. Saunders,
A/D.I.A.R.

KFS/M
cc: DIAR Vancouver

CERTIFICATION OF

SERVICEABLE SURPLUS MILITARY AIRCRAFT. R.C.A.F. # 7988

Aircraft Identification Markings Displayed..C.F.-B.M.M.

Aircraft Manufacturer..Cessna Aircraft Co. Aircraft Type..Cessna Crane T50

Manufacturer's Serial Number.....1481.....

Engine Manufacturer..Jacobs Aircraft Eng. Co. Engine Type..Jacobs L.4.MB.

Manufacturer's Serial Number...4828...and...4621.....

The above aircraft has been inspected in accordance with accepted practice and to the best of our knowledge and belief is serviceable.

S. N. Green
Air Engineer Category "B"
licence No. A 790

12/1/46

S. N. Green
Air Engineer Category "D"
Licence No. A 790

S. N. Green
Air Engineer Categories "A" & "C"
Licence No. A 790

Aircraft test flown at a total all up weight of 4900 lbs. and found satisfactory

H. T. Rudge-Williams
Test Pilot
Pilot's Licence No. C 2359

COPY

PRUCHASER 9

WAR ASSETS CORPORATION
P.O. Box 6099
MONTREAL, Que.

SALES ORDER

Sheet No. 1 of 1 Sheets

Date Jan. 4th, 1946.

SOLD TO:

Mr. Donald Revie
P.O. Box 244
Cranbrook, B.C.

Purchaser's Reference
Teletype Dec. 27

Sales Order
MTL No. 26153

Sales Directive No.
7-451

Terms of Payment: Payment with acknowledgment of order.

C.A.A.C. Ref's
File No.: 223-28D-1
Serial No. 228

Terms of Delivery:
Ex Storage Location.

Delivery Instructions:
Ex #10 Repair Depot,
R.C.A.F.
CALGARY, Alta.

War Assets Corporation
Declaration No.
4-2 477

PC Authority 5222

Declarer's File Ref:
935-F-1-16 938CA-1-16

Custodian:
Dept. of National Defence (Air)
#10 Repair Depot
CALGARY, Alta.

DESCRIPTION	W.A.C. Decl. Item. No.	Unit	No. of Units	Total Value
Cessna Crane Aircraft R.C.A.F. No. 7988 Mfg. Serial No. 1481 Jacobs L4MB Engines Serial Nos. 4621/22526 & 4828/21849 c/w 2 Wooden Fixed Pitch Propellers		each	1	$1,800.00

Salesman H. F. Chase.

WAR ASSETS CORPORATION
per A. ?

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **Cessna Aircraft Compa**

Type **Crane T50** Maker's No. **1481**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	41' 11"	
Length o/a in feet	32' 9"	
Height o/a in feet	9' 11"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 3544 POUNDS

Total weight authorized (fully loaded) in lbs 5100 lbs. Air speed 140 miles per hour CRUISING.

EQUIPMENT—(Give number and type).

1. Instruments 1 GYRO ARTIFICIAL HORIZON. 1 DIRECTIONAL GYRO. 2 TURN AND BANK. 2 AIR SPEED INDICATORS. 1 ALTIMETER 1 RATE OF CLIMB. 2 R.P.M. INDICATORS. 2 COMBINATION GAUGES. (GAS, OIL PRESSURE GAUGES TWO OIL TEMP. GAUGE)
2. Gauges 1 AMMETER 1 AIR TEMP. 2 CARBURETOR TEMP. 1 COMPASS. 1 FUEL AIR PRESS. 2 MANIFOLD PRESSURE GAUGES. 1 SUCTION GAUGE. 2 FUEL CONTENTS. 1 CYLINDER HEAD.
3. Lights PORT AND STARBOARD NAVIGATION LIGHT. IDENTIFICATION UPPER AND LOWER. PORT AND STARBOARD LANDING.
4. Signals
5. Fire Extinguishers 1 PYRENE 1 QUART AND 1 7½ lb. CO_2.
6. Parachutes NONE.
7. Tools STANDARD TOOL KIT.
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type JACOBS L4MB.	4828	4621		
Pusher or Tractor TRACTOR.				
Right or Left Hand LEFT HAND.				
No. of Cylinders SEVEN.				
H.P. MAXIMUM 225 at 2000 R P M FULL THROTTLE.				
Bore 5.25 in. 133.35 mm.				
Stroke 5 INCHES. 127.0 mm.				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 14/1/46 DAY FLYING ONLY.

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Weighed empty landplane at XII 14/1/46 3836 lbs

Send DIAR Vancouver copy of your letter when issuing

Date 14/1/46

Signature C.F.—BMM

Registration approved and Registration Mark C.F.—BMM allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

10 2413 9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration X $5.00

Certificate of Airworthiness X $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Donald Revie

Date of Application DECEMBER 22ND. 1945

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
DONALD REVIE	BOX 244, CRANBROOK, B.C.	BRITISH.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

COMMERCIAL.

Usual Station CRANBROOK, B.C.

Date of manufacture or reconstruction

Crew required ONE.

Accommodation for what number of passengers FOUR.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

11

2
6-44

Edmonton, Alberta, Jan. 19, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Cessna T50 CF-BMM Maker's Serial No. 1481	1-445

TRANSPORT-RECORDS
JAN 23 A.M.
5808-B13-13

Controller of Civil Aviation,
Ottawa.

1. The subject aircraft was inspected at Edmonton the 14th instant and weighed empty as a Landplane at 3836 lbs.

AIRCRAFT: Time since new: 3569:20
Time since overhaul: 1063:30

ENGINES: Jacobs L4MB No. 4828
Time since new: 746:15
Time since overhaul: 105:35

A35807

Jacobs L4MB No. 4621
Time since new: 1276:15
Time since overhaul: 105:35

2. The Aircraft and Engines were also inspected by B & D Air Engineer, Stan Green, in accordance with Information Circular T/22/38.

3. We are attaching herewith for your approval please, application in duplicate for registration, commercially, of the subject aircraft in the name of Donald Revie, Box 244, Cranbrook, B.C. together with Sales Order No. 26153 to Mr. Revie from the War Assets Corporation and Certificate covering the serviceability of this Surplus Military Aircraft signed by Mr. S. N. Green.

Send Certs to Jane

4. Fee of $10.00 has been received, and will be forwarded to Headquarters under Receipt No. 29291, Folio No. 3.

5. We recommend that formal Certificates be issued Mr. Revie covering this aircraft, and that a copy of your covering letter to Mr. Revie be forwarded to the D.I.A.R. Vancouver.

3360(R)
866(A)

K. F. Saunders,
A/D.I.A.R.

KFS/M
cc: DIAR Vancouver

14

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3360

NATIONALITY AND REGISTRATION MARKS CF-BMM

1. Type and description	Cessna T-50
2. Name and address of constructor	Cessna Aircraft Co., Wichita, Kansas, U.S.A.
3. Constructor's serial number	1481
4. Name of owner	Donald Revie
5. Address of owner	Box 244, Cranbrook, B.C.
6. Nationality of owner	British
7. Usual station of aircraft	Cranbrook, B.C.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 14th day of January, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BMM and is of Canadian nationality.

Given at Ottawa this 6th day of February, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

15

Ottawa, Feb. 6, 1946

1-445 Cessna T-50, CF-BMM 5008-B13-13

REGISTERED :

District Inspector, Air Regulations,
430 Federal Bldg.,
Vancouver, B.C.

Enclosed please find Certificate of Registration No. 3360 and Certificate of Airworthiness No. 866, together with Engine and Journey and Aircraft Log Books, for the above-mentioned aircraft, owned by Mr. Donald Revie, Box 244, Cranbrook, B.C.

(S. Graham),
Superintendent, Air Regulations.

Encls.

Mtce Insp.
9-2-46 D.

TMS/2C

16

Ottawa, February 13th, 1946.

1-445 Cessna T50 aircraft CF-BMM 5008-B13-13

AIR MAIL

District Inspector, Air Regulations,
402 Blowey-Henry Bldg.,
Edmonton, Alta.

1. With reference to your letter of the 19th ultimo enclosing application for Certificate of Registration and Certificate of Airworthiness for the above-noted aircraft in the name of Donald Revie, Cranbrook, B.C., it is noted under Paragraph 2 that you state aircraft and engines were inspected by 'B' and 'D' Air Engineer Stan Green in accordance with Information Circular No.T/22/38.

2. Will you kindly advise what action Air Engineer Green took to ensure that the requirements of Addendum No.1 to Information Circular No.T/22/38 have been complied with. This refers to Paragraphs 3 and 4 as it is noted that the engines have a total service life of 105 hours 35 minutes since last complete overhaul and were kept in storage beyond sixty days.

3. Kindly treat this matter as urgent.

(S. Graham),
Superintendent, Air Regulations.

c.c. D.I.A.R. VANCOUVER

COPY

17

WORK AND EXAMINATION REPORT OF CESSNA CRANE T50 AIRCRAFT CF BMM
(RCAF #7989)

Aircraft examined in detail as to condition and functioning of all components.
Several small ringworms in the covering removed. R.C.A.F. markings removed. complete aircraft given a new coat of dope and registration letters affixed.
Both engines examined for internal corrosion and given a complete service.
Propellers removed to examin crankshafts for corrosion.
Engine mounts and installations examined.
All service work on this aircraft and engines was carried out by R.C.A.F. personnel under the supervision of F/L Gardner, Engineering Officer #10 RD Calgary.

Aircraft and engine log books examined and found in good order.

Record of Aircraft and Engine times submitted to the District Inspector, Air Regulations, Edmonton.
Duplicate copies of Form A1-6 issue 3 attached.

S. N. Green
Air Engineer D
Feb. 16, 1946.

18

COPY.

1812-30th Ave. S.W.,
Calgary, Alta.
Feb. 16, 1946.

J. J. Currie, Esq.,
Resident Inspector A.I.D.,
Edmonton, Alta.

Dear Sir:

Enclosed please find forms Al-6 issue 3 and work and examination report of Cessna Aircraft CF-BMM.

At the time the servicing, etc. of this aircraft and engines was been carried out I went over to #10 RD and examined them in detail. I also examined the aircraft when the work had been completed and found the aircraft and engines airworthy.

Trusting the enclosed will be satisfactory, I am

Yours very truly,

S. N. Green.

AI-6 Issue 3

19

INSPECTION RELEASE CERTIFICATE

Aero Engines, Propellers, Relevant Accessories, and any Parts thereof Assembled or Overhauled in Canada.
(Including special engine parts overhauled by the engine manufacturer for the Canadian agent).

I hereby certify that the aero engines, propellors, relevant accessories or parts of any of them covered by the Report of Materials Shipped or Packing Sheet No.....,have been assembled or overhauled under my supervisory inspection or, in the case of special engine parts, by the engine manufacturer on our behalf. All fittings and adjustments have been made and all tests carried out in accordance with the manufacturers' instructions.

Documentary evidence in our possession substantiates that:-

(a) All new parts fitted were obtained from a reliable source and conform to the manufacturers' drawings and specifications.

(b) Engine and propellor parts are constructed to approved designs, and no parts of unknown history have been fitted.

Signed _____ Date _____
Chief Inspector

This is to certify that, to the best of my knowledge and belief, the component (s) described herein is (are) airworthy and satisfactory for installation in airworthy aircraft.

Signed S.N. Green Date Jan 17th 1946
Air Engineer "D" Licence No. ...A.790...

From the documentary evidence available, it is considered that the component (s) described herein can be accepted as being eligible for use in airworthy aircraft.

Signed J.J. Curtis Date FEB 18 1946
Resident Inspector A.I.D.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING CANADA

Jacobs L4MB engine # 4621 installed in Cessna Aircraft (Set # 1481) CF-BIMM R.C.A.F. # 7989

AI-6 Issue 3

20

INSPECTION RELEASE CERTIFICATE

Aero Engines, Propellers, Relevant Accessories, and any Parts thereof Assembled or Overhauled in Canada.
(Including special engine parts overhauled by the engine manufacturer for the Canadian agent).

I hereby certify that the aero engines, propellors, relevant accessories or parts of any of them covered by the Report of Materials Shipped or Packing Sheet No.....have been assembled or overhauled under my supervisory inspection or, in the case of special engine parts, by the engine manufacturer on our behalf. All fittings and adjustments have been made and all tests carried out in accordance with the manufacturers' instructions.

Documentary evidence in our possession substantiates that:-

(a) All new parts fitted were obtained from a reliable source and conform to the manufacturers' drawings and specifications.

(b) Engine and propeller parts are constructed to approved designs, and no parts of unknown history have been fitted.

Signed _____ Date _____
Chief Inspector

This is to certify that, to the best of my knowledge and belief, the component (s) described herein is (are) airworthy and satisfactory for installation in airworthy aircraft.

Signed S. H. Green Date Jan 17th 1946
Air Engineer "D" Licence No. A.7.C.J.A.

From the documentary evidence available, it is considered that the component (s) described herein can be accepted as being eligible for use in airworthy aircraft.

Signed J. J. Currie Date FEB 18 1946
Resident Inspector A.I.D.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING CANADA

Jacobs L4MB engine #4828 installed in Cessna Aircraft (Ser #1481) CF-BMM R.C.A.F. # 7989.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 1 2
6-44

Edmonton, Alberta, February 18, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B13-13	Cessna T50 aircraft CF-BMM	1-445

TRANSPORT-RECORDS
FEB 20 A.M.
File 5008-B13-13

AIR MAIL

Controller of Civil Aviation,
OTTAWA.

1. Reference yours of the 13th instant, herewith forms A16 Issue 3, and copies of letters from B and D Engineer Stan Green, covering the subject aircraft and engines, which we trust will prove satisfactory.

K. F. Saunders,
A/District Inspector,
Air Regulations.

A39255

KFS/W
Encls.

9

22

5008- B13-13.

420 Federal Bldg.,
Vancouver, B.C.,
February 21st, 1946.

Donald Revie, Esq.,
Box 244,
Cranbrook, B.C.

Dear Sir,

1. Acknowledging receipt of your letter dated the 18th instant, it is requested, please, that you forward a letter requesting the issuance of a Canadian Export Certificate, advising us of the name of the purchaser in the United States.

2. Attached hereto is a letter addressed to our Headquarters which is self-explanatory reply, other necessary steps will be taken.

3. Should you sell your aircraft to the purchaser in Spokane, there is no objection to your delivering the aircraft personally.

Yours very truly,

R. C. G.

(R. Carter Guest)
District Inspector, Air Regulations.

RCG/GS.
Encl.

cc:- C.C.A.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

24

2
6-44

Vancouver, B.C., February 21st, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B13-13.	Cessna T.50 aircraft - CF-BMM, Donald Revie, Cranbrook, B.C.	5008-B13-13.

A40130

TRANSPORT-RECORDS
FEB 27 P.M.
File 5008-B13-13

Controller of Civil Aviation,
O t t a w a.

1. Attached please find copy of a letter from Mr. Donald Revie of Cranbrook, B.C., which is self-explanatory.

2. May we be advised, please, if it is permissible to export this Cessna T.50 aircraft CF-BMM into the United States and if the deal is consummated will there be any objections to the issuance of a Canadian Export Certificate.

R. Carter Guest

(R. Carter Guest)
District Inspector, Air Regulations.

RCG/GS.
Encl1.
cc:- Donald Revie.

COPY

23

REVIE'S FREIGHT LINES.

Cranbrook, B.C.,
February 18th, 1946.

Mr. Carter Guest,
420 Federal Bldg.,
Vancouver, B.C.

Dear Sir,

Would you please advise me if it is in order to sell my Cessna Crane aircraft CF-BMM to a friend of mine in the U.S.A. What forms are required for a bill of sale, etc. and can I deliver the ship to Spokane.

My licence has been endorsed for this ship.

An early reply would be appreciated.

Yours truly,

(signed) "Don Revie"

GTT/ZS Ottawa, March 2nd, 1946.

5008-B13-13 Cessna T50 5008-B13-13

AIR MAIL

District Inspector, Air Regulations,
420 Federal Building,
Vancouver, B.C.

1. In reply to your letter dated February 21st, this Headquarters is not aware of any restrictions on the export of used aircraft to the United States but as in this case the aircraft was manufactured by the Cessna Aircraft Company, Wichita, Kansas, this Department would not be prepared to issue a Certificate of Airworthiness for Export but would be prepared to state if so requested by the U.S. Civil Aeronautics Authority that at some given date a Canadian Certificate of Airworthiness was in force.

2. Since the Cessna Crane CF-BMM is a Canadian registered aircraft, there would be no objection to a Canadian pilot flying this aircraft into the United States subject to compliance with the usual Customs and Immigration requirements.

(S. Graham),
Superintendent, Air Regulations.

36

5008-B13-13

420 Federal Bldg.,
Vancouver, B.C., Feb. 19th, 1947

REGISTERED.

71930

Donald Revie, Esq.,
Cranbrook, B.C.

TRANSPORT - RECORDS
FEB 24 A.M.
File 5008-B13-13

Dear Sir:

This letter will serve as sixty days' extension to Certificate of Registration No. 3360 and Certificate of Airworthiness No. 866 for Cessna T.50, Serial No. 1481, CF-BMM. This extension will expire April 19th, 1947.

An inspection of this aircraft will be made on our next inspection trip to your district, at which time Certificates of Registration and Airworthiness may be renewed.

Certificate of Registration No. 3360 and Certificate of Airworthiness No. 866 are returned herewith.

noted

Yours truly,

District Inspector Air Regulations

W.
Encls. 2
Cc-CCA

5008-B13-13

27

420 Federal Bldg.,
Vancouver, B.C., April 21st, 1947

8061

Donald Revie, Esq.,
Cranbrook, B.C.

TRANSPORT - RECORDS
APR 25 P.M.
5008-B13-13
File

Dear Sir:

Temporary extension of Certificates of Registration and Airworthiness for your Cessna T.50 CF-BMM is hereby granted--to be not valid after June 20th, 1947.

An inspection of this aircraft will be carried out in the near future.

Yours truly,

District Inspector of Air Regulations

W.
Co.CCA.

Vancouver, B. C., Dec. 23rd 1946.

CF-BMM - Cessna T50 - Serial No. 1481 5008-B13-13

28

TRANSPORT-RECORDS
MAY 13 P.M.
File 5008-B13-13

D.I.A.R.,
Vancouver, B. C.

A 4760

1. Repairs to this aircraft are now completed and have been inspected and are considered satisfactory.

2. This aircraft was recently damaged during emergency landing enroute from Cranbrook to Vancouver. Copy of Log Book Entry covering repairs to aircraft, by Brisbane Aviation Company herewith.

(N. C. Terry),
Resident Inspector, A.I.D.

NCT/RA
cc:cca
cc:cae
Encl. 1

Edmonton, Alberta, May 10, 1947. 29

5008-B13-13 Cessna T50 - CF-BMH - Serial No. 1481 1-445

TRANSPORT-RECORDS
MAY 13 P.M.
File 5008-B1 3-13

District Inspector, Air Regulations,
Vancouver.

A 4764

1. Reference yours of May 8th, 1947, you are in error, we believe, when you think that we should have checked for AD-722-4 at the time of our inspection, as the directive is dated January 31, 1947, how could we.

K. F. Saunders,
District Inspector,
Air Regulations.

KFS/p

cc: Hqs.✓

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3360

NATIONALITY AND REGISTRATION MARKS CF-BMM

1. Type and description	Cessna T-50
2. Name and address of constructor	Cessna Aircraft Co., Wichita, Kansas, U.S.A.
3. Constructor's serial number	1481
4. Name of owner	Donald Revie
5. Address of owner	Box 244, Cranbrook, B.C.
6. Nationality of owner	British
7. Usual station of aircraft	Cranbrook, B.C.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 14th day of January, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BMM and is of Canadian nationality.

Given at Ottawa this 6th day of February, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

1-445

402 Blowey-Henry Bldg.,
Edmonton, Alberta,
May 7, 1947.

Leon J. McKenna, Esq.,
124 Drake Hotel,
Regina, Sask.

Dear Sir:

Pending issue by our Headquarters of formal Certificates, this letter constitutes your temporary Certificate of Registration and Certificate of Airworthiness for Cessna T50 aircraft CF-BMM, to be not valid after June 30, 1947, unless extended or renewed.

The aircraft must be flown within the following conditions:

VFR - day flying only
Landplane empty weight.....3836 lbs.
fuel.....720 lbs.
Oil.....75 lbs.
Crew.....170 lbs.
Landplane commercial load..... 299 lbs.
Maximum total weight authorized as Landplane.....5100 lbs.
Minimum crew necessary.....One
Accommodation for Five persons (including crew).
Total weight authorized does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made.
Commercially

This aircraft may not be flown commercially until you are in possession of a Charter as issued by the Air Transport Board and an Operating Certificate as issued by this Department.

If radio apparatus is installed, same must be licenced by the Radio Division of this Department and

Pilot must be in possession of a Certificate of Proficiency in Radio, otherwise equipment must be rendered inoperative.

Yours truly,

R. S. Keetley,
Asst. Inspr. Air Regulations.
for D.I.A.R.

RSK/M
Ch

All of which goods and personal chattels are now in the possession of
and are situate, lying and being in,
upon or about
in the of
in the County of in the Province of British Columbia.

And all the right, title, interest, property, claim and demand whatsoever, both at law and in equity, otherwise howsoever, of the said Grantor, of, in, to, and out of the same, and every part thereof:

To have and to hold the said assigned goods and personal chattels and each and every of them and every part thereof, with the appurtenances, and all the right, title and interest of the said Grantor thereto and therein, as aforesaid, unto and to the use of the said Grantee, to and for his sole and only use Forever:

And the said Grantor **Doth** hereby Covenant, Promise and Agree with the said Grantee, in manner following, that is to say:

That the said Grantor is now rightfully and absolutely possessed of and entitled to the said hereby assigned goods and personal chattels, and every of them, and every part thereof: **And** that the said Grantor now has in himself good right to assign the same unto the said Grantee, in manner aforesaid, and according to the true intent and meaning of these presents; **And** that the said Grantee shall and may from time to time, and at all times hereafter, peaceably and quietly have, hold, possess and enjoy the said hereby assigned goods and personal chattels and every of them, and every part thereof, to and for his own use and benefit without any manner of hindrance, interruption, molestation, claim or demand whatsoever, of, from or by him, the said Grantor, or any person or persons whomsoever; And that free and clear, and freely and absolutely released and discharged, or otherwise at the cost of the said Grantor, effectually indemnified from and against all former and other bargains, sales, gifts, grants, titles, charges and incumbrances whatsoever:

Form No. 13. Bill of Sale (Absolute). 3-47. Clarke & Stuart Co. Ltd., Law Printers and Stationers, Vancouver, B.C.

"A"

This Indenture

made the 26th day of April in the year of our Lord one thousand nine hundred and forty-seven

In Pursuance of the "Bills of Sale Act"

Between

DONAID REVIE, of the City of Cranbrook, in the Province of British Columbia, Manager

(hereinafter called the Grantor) of the First Part

Insert full Names, Addresses and Occupations of Parties

AND

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ LEON J McKENNA of the City of Regina, in the Province of Saskatchewan

(hereinafter called the Grantee) of the Second Part

Whereas, the Grantor is possessed of the goods and personal chattels hereinafter set forth, described and enumerated, and hath contracted and agreed with the Grantee for the absolute sale to him of the same, upon the terms and considerations hereinafter set forth.

Now this Indenture Witnesseth, that in pursuance of the said Agreement, and in consideration of the sum of Seventeen Hundred Dollars ($1700.00) of lawful money of Canada, paid by the said Grantee to the said Grantor, at or before the sealing and delivery of these presents (the receipt whereof is hereby acknowledged), the said Grantor **hath bargained,** sold, assigned, transferred and set over, and by these presents **Doth bargain,** sell, assign, transfer and set over unto the Grantee:

All those the said goods and personal chattels described and enumerated as follows:

Cessna Crane T.50 Aeroplane, Registration No. CF-BMM equipped with two Jacobs Engines No. 1-4MB. port Engine Serial No. 4621, Starboard Engine No. 4828

"BILLS OF SALE ACT"

COUNTY OF
TO WIT:

I, BERNARD MICHAEL McKENNA of the City of Regina, in the Province of Saskatchewan ~~in the Province of British Columbia,~~ Manager of the Grantee in the foregoing Bill of Sale named, make oath and say: That the sale therein made is bona fide and for valuable consideration, namely, the consideration of the sum of Seventeen Hundred Dollars dollars; as set forth in the said Bill of Sale; and not for the purpose of enabling ~~the said Grantee~~ to hold the goods and chattels mentioned therein as against the creditors of the said Grantor; and that said Bill of Sale is not given for the purpose of protecting the goods and chattels mentioned therein against the creditors of the Grantor or of preventing such creditors from obtaining payment of any claim against the Grantor.

Sworn before me at the City of Cranbrook in the Province of British Columbia, this 26th day of April A.D. 1947

B. M. McKenna

R E Read

A Notary Public in and for the Province of British Columbia.
~~A Commissioner for taking affidavits within British Columbia.~~

Dated 194

—TO—

Bill of Sale

(ABSOLUTE)

Clarke & Stuart Co. Ltd., Law Printers and Stationers
Vancouver, B.C. Form No. 12

"BILLS OF SALE ACT"

COUNTY OF
TO WIT:

I, RALPH EMERSON READ of the City of Cranbrook, British Columbia make oath and say as follows:

1.—That the paper-writing hereunto annexed, and marked "A", is a true copy of a Bill of Sale and every Schedule or Inventory thereto annexed, or therein referred to, and of every attestation of the execution thereof, as made and given and executed by Donald Revie

2.—That the Bill of Sale was made and given by the said Donald Revie on the 26th day of April, in the year of our Lord one thousand nine hundred and forty-seven

3.—That I was present and did see the said Donald Revie, in the said Bill of Sale mentioned, and whose name is signed thereto, sign and execute the same on the said 26th day of April in the year aforesaid.

4.—That the said Donald Revie at the time of making and giving the said Bill of Sale, resided and still resides at Cranbrook, B. C. and then was and still is a Merchant

5.—That the name Ralph Emerson Read set and subscribed as the witness attesting the due execution thereof, is of the proper handwriting of me, this deponent, and that I reside at Cranbrook, B. C. and am a Solicitor

Subscribed to and sworn before me this 26th day of April A.D. 1947 at the City of Cranbrook in the Province of British Columbia.

R E Read

R E Read

A Notary Public in and for the Province of British Columbia.
~~A Commissioner for taking affidavits within British Columbia.~~

...d moreover, that the said Grantor, and all persons rightfully claiming, or to claim, any estate, right, title, or interest of, in or to the said hereby assigned goods and personal chattels and every of them, and every part thereof, shall and will from time to time, and at all times hereafter upon every reasonable request of the said Grantee, but at the cost and charges of the said Grantee, make, do and execute, or cause or procure to be made, done and executed, all such further acts, deeds and assurances for the more effectually assigning and assuring the said hereby assigned goods and personal chattels unto the said Grantee, in manner aforesaid, and according to the true intent and meaning of these presents as by the said Grantee or his Counsel shall be reasonably advised or required.

Wherever the singular or masculine are used throughout this Indenture, the same shall be construed as meaning the plural or the feminine or body corporate or politic where the context or the parties hereto so require, and shall include the parties, hereto, their and each of their heirs, executors, administrators, successors and assigns, respectively.

In Witness Whereof the Grantor has hereunto set his hand and seal the day and year first above written.

Signed, Sealed and Delivered
IN THE PRESENCE OF

Donald Reece

SIG. OF WITNESS: Ralph Emerson Read

ADDRESS Cranbrook BC

OCCUPATION Solicitor

This is the paper-writing marked "A" referred to in the Affidavit of Ralph Emerson Read sworn before me this 26th day of April A.D. 1947

C Reward

A Notary Public in and for the Province of British Columbia.
~~A Commissioner for taking affidavits within British Columbia.~~

"BILLS OF SALE ACT"

ACKNOWLEDGMENT OF OFFICER OF A CORPORATION

I, ...of.....

..... of the.....
(State whether President, Secretary or Director) (Name of Corporation)

make oath and say as follows:—

1. That the paper-writing hereto annexed and marked "A" is a true copy of a bill of sale, and of *(or, when an original bill of sale is filed,* is a bill of sale together with) every schedule or inventory thereto annexed or therein referred to as made, given, and executed by the said.....
(Name of Corporation)

2. That I, as.....of the said Corporation, being duly authorized
(State whether President, Secretary or Director)
so to do, did affix the seal of the said Corporation to the said bill of sale, did sign the said bill of sale as .....of the said Corporation, and did duly deliver the said bill of sale
(State whether President, Secretary or Director)
as the act and deed of the said Corporation on the.....day of.....194....

3. That the head office or chief place of business of the said Corporation in British Columbia is situate at .....in the said Province.
[State fully the whereabouts of the head office or chief place of business, such as street and number (if any).]

Subscribed to and sworn before me this
.....day of.....194....

.....
A Notary Public in and for the Province of British Columbia.
A Commissioner for taking affidavits within British Columbia.

.....

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Cessna, Wichita, Kansas. U. S. A.

Type T-50 Cessna Maker's No. 1481

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet 41' 11"		
Length o/a in feet 32' 9"		
Height o/a in feet 9' 11"		

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 3836

Total weight authorized (fully loaded) in lbs 5100 Air speed 125 miles per hour

EQUIPMENT—(Give number and type)

1. Instruments Full Blind flight panel, consisting of AirSpeed Sensitive Altimeter, artificial horizon, direction gyro, turn & bank Indicator, Rate of climb indicator;
2. Gauges Two of each of following: Oil Temp. guages, oil pressure guages, fuel analizer, cylinder head temp. carb. temp. fuel pressure, gasoline guages, manifold pressure, cylinder head temp. R.P.M. indicators. 1 suction guage;
3. Lights Navigation, cockpit and landing lights.
4. Signals Morse code mk 2
5. Fire Extinguishers C.O. 2 with lines to each engine and Pyrene hand.
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Winter front, engine covers.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Jacobs L 4 M B	Jacobs L 4 M B		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	R Hand	R Hand		
No. of Cylinders	7	7		
H.P.	225	225		
Bore	5¼"	5¼"		
Stroke	5"	5"		

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on To be inspected

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date 6.5.47 Signature [illegible]

Registration approved and Registration Mark C.F. BHM allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

241.3

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Leon J McKenna

Date of Application April 30, 1947.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
LEON J McKENNA	124 Drake Hotel, Regina, Sask.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Commercial

Usual Station Regina, Sask.

Date of manufacture or reconstruction

Crew required Pilot

Accommodation for what number of passengers four

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

$5.00 fee rec'd. f~lio #2, Rec. #1275.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

Edmonton, Alta. May 14, 1947
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B13-13	Cessna T-50 CF-BMM Serial No. 1481	1-445

TRANSPORT-RECORDS
MAY 19 P.M.
File 5008-B13-13

REGISTERED - AIR MAIL

Controller of Civil Aviation,
Ottawa.

A 5532

1. Herewith, for your approval please, application in duplicate for:

Registration.....,
Re-registration..... x
Commercially..... x
Privately.....

of the subject aircraft in the name of.....Mr. Leon J. McKenna of Drake Hotel, Regina, Sask.

2. Attached also, the following documents in connection with the application:

(a) Bill of Sale from Donald Revie to Mr. McKenna

(b) Weight and Balance report Nil
Customs' Declaration B1 Nil
Copy of our temporary C of R and C of A issued this aircraft dated May 7/47
Inspection report dated.. Nil - inspection to be carried out later
Weighing report dated Nil
C of R No...3360....for Cancellation
C of A No....866....for change of name
Work Report covering Engine No. Nil
Work report covering aircraft... Nil
Release Certificate A1-1 Nil
Release Certificate AI-6 Issue 3 Nil

5715(R)
866(A)
Log books sent

3. Fee of $..5.00.....has been received and will be forwarded to H.Q. under Folio #..2.....Receipt No..1275....

4. We recommend that formal Certificates be issued as applied for please and forwarded:

(a) Direct to the Owner.... No
(b) Direct to this district office to be handed over to the owner after our satisfactory inspection. Yes

Effective Request May 20/47

K. F. Saunders,
D.I.A.R.

KFS/ M Encls.

7EM

2462A
8-41

14

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5715

NATIONALITY AND REGISTRATION MARKS CF-BMM

1. Type and description	Cessna T-50
2. Name and address of constructor	Cessna Aircraft Company, Wichita, Kansas, U.S.A.
3. Constructor's serial number	1481
4. Name of owner	Leon J. McKenna,
5. Address of owner	124 Drake Hotel, Regina, Sask.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Regina, Sask.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 7th day of May 1947., in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BMM and is of Canadian nationality.

Given at Ottawa this 22nd day of May 1947.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

/BM

15

Ottawa, Ontario. May 22nd, 1947.

Cessna T-50 CF-BMM 5008-B13-13

REGISTERED

District Inspector, Air Regulations,
402 Blowey-Henry Bldg.,
Edmonton, Alta.

1. Enclosed please find Certificates of Registration No. 5715 and Airworthiness No. 866 for the above-mentioned aircraft owned by Mr. Leon J. McKenna.

2. The Certificates should be forwarded to the owner after a satisfactory inspection of the aircraft has been carried out and you have endorsed the Certificate of Airworthiness.

(S. Graham),
Superintendent, Air Regulations.

Encls.

/RM

2462A 8-41 16

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5715

NATIONALITY AND REGISTRATION MARKS CF-BMM

1. Type and description	Cessna T-50
2. Name and address of constructor	Cessna Aircraft Company, Wichita, Kansas, U.S.A.
3. Constructor's serial number	1481
4. Name of owner	Leon J. McKenna,
5. Address of owner	124 Drake Hotel, Regina, Sask.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Regina, Sask.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 7th day of May 1947., in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BMM and is of Canadian nationality.

Given at Ottawa this 22nd day of May 1947.

H. Stattuss

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

17

1-445

402 Blowey-Henry Bldg.,
Edmonton, Alberta,
June 26, 1947.

Mr. Lucien A. Cugnet,
27 Duncan Street,
YORKTON, Sask.

Dear Sir:

Pending issue by our Headquarters of formal Certificates, this letter constitutes your temporary Certificate of Registration and Certificate of Airworthiness for:

Type: Cessna T50
Serial No.: 1481
Registration Marks: CF-BMM

This authority is issued for:

VFR
Day flying only .....
Weights:
Fuel.....720 lbs.
Oil..... 75 lbs.
Crew.....170 lbs.

	Empty	Commercial	Gross
Landplane	3836 lbs.	299 lbs.	5100 lbs.
Seaplane			
Skiplane			

Minimum number of crew.....One
Number of passengers permitted...Four
Commercial No
Private Yes
Pilot must be in possession of a valid Air Pilot's Certificate.
This authority to be not valid after...August 25, 1947.....unless extended or renewed.

If aircraft is registered commercially you must be in possession of a Charter as issued by the Air Transport Board, and an Operating Certificate as issued by this Department. If aircraft is registered privately, you are not permitted to operate same for hire or for any reward.

This authority does not constitute your permission to operate Radio Apparatus if installed.

Yours very truly,

K. F. Saunders,
District Inspector,
Air Regulations.

KFS/M
Ch

18

BILL OF SALE

REGINA, Sask.,
June 7th, 1947.

THIS IS TO CERTIFY that I, L. A. Cugnet of 27 Duncan Street, Yorkton, Sask., have today purchased from the Canadian Aircraft Company, Room 124 Drake Hotel, Regina, Sask., Cessna Crane T-50, CF-BMM, for which I have paid in full by cheque the sum of $900.00, (Nine Hundred Dollars).

Canadian Aircraft Company
L. J. McKENNA
P.O. Box 13 - REGINA, Sask.

L. J. McKenna
Per H. I. Hindle (Sgd.)

L. A. Cugnet (Sgd.)
27 Duncan Street,
Yorkton, Sask.

This is to certify that the above is a true and exact copy of the original Bill of Sale.

D. Racusak
.....

Room 120,
Drake Hotel,
Regina, Sask.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..... made by Cessna, Wichita, Kansas

Type Cessna Crane T-50 Maker's No. ~~1621~~ 1481 m CF-BMM

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet 41' 11"		
Length o/a in feet 32' 9"		
Height o/a in feet 9ft. 11"		

Cubic Capacity (of Airship or Balloon) .....

Weight equipped, but without load, fuel, or oil 3836 lbs.

Total weight authorized (fully loaded) in lbs 5100 Air speed 125 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 1 suction guage, cyclinder temp. guage. 2 gas guages, 2 manifold pressure guages, 2 car. temp guages, 2 fuel pressure guages, outside temp. guage. 2 oil guages. 2 fuel ratio guages, 2 r.p.m. guages. Full blind flying instrument panel.
2. Gauges .....
3. Lights Landing lights, retactible, nagigation lights.
4. Signals Morse code
5. Fire Extinguishers CO 2 direct to engine and Pyrene hand extinguisher
6. Parachutes Nil
7. Tools .....
8. Other Equipment No radio

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Jacobs	Jacobs		
Pusher or Tractor	Tractor	Tractor		
Right or Left Hand	Right	Right		
No. of Cylinders	Seven	Seven		
H.P.	225	225		
Bore	5¼	5¼		
Stroke	5	5		

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

We recommend that Certificates be issued as applied for please and forwarded direct to Owner.

Date June 26, 1947

Signature G W Pinder D.I.A.R.

Registration approved and Registration Mark C.F. - B M M allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

19

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....

Date of Application June 19th, 1947.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
L. A. CUGNET	27 Duncan St., YORKTON, Sask.	Canadian
(Cugnet, Lucien Augest)		

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....

Private

Usual Station Yorkton, Sask.

Date of manufacture or reconstruction 24/11/43

Crew required Pilot

Accommodation for what number of passengers Pilot and four passengers with suitable gas reduction.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

$5.00 fee rec'd
folio # 31
rec. # 26539

Edmonton Alta. June 26/47

.....inspection.

per K. F. Saunders,
District Inspector,
Air Regulations.

KFS/M
Encls.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

21 2 8-45

Edmonton, Alta. June 26, 1947
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B13-13	Cessna T50 CF-BMM Serial No. 1481.	1-445

TRANSPORT RECORDS
JUN 30 A.M.
File 5008-B13-13

A10303

AIR MAIL - Registered

Controller of Civil Aviation,
Ottawa.

1. Herewith, for your approval please, application in duplicate for:

Registration..... N.A.
Re-registration.....Yes
Commercially.....No
Privately.....Yes

of the subject aircraft in the name of.....Mr. Lucien Augest CUGNET of 27 Duncan Street, Yorkton, Sask.

2. Attached also, the following documents in connection with the application:

(a) Bill of Sale from L. J. Mckenna to Mr. Cugnet. (true copy)

(b) Weight and Balance report N.A.
Customs' Declaration B1 N.A.
Copy of our temporary C of R and C of A issued this aircraft dated June 26/47 yes.
Inspection report dated.. N.A.
Weighing report dated N.A.
C of R No..5715.....for Cancellation
C of A No..866.....for change of name
Work Report covering Engine No. N.A.
Work report covering aircraft... N.A.
Release Certificate A1-1 N.A.
Release Certificate AI-6 Issue 3 N.A.
The requirements of CAA Airworthiness Directive No. 722-4 have been incorporated.

5879(R) 866(A)

3. Fee of $..5.00.....,has been received and will be forwarded to H.Q. under Folio #...3....Receipt No..26539:..

Log Book

4. We recommend that formal Certificates be issued as applied for please and forwarded:

(a) Direct to the Owner.... Yes
(b) Direct to this district office to be handed over to the owner after our satisfactory inspection. N.A.

CD 2x

CLASS OF SERVICE	
Full Rate	
Day L[illegible]	X
Night M[illegible]age	
Night Letter	
Evening and Sunday Message	

Please mark an X opposite the class of service desired.

CANADIAN PACIFIC TELEGRAPHS

World Wide Communications

W. D. NEIL, GENERAL MANAGER OF COMMUNICATIONS, MONTREAL

CHECK
22
TIME FILED
STANDARD TIME

Send the following message, subject to the conditions on the back thereof, which are hereby agreed to.

CAR P.A.

EDMONTON ALBERTA JUNE 26/43

TRANSPORT-RECORDS
JUN 30
5008-B13-13
File

PILOT H F W MERCER
REGINA SASK

A10313

RETEL PROVIDING AIRCRAFT SIGNED FIT FOR FLIGHT BY COMPETENT PERSON AND YOUR PILOT'S CERTIFICATE VALID THIS YOUR TEMPORARY AUTHORITY FERRY CF DASH BAKER MARY MARY REGINA TO YORKTON VFR DAY FLYING NO PASSENGERS AND ON FLIGHT PLAN WITHIN TERMS AND CONDITIONS OF FORMAL CERTIFICATES THIS AUTHORITY NOT VALID AFTER THIRTIETH INSTANT

DISTRICT INSPECTOR AIR REGULATIONS

COLLECT

Our file: 1-445
H.Q. file: 5008-B13-13
copy to H.Q.

Sent.

/RM

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5879

NATIONALITY AND REGISTRATION MARKS CF-BMM

1. Type and description	Cessna T-50
2. Name and address of constructor	Cessna Aircraft Company, Wichita, Kansas, U.S.A.
3. Constructor's serial number	1481
4. Name of owner	Lucien August Cugnet,
5. Address of owner	27 Duncan St., Yorkton, Sask.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Yorkton, Sask.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 26th day of June 19 47, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BMM and is of Canadian nationality.

Given at Ottawa this 4th day of July 19 47.

Superintendent, Air Regulations.

ntion is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

ENGINES

18. Number installed: Two

19. Makes: Jacobs

20. Types: LAMB

21. International power of the engine or engines at

(each) (a) Sea Level 225 H.P. at 2000 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews { Number fitted Two Types ..... No. .....
Pitch ..... Diameter .....

25. Weight of aircraft empty (including water in the radiators): (a) Landplane 3836 lbs. (b) Seaplane ..... lbs. (c) Skiplane ..... lbs.

WEIGHT OF FUEL AND OIL

26. Fuel ..... 720 lbs.
(at 7·2 lbs. per gallon)
(a) Number of tanks Two
(b) Capacity of tanks 100 Imp. gals.

27. Oil ..... 75 lbs.
(at 9·0 lbs. per gallon)
(a) Number of tanks Two
(b) Capacity of tanks 8 Imp. gals.

28. Weight allowed for crew ..... 170 lbs.

29. Weight allowed for equipment, excluding wireless apparatus ..... lbs.

30. Weight of wireless apparatus ..... lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full ..... 299 lbs.

32. Maximum total weight authorized ..... lbs.
Landplane ..... 5100 lbs.
Seaplane ..... lbs.
Skiplane ..... lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane ..... Fifty-one hundred pounds .....
Seaplane .....
Skiplane .....

34. Minimum crew necessary ..... One .....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of 4.8 AHEAD OF 8.1 inches and ..... inches behind the prescribed datum. (Center line of the top of the front spar)

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2000 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2200 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated Jan. 14, 1946 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 6th day of February 19 46

Superintendent, Air Regulations.

Valid for day flying only

23

2462
9-89

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 866

(Heavier than air)

FIRST PART

(26.6.47) CUGNET, S.

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) ~~Revie (7.5.47) McKENNA,~~ H.P.
2. Christian name ~~Donald- Leon-J.~~ Lucien Augest
3. Address 27 Duncan St., Yorkton, Sask. ~~124 Drake Hotel, Regina, Sask.~~ ~~Box 844, Cranbrook, B.C.~~
4. Nationality British

NAME OF CONSTRUCTOR

5. Name Cessna Aircraft Company

NATIONALITY AND REGISTRATION MARKS

6. CF-BMM

DESCRIPTION OF AIRCRAFT

7. Type Cessna Series T-50 Constructor's No 1481
8. Place and year of construction of aircraft Wichita, Kansas, USA

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines Two
12. # Maximum number of persons to be carried (including crew) Five

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision a,b,c,d,& e
15. Maximum span (in flying position) 41' 11"
16. Maximum length (in flying position) 32'
17. Total height (with and without trolley in case of seaplanes) 9' 11"

Total weight authorised does not permit of carrying the total number of passengers unless a suitable reduction in the quantity of fuel is made

12

/MIM
/ZC

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Jan.14/47	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass	2 Oil Temperature Gauges
Altimeter	2 Oil Pressure Gauges
Airspeed Indicator	2 Revolution Indicators

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

First Aid Kit

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

/RM

Ottawa, Ontario. July 4th, 1947.

Cessna T-50 CF-BMM 5008-B13-13

REGISTERED

District Inspector,
Air Regulations,
402 Blowey-Henry Bldg.,
Edmonton, Alta.

1. Enclosed please find Certificate of Registration No. 5879 and Certificate of Airworthiness No. 866, for the above-mentioned aircraft owned by Mr. Lucien August Cugnet.

2. The Certificates should be forwarded to the owner after a satisfactory inspection of the aircraft has been carried out and you have endorsed the Certificate of Airworthiness.

16/7/47

(S. Graham),
Superintendent, Air Regulations.

Encls.

CAI-601

DEPARTMENT OF TRANSPORT

Civil Aviation Division

A12569

File No. 1-445
H.Q. file: 5008-B13-13
Place ...Edmonton.....

Date...July.15.....194.7..

TRANSPORT-RECORDS
JUL 18 A.M.
File 5008 B13 -13

TO: Superintendent, Air Regulations.

FROM: District Inspector.

SUBJECT: Aircraft Inspection Report.

Aircraft Type .....Cessna T50.....

Registration Markings .....CF-BMM.....

Private or Commercial .....Private.....

Date of Inspection .at Yorkton July 5/47...satisfactory..

Previous C. of A. Expires .....Jan. 14, 1947.....

Present C of R and Present C. of A. Expires .....July 4, 1948.....

Remarks .....C of R and C of A was forwarded to.....
owners this date after endorsement.
.....

.....

.....

.....

.....

Miss Jones
of P.A.

Noted
AI

K.V.P.
for K. F. Saunders.....
District Inspector.
Air Regulations.

KFS/M

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W. M. ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	X
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

TRANSPORT-RECORDS 27
JUN 13 P.M.
5008-B13-13
File

(COLLECT)

WINNIPEG MAN JUNE 9 1949

C WHITEHEAD
27 DUNCAN ST
YORKTON SASK

10792

RETEL THIS WIRE YOUR AUTHORITY FERRY CESSNA CF DASH BMM FROM YORKTON TO WEYBURN STOP NO PASSENGERS AND VFR CONDITIONS ONLY STOP REQUIRE PROOF OF OWNERSHIP FOR HARVARDS AND AUTHORITY OF OWNERS FOR RABBIT ALLEN TO FERRY SAME

FWB/LB
c.c. H.Q.
c.c. 5008-1

Fredw Bone

DISTRICT INSPECTOR AIR REGULATIONS

Noted
Ist

"IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS."

SENDER'S NAME AND ADDRESS (FOR REFERENCE ONLY)

SENDER'S TELEPHONE NUMBER

/BEK

April 20th, 1950.

Lapsed Certificate 5008-B15-15

Director of Public Buildings & Services.
WINNIPEG, Manitoba.

Attention: District Superintendent, Air Regulations.

1. Aircraft BHM Type Cessna T-50 Serial No. 1481
Registration No. [illegible] according to our records, lapsed during the year .

2. The last known address of the owner is
Lucien August Cugnet,
27 Duncan St.,
Yorkton, Sask.

3. Please investigate the disposal of this aircraft and the owner's intention re:

(a) is the aircraft to be used again,
(b) if not, the Certificates should be forwarded for cancellation,
(c) iif the Certificates are not available, a statement from the owner as to their loss.

4. This information is necessary to complete the records of this aircraft.

(C. T. Travers),
Superintendent, Air Regulations.

AC-5-96
11-49

11

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3.0 2 6-46

717 Dominion Public Bldg.,
Winnipeg, Manitoba. April 24, 1950
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Lapsed Certificate CF-BMM	5008-B13-13

3599

TRANSPORT - RECORDS
APR 27 A.M.
File 5008 - B13-13

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations

1. In reply to Headquarters' form letter AC-5-96 dated April 20, 1950, in connection with the Lapsed Certificate of the above noted aircraft, attached hereto please find copy of letter received from the registered owner in reply to our notification concerning the expiry date of the formal Certificate of Airworthiness.

2. The contents of this letter are considered self-explanatory.

Fred W Bone

per D. G. Joy
District Controller of Air Services

noted FWB.

FWB/DS
Encl.

2

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

R WHITE, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	
NIGHT MESSAGE	✓
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

Send the following message, subject to the terms on back hereof, which are hereby agreed to

COLLECT

WINNIPEG MANITOBA MAY 10 1952

MR J H DALEN
C/O L CUGNET
MELVILLE SASKATCHEWAN

07746

REURTEL THIS WIRE YOUR AUTHORITY FERRY CESSNA T FIFTY COCA FOXTROT DASH BRAVO METRO METRO WEYBURN TO EDMONTON AIRCRAFT TO BE CERTIFIED BY COMPETENT AUTHORITY stop FLIGHT TO BE MADE UNDER DAY VISUAL FLIGHT RULES CONDITIONS NO PASSENGERS TO BE CARRIED stop THIS WIRE TO BE ON BOARD AIRCRAFT DURING FLIGHT

Fred W Bone

FWB/MH DISTRICT SUPERINTENDENT AIR REGULATIONS

CC: H. Q. AND EDMONTON

TRANSPORT - RECORDS
MAY 15 A.M. 1952
File 5008 - B13 - 13

FOR MESSENGER CALL 925361

"IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS"

SENDER'S NAME AND ADDRESS (FOR REFERENCE ONLY)

SENDER'S TELEPHONE NUMBER

32

JF/AdeL

Ottawa, Ontario, October 3rd, 1952.

5008-E13-13

Cessna T-50 Aircraft, CF-EMM.

5008-E13-13

District Controller of Air Services,
612 Power Building,
Winnipeg, Man.

Attention: District Superintendent, Air Regulations.

1. A copy of your telegram to J. H. Dalen, c/o L. Cugnet, Melville, Saskatchewan, dated May 10th, 1952, covered authority to ferry Cessna T-50, CF-EMM, from Weyburn to Edmonton for certification by a competent authority.

2. To date we have not recieved any further information on this aircraft and would like to know if there has been any change in the status of this aircraft.

(C. T. Travers),
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

34 2 9-49

501 Power Building,
Winnipeg, Manitoba, October 14, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	CESSNA T-50, CF-BMM	5008 - B13 - 13

36522

TRANSPORT - RECORDS
OCT 17 A.M. 1952
File 5008 - B/3-13

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations

1. Reference is made to your letter of October 3, 1952, in which you enquired the whereabouts of the above noted aircraft. Please find enclosed a copy of a letter submitted by Mr. L. A. Cugnet dated October 9, 1952.

2. Submitted.

B F Burbidge
District Controller of Air Services.

BFB/MH
Enc.

C
O
P
Y

33

October 9, 1952.

F. W. Bone,
District Superintendent,
Air Regulations,
501 Power Building,
Winnipeg, Manitoba.

Dear Mr. Bone:

I remember the instance of Mr. J. H. Dalen coming up to Yorkton to inspect my Cessna T-50, CF-BMM, but he returned without purchasing so the aircraft still is in my hands and has not been moved from Weyburn.

I remember the telegram and at the time the wire arrived Mr. Dalen had returned to Edmonton. From there I don't know what happened but if there has been any expense to the Department I will be just too glad to refund same if you will let me know the amount.

Yours truly,

SIGNED: L. A. Cugnet

LAC/hhh

JCF/MIF

30

OTTAWA, Ontario, October 1st, 1953.

5008-B13-13 Cessna T50 Aircraft, CF-BMM 5008-B13-13

District Controller of Air Services,
612 Power Building,
WINNIPEG, Manitoba.

Attn: District Superintendent, Air Regulations.

1. May we please be advised if there has been any change in the status of Cessna T50 Aircraft, CF-BMM, registered in the name of Lucien August Cugnet, 27 Duncan Street, Yorkton, Saskatchewan.

(A.T. Travers),
Superintendent, Air Regulations.

CKA

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
9-49

36

501 Power Building,
Winnipeg, Manitoba, October 2, 1953.
PLACE DATE

YOUR FILE	SUBJECT		OUR FILE
5008-B13-13	CESSNA T-50	CF-BMM	5008-B13-13

TRANSPORT - RECORDS
OCT 5 A.M. 1953
File 5008-B13-13

42103

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations

1. Reference is made to your letter dated October 1, 1953.

2. Our records at this office show that the above noted aircraft is still the property of Lucien Augest Cugnet, 27 Duncan Street, Yorkton, Saskatchewan.

BFB/MH

B F Burbidge
District Controller of Air Services.

6

KA

MEMORANDUM • GOVERNMENT OF CANADA

24421

TRANSPORT • RECORDS
OCT 23 A.M.
File 5008-BMM

TO : ADMA - Ottawa.

FROM : Winnipeg Regional Office.

SUBJECT: Write-off - aircraft

YOUR FILE No:
5008-14

OUR FILE No:
5008-BMM, BTF, CTK,
CVA and SAG (ARW)

DATE:
October 18, 1963.

1 Please be advised that the following aircraft are beyond any economical repair and are considered a write-off:

CF- B M M - Cessna T-50
CF- BTF - D.H.82C
CF- CTK - D.H.82C
CF- SAG - D.H.82C

2 Perusal of the Civil Aircraft Register indicates that CF- C V A is still registered to Superior Airways Limited. Please refer to your letter dated October 29, 1956, which deleted the markings from the register.

3 Would Headquarters kindly delete the above markings from the register.

COPY ON
5008-BTF
-CTK
-CVA
-SAG

for Regional Director, Air Services.

Certs. cancelled
24.10.63

Coded + Noted
24.10.63

CGSB Stand

Cat. No. 3593

VOL. 1

5008 - BRJ

FILE No. 5008 - BRJ 11-2-65 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM FEB., 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BRJ - D.H.82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

Copied

IMPORTANT — Do not fail to NOTIFY RECORDS whenever a File is passed direct to another section.

FILE No. 5008 - ~~BTC - 110~~ BRJ

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM 7 Feb 1946

TO

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BRJ - DH.82c TIGER MOTH

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

VOL. No. 1

FILE No. 5008 BRJ

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
~~MAR 26 1946~~ APR 1 8 1946	43300	LAR			APR 1 8 1946
		Treas			
~~DEC 30 1946~~	63826	LAR		CJT	JAN 1947
JAN 10 1947	66038	LAR		LSJ	JAN
MAY 26 1947	6101	CAR		LSJ	MAY 27 1947
JUN 28 48	13298	CAR		LSJ	JUN 29 48
FEB 16 1960	47127	SR		LR	FEB 17 1960
FEB 22 1960	Cancelled	DH Records		EB	FEB 24 1960
FEB 17 1960		SAE/A		OL	FEB 18 1960
FEB 18 1960		DATA		RW	FEB 22 1960

7

CERTIFIED TRUE COPY

W. T. Leavens

.....

(C.R. Leavens)

WAR ASSETS CORPORATION

P.O. Box 6099
Montreal, Quebec

Sold To: Leavens Bros. Air Services Ltd.
Barker Airport
Toronto Ont.

SHIP TO: Same

SHIP FROM : Trenton, Ont.

TERMS: Cash: FOB: Ex. Storage Location

VIA

Invoice MTL 39202

Date	Purchaser's Reference No.	Sales Order No.	Prov. Sales	Loc. code
Jan. 16/46	Telegram Oct. 18	7-427-7-342-18775		

Item No	W.A.C. Declaration No.	W.A.C. Declaration Item	Description	Unit Meas.	No. of Units	Amount
	4-2-470		MENASCO MOTH AIRCRAFT 82-C2 RCAF NO.4935 MFG. SERIAL NO. 735 MENASCO D4 ENGINE No.4142/18220	EA	1	$200.00
			MENASCO MOTH 82-C2 AIRCRAFT RCAF NO. 4910 MFG. Ser.No.1101 MENASCO D4 ENGINE 4016/18110	EA	1	$200.00
			MENASCO MOTH 82-C2 AIRCRAFT RCAF No.4811 MFG. SER. NO. 1021 MENASCO D4 ENGINE 4330/18402 WITH WOODEN PROPELLER	EA	1	$200.00
			MENASCO MOTH 82-C2 AIRCRAFT RCAF NO. 4934 MFG. SER. NO. 1127	EA	1	$200.00
X			MENASCO MOTH 82-C2 AIRCRAFT RCAF NO 4941 MFG. SER. NO. 741 MENASCO D4 ENGINE NO. 4120/18202 WITH WOODEN PROPELLER	EA	1	$200.00
			MENASCO MOTH 82-C2 AIRCRAFT RCAF NO 4943 MFG. SER. NO. 743 MENASCO D4 ENGINE NO. 4253/18325	EA	1	$200.00

War Assets Corporation makes no warranties or representations whatsoever as to the aircraft (s) and/or equipment, nor does it make any representations as to condition or certificatability of the aircraft (s) and/or equipment. Certification for flying use and the securing of the authority of the Dept. of Trade and Commerce for export purposes shall be the responsibility of the purchaser.

Custodian
D.N.D. (Air) ## 6 R.D. Trenton, Ont.

Amount	
Prov.Sales Tax	$1,200.0 0
TOTAL	$1,200.00

6

BILL OF SALE

This is to certify that we have this date sold, assigned and transferred all right, title, and interest in, Tiger Moth Aircraft, Registration CF-BRJ, Ser. No. 741. to Mr. C.H. Lilley, 118 Bedford Rd., Toronto, Ontario, for the sum of One ($1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged. We also certify that there is no lien or encumbrance against this machine.

Dated at TORONTO, Ont. this 25th day of February 1946

LEAVENS BROS. AIR SERVICES LTD.

V. A. Denton
(Witness)

W. T. Leavens
(Owner)

3

LEAVENS BROS. AIR SERVICES LTD.

BARKER AIRPORT

TORONTO ONTARIO.

FEB 25 1948

Type of Aircraft: Tiger Moth, Model DHC Ser. No. 741 Registration: CF-BRJ

Type of Engine: Gypsy Major IC Mfg. No.: 87264

Type of Work: Application for Certificate of Airworthiness

Aircraft was moved by truck from No. 6 Repair Depot, R.C.A.F., Trenton to Toronto, and the following work was carried out:

Aircraft completely dissassembled.

FUSELAGE

Fabric covering removed.
Control cables removed, cleaned, inspected and found to be in good condition, and re-installed.
Tubing inspected by opening fuselage in several places.
Cockpits cleaned and interior refinished.
Controls checked and found to be okay.
Fuselage recovered using grade "A" fabric.
Fabric given nine coats of dope.
Civilian Registration markings installed.

TAILPLANE, ELEVATORS, FIN & RUDDER

All components opened, inspected internally and found to be in good condition.
All holes patched; fabric given two coats of rejuvenator, followed by two coats of red dope on tailplane and elevator, and two coats of blue dope on fin and rudder.

UNDERCARRIAGE

Undercarriage completely dismantled, cleaned, checked and found to bein good condition.
Undercarriage re-assembled and refinished.

WINGS

Wings cleaned, opened at drag wire fittings, inspected and found to bein good condition.
Holes patched and fabric given two coats of rejuvenator followed by two coats of red dope.
Civilian registration markings installed.

ENGINE COWLINGS

Cowlings checked and repaired where necessary. Completely refinished.

Aircraft assembled and rigged to specification.

Engine No. 87264 installed with propellor No. A/1155.

4

LEAVENS BROS. AIR SERVICES LTD.

BARKER AIRPORT

TORONTO ONTARIO

FEB 25 1946

Type of Aircraft: Tiger Moth, Model DHC, Serial No. 741 Registration: CF-BRJ

I hereby certify that the work listed has been done with certified materials and according to the accepted practice, that all Manufacturers Service Bulletins affecting safety have been complied with to date, that no unapproved modifications have been incorporated, and that the aircraft is airworthy.

J. Leggat.....

FEB 25 1946

I hereby certify that I have flown CF-BRJ and found that it flies in an airworthy manner.

H. Comfield.....

FEB 25 1946

I hereby certify that I have inspected all flight controls for correct action and locking devices.

K. L. Stirk.....

3

LEAVENS BROS. AIR SERVICES LTD.

BARKER AIRPORT

FEB 25 1946 TORONTO ONTARIO

Type of Engine: Gypsy Major IC Manufacturer's No. - 87264

Type of Work: Top overhaul and major inspection for commercial operation.

The following work was carried out:

Engine dismantled cylinder barrels removed all parts decarbonized and cleaned. Cylinder barrels were replaced with serviceable ones, Nos. 1, 2 and 3. No. 4 was honed to wear out limits. Valve seats cut and valves refaced, valves tapped in. Ignition harness was checked and renewed.

The following parts were renewed:-

1903/2	Joint upper timing gear cover	ea. 1
1903/3	Joint lower timing gear cover	ea. 1
1902/1	Cylinder (reconditioned)	ea. 1
1302/38	Joint ring cylinder	ea. 1
1302/12A	Joint - flange - exhaust	ea. 4
1302/13	Joint flange inlet pipe	ea. 4
1304/5A	Joint casing tube	ea. 16
1900/25	Ring piston	ea. 8
1900/26	Ring Scraper (Com.)	ea. 4
1303/16	Shaft drive magneto (reconditioned)	ea. 1
1303/17	Key - drive shaft (reconditioned)	ea. 1
1303/15	Gear drive magneto (reconditioned)	ea. 1
1303/21	Oil baffle magneto drive (reconditioned)	ea. 2
1303/22	Oil retainer tappet side (reconditioned)	ea. 1
1303/23	Housing ball race tappet side (reconditioned)"	1
1303/24	Housing ball race (reconditioned)	ea. 1
1303/25	Oil retainer (reconditioned)	ea. 1
805/13	Joint - Carburettor	ea. 1
1905/17	Joint - flange - air intake	ea. 1
1905/18	Joint - flange - carburettor	ea. 1

Engine was assembled according to manufacturer's specifications and recommendations. Magneto and carburettor were reconditioned at this plant.

Engine started and given ground run for one hour. Engihe is considered airworthy.

.....
("D" Engineer)

2

FEB 2 5 1946

LEAVENS BROS. AIR SERVICES LTD.

BARKER AIRPORT

TORONTO ONTARIO

I hereby certify that Tiger Moth Aircraft, Registration CF-BRJ, Serial No. DHC 741, with Gypsy Major Engine, Serial No. 87264, has been weighed at Leavens Bros. Air Services Ltd., and the net weight was found to be 1218 lbs., complete with fire extinguisher and full navigation equipment.

H. L. Stark

AIR SERVICES
CIVIL AVIATION DIVISION

COPY

FOR FILE

8
9-45

TOR:5008-B18-10

1 Montgomery Avenue, Toronto,
February 26th, 1946.

Mr. C.H. Lilley,
118 Bedford Road,
TORONTO, Ontario.

Dear Sir: Re: Tiger Moth CF-BRJ

Receipt is acknowledged of your application for registration of Tiger Moth aircraft, CF-BRJ, R.C.A.F. No. 4941, Mfgs. Serial No. 741, with the following papers:-

(a) Application form in triplicate.
(b) Fee of $10.00.
(c) War Assets Sales Order No. MTL 39202..
(d) Bill of Sale, dated February 25th, 1946.
(e) Report on Overhaul - February 25th.
(f) Certificate re weight.

Receipt No. 28045 for the $10.00 fee is attached hereto.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BRJ as a commercial aircraft until March 28th, 1946.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

26-3-46

Send Certificates &
Log Books to
118 Bedford Road,
Toronto, Ont.

OWS

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ...H eavier... made by ...De Havilland Aircraft of Canada

Type ...Tiger Moth 82C... Maker's No. ...~~XXXX~~ 741...

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29 Ft. 4 in.	
Length o/a in feet	23 Ft. 11 in.	
Height o/a in feet	8 ft. 10 in.	

Cubic Capacity (of Airship or Balloon) .....

Weight equipped, but without load, fuel, or oil ...1218 lbs.

Total weight authorized (fully loaded) in lbs. ...1825 lbs... Air speed ...90... miles per hour

EQUIPMENT—(Give number and type).

1. Instruments ...1 Altimeter, 1 Compass, 1 Airspeed, 1 turn & Bank and 1 tachometer
2. Gauges ...1 oil pressure, 1 oil temperature
3. Lights ...nil
4. Signals ...nil
5. Fire Extinguishers ...one hand type (1 qt. pyrene)
6. Parachutes ...nil
7. Tools ...nil
8. Other Equipment ...nil

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand	Clockwise			
No. of Cylinders	4			
H.P.	125-130			
Bore	140 mm			
Stroke	144 mm			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on ...February 25th, 1946. - J. Leggett

Particulars accurate as corrected ...See Inspection Report

Modifications ~~required as annexed or~~ ...None

Registration recommended ~~with the following special conditions~~ ...Yes

Date ...February 25th, 1946.

Signature ...W.S. Aegerie

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

registration - BRJ

2413
9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness ... X $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... C. H. Lilley .....

Date of Application ..... February 25th, 1946. .....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
C.H. LILLEY	118 Bedford Rd., Toronto, Ontario.	British

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Commercial .....

Usual Station ..... Red Lake, Ontario. .....

Date of manufacture or reconstruction ..... 7-6-41 .....

Crew required ..... one .....

Accommodation for what number of passengers ..... one/ .....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

10

DEPARTMENT OF TRANSPORT

Civil Aviation Division

File No.

Place Ottawa, Ont.

Date March 26 1946

TO: Superintendent, Air Regulations.

FROM: District Inspector

SUBJECT: Aircraft Inspection Report.

Aircraft Type D.H. 82

Registration Markings C.F.-B.R.J.

Private or Commercial .....

Date of Inspection .....

Previous C. of A. Expires .....

Present C. of A. Expires .....

Remarks .....

Temporary authority

extended to April 26th 1946

.....

.....

.....

3461 (R)
1048 (A)

.....
District Inspector

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

9
2
8-45

TORONTO, February 26th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-10	Tiger Moth - CF-BRJ	5008-B18-10

A40131

TRANSPORT-RECORDS
FEB 27
File 5008-B18-10

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to registration of Tiger Moth, CF-BRJ, R.C.A.F. No. 4941, Mfgs. Serial No. 741, recently purchased by Mr. C.H. Lilley from Leavens Bros. Air Services Limited:-

(a) Application form in duplicate.
(b) Fee of $10.00 (See page 147 in Cash Book, Receipt No. 28045)
(c) War Assets Sales Order No. MTL 39202.
(d) Bill of Sale, dated February 25th, 1946.
(e) Report on Overhaul - February 25th.
(f) Certificate re weight.
(g) Copy of letter of temporary authority.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

In addition I wish to inquire as to the whereabouts of the log books for the Figer Rath aircraft, recently purchased by me from Leavens Bros. here. The registration on same is CF-BRJ.

If these have not already been mailed I wish them sent to me at the above address rather than to Red Lake, Ont as I will be living in Toronto until well after the break-up period in the Red Lake area.

Thanking you for your trouble I remain

Yours truly,

C. H. Lilley

S.A.R. . . . 118 Bedford Rd.,
Toronto, Ont.,
20/3/46.

Dept. of Transport
Civil Aviation Div.

TRANSPORT - RECEIVED
MAR 22 P.M.
File A 43300

Dear Sirs,

Would you kindly send me one of the sets of information on airports throughout Canada containing pictures of the individual airports and stating the facilities available at each. I am not aware of the name of this volume but it is similar to that which was issued to me as civilian staff pilot at #9 A.O.S. and which is now standard equipment at most D.O.T. airports.

If these are available elsewhere or if there is any charge for same would you kindly let me know so that I can make necessary steps to obtain same.

ENTERED ON CARDS
COPY ON 5008-318-10

14

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3461

NATIONALITY AND REGISTRATION MARKS CF-BRJ

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ont.
3. Constructor's serial number	741
4. Name of owner	C.H. Lilley,
5. Address of owner	118 Bedford Road, Toronto, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Red Lake, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 28th day of February, 1946 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRJ and is of Canadian nationality.

Given at Ottawa this 17th day of April, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

ENGINES

18. Number installed: One

19. Makes: DeHavilland

20. Types: Gipsy Major 1C

21. International power of the engine or engines at

(a) Sea Level 125/130 H.P. at 2100 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews: Number fitted One ..... Types ..... No .....
Pitch ..... Diameter .....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	1218 lbs.
	(b) Seaplane	lbs.
	(c) Skiplane	lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	137 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 19 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	18 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 2 Imp. gals.	
28. Weight allowed for crew	170 lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	282 lbs.
32. Maximum total weight authorized	lbs.
Landplane (Acrobatic) 1770 lbs. (Normal)	1825 lbs.
~~Seaplane~~	lbs.
Skiplane	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane (Normal) Eighteen hundred and twenty-five pounds.
~~Seaplane~~
Skiplane (Acrobatic) Seventeen hundred and seventy pounds.

34. Minimum crew necessary: One

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2400 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated February 26, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this ..... day of April, 19 46.

.....
Superintendent, Air Regulations.

* If flown acrobatically the maximum weight must not exceed 1770 lbs.

VALID FOR DAY FLYING ONLY

13

2462
9-39

CANADA
DEPARTMENT OF TRANSPORT
CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1048

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Lilley
2. Christian name C. H.
3. Address 118 Bedford Road, Toronto, Ontario.
4. Nationality British

NAME OF CONSTRUCTOR

5. Name DeHavilland Aircraft of Canada Ltd.

NATIONALITY AND REGISTRATION MARKS

6. CF-BRJ

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 82C Constructor's No. 741
8. Place and year of construction of aircraft Toronto, Ontario. 1941

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes Two
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal and Acrobatic
14. Subdivision a, b, c, d & e
15. Maximum span (in flying position) 29' 4"
16. Maximum length (in flying position) 23' 11"
17. Total height (with and without trolley in case of seaplanes) 8' 9"

MIM/ZC/LEM

12

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		February 28, 1947. 14/5/48 23/6/49	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass	Oil Pressure Gauge
Altimeter	Oil Temperature Gauge
Airspeed Indicator	Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

(Normal) Safety belt for each occupant.
(Aerobatic) Safety harness must be installed.

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

15

5008# B18-10

REGISTERED

Ottawa, April 17, 1946.

C.H. Lilley, Esq.,
118 Bedford Road,
Toronto, Ont.

Dear Sir:-

Enclosed please find Certificate of Registration No. 3461 and Certificate of Airworthiness No. 1048 for your D.H. 82C Tiger Moth aireraft, CF-BRJ, Serial No.741.

The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. In the meantime, a temporary log should be kept.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

2m

16

5008-B18-10

REGISTERED

OTTAWA, Ontario.
Nov. 2nd, 1946.

C.H. Lilley, Esq.,
118 Bedford Road,
Toronto, Ont.

Dear Sirs:-

Enclosed are Engine and Journey and Aircraft Log Books for your aircraft, CF-BRJ.

The Certificates of Registration and Airworthiness must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

PHONE COBALT 1812

12

TEMAGAMI AIR SERVICES

C. H. LILLEY

GILLIES DEPOT, ONTARIO

indispensible to me in my business contacts many of which a so located as to be inaccessible, with any degree of dispatch, by any other means of transportation. This condition, I anticipate, will continue until the breakup is well under way next spring.

Your co-operation in this matter will be greatly appreciated and any further information required will be speedily dispatched from this end.

Yours truly,

C. H. Lilley

(2)

Concur in exclusion of C. of A.
& request report of C. J. Campbell
regarding this aircraft.

C. Travers.

30/12/4

PHONE COBALT 1812

18

TEMAGAMI AIR SERVICES

C. H. LILLEY

GILLIES DEPOT, ONTARIO

TRANSPORT - RECORDS

DEC 30 A.M. 1946

File 5008-B18-10

P.O. Box 89

Cobalt, Ont.,

26/12/46.

63826

Mr. S. Graham

Dear Sir,

Re. Certificate of Airworthiness # 1048 for D.H. 82C Tiger Moth aircraft CF-BRJ Serial # 741.

It has been brought to my attention that a C. of A. may have its validity extended by your dept. if there is sufficient reason and provided the aircraft is in well maintained and serviceable condition. This is what I wish to request.

The aircraft in question has given trouble free service for the entire time since delivered to me by Leavens Bros., Toronto on Feb. 28 of this year. Aside from minor damage to the bottom of the rudder, which was repaired by Leavens Bros, it has suffered no damage of even a minor nature.

If necessary an affidavit is available from Mr. C. J. Campbell (A. and C. Engineer) of Haileybury, Ont. testifying to the present condition of the craft and its fitness for the extension.

The validity of the C. of A. expires Feb. 26/47 and would greatly benefit the business I am attempting to establish here if it could be extended to Mar. 31/47 as this would correspond more closely with the usual time of the breakup here. Although the aircraft has not been used a great deal, pending approval of my operating certificate, it has been

19

5008-B18-10
5802-1073

[illegible]/TD

Ottawa, January 2nd, 1948.

Mr. C.T. Campbell,
Haileybury, Ontario.

Dear Sir:-

It is requested, please, that a report be submitted to this Department as to the present condition of Tiger Moth CF-BRT Serial #741 owned by Mr. C.H. Lilley, P.O. Box 89, Cobalt Ontario, and whether, in your opinion, it is fit for an extension of the Certificate of Airworthiness and Registration from February 26th, 1947 to March 31st, 1947 inclusive.

Mr. Lilley has already informed this Department that such information would be forthcoming should it be so requested.

Yours truly,

(S. Graham)
Superintendent, Air Regulations

c.c. DIAR TORONTO

20

5008-B18-10

PSH/YD

Ottawa, January 2nd,1947.

Mr. C.H. Lilley,
P.O. Box 89,
Cobalt, Ontario

Dear Sir:-

Subject: Tiger Moth CF-BRJ

Reference your letter of December 26th,1946.

This letter constitutes an extension of the Certificate of Registration #3461 and Certificate of Airworthiness #1048, not valid after March 31st,1947 for Tiger Moth CF-BRJ Serial #741. This temporary extension is subject to the conditions and limitations as laid down in the above mentioned certificates.

Yours truly,

(S. Graham)
Superintendent, Air Regulations

c.c. DIAR TORONTO

Haileybury Ont
Jan 13/47

Dept of Transport
Civil Aviation Branch
Ottawa

TRANSPORT - RECORDS
JAN 15 P.M.
File 5008-B/8-10

Dear Sir 66038

Regarding recent letter concerning present condition of Tiger Moth C.F. B.R.J. # 741 owned by Mr. C.H. Lilley of Cobalt.

In my opinion said aircraft is in airworthy condition and can see no reason why certificate of airworthiness & registration should not be extended for time specified

Yours truly

C J Campbell

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2V 2

6-46

TORONTO, May 23rd, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-10	Tiger Moth CF-BRJ	5008-B18-10

A 6107

TRANSPORT-RECORDS
MAY 26 A.M.
File 5008-B18-10

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Tiger Moth, CF-BRJ, Serial No. 741, owned by Mr. C.H. Lilley, was recently reconditioned by Doherty Air Services Muskoka.

2. Proper entries have been made in the log books of the aircraft to the effect that it was airworthy on May 14th, 1947. These entries were signed by Messrs. H.L. Stirk and W.R. Boucher as air engineers and Mr. S.H. Rowe as test pilot.

3. Certificate of Registration No. 3461 and Certificate of Airworthiness No. 1048 were renewed until May 14th, 1948.

for D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

Mrs Jones to note & P.A

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

24 2
6-46

1 Montgomery Avenue, Toronto, June 24th, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-10	Renewal of Certificates of Registration and Airworthiness - aircraft CF-BRJ	5008-B18-10

TRANSPORT-RECORDS
JUN 28 A.M.
File 5008-B18-10

Controller of Civil Aviation,
Department of Transport,
OTTAWA.

A13298

1. Tiger MothDH82C aircraft, C F - B R J, Serial No. 741, owned by Mr. C.H. Lilley, has recently been reconditioned by Lome Airways Limited at Toronto Island Airport, Toronto, Ontario.

2. Proper entries have been made in the Log Books of this aircraft that it was airworthy on June 23rd, 1948. These entries have been signed by Messrs. J. Grubb and F.N. Donnelly as Air Engineers and G. Nicol as Test Pilot. ✓

3. Certificate of Registration No. 3461 and Certificate of Airworthiness No. 1048 have been renewed valid until June 23rd, 1949. ✓

C.A. Brethour,
A/District Inspector,
Air Regulations,
Toronto.

CAB:alb
Encl.

23

TIGER MOTH serial 741 Aircraft property of Mr.Lillie. Aircraft received for inspection for renewal of C. of A. after the following work was done:-

Registration marks CF/BRJ.

Complete cover refinished with one coat of thinned clear dope, and two coats of Berryloid pigmented dope. Leading edge pins removed from wing roots and lugs and pins checked for wear. Rear wing root pins checked for wear. Flying and landing wires removed and pins, wing fittings and wires checked for wear and rust. Aircraft re-rigged. All control wires and pins checked for wear and rust and tightened. Rudder bushings renewed. Undercarriage fittings checked. Propellor checked for balance and varnished. Engine given 30 hour check.

AIRCRAFT INSPECTED. All cowls, fairings and inspection covers removed. All cables, pulley levers and joints inspected in control system. Elevator Trim Tab controls and adjusted joint pins lubricated. Control surfaces checked for movement. Ailerons re-rigged. Flying and landing wires tensioned. Fabric inspected and patched where necessary. Undercarriage checked. Brakes adjusted. Engine visually inspected. Breather pipe repaired. Gaslines secured.

June 23rd, 1948.

I hereby certify that all work listed has been done with certified materials and according to accepted practice, that all manufacturers Service Bulletins affecting safety have been complied with to date, that no unapproved modifications have been incorporated and that the aircraft is airworthy.

J Gould
Air Engineer B & D category. # 533

June 23rd, 1948.

I hereby certify that I have inspected all flight controls for correct action and locking.

F.N. Donald
Air Engineer "A" category.

June 23rd, 1948.

I hereby certify that I have flown aircraft registration CF/BRJ and that it flies in a satisfactory and airworthy manner.

G. Neil. C-4374
Test Pilot.

MEMORANDUM • GOVERNMENT OF CANADA

25

47227

TRANSPORT - RECORDS
FEB 15 P.M.

TO A.D.M.A., Ottawa

FROM : Toronto Regional Office

YOUR FILE No:
File 5008-B18-10

OUR FILE No:
5008-B18-10 (ART)

SUBJECT: DHB2C Aircraft CF-B R J

DATE:
February 11th, 1960

1. The last registered owner of the subject aircraft has recently advised this office that this aircraft was permanently withdrawn from use in September 1948 after receiving substantial wind damage. He also stated that the Certificates of Registration and Airworthiness for this aircraft have been lost or destroyed.

2. In view of the foregoing, it is recommended that this aircraft be deleted from the Canadian Civil Aircraft Register.

D. Hinchcliffe
Regional Director, Air Services.

Certs. cancelled
16.2.60

Coded & Noted
16.2.60

2

3—GP—22; P P & S Cat. No. 3590

FILE No. 5008 - BRO 8-5-67 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM FEB., 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - BRO - PIPER CUB

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS
MAY 11 1962	5260	DAR		LB	MAY 15 1962
MAY 15 1962		SAE/A		CMB	MAY 18 1962
MAY 18 1962		DATA		Dra	MAY 22 1962
		Cancelled			

VOL. 1 5008 - BRO

IMPORTANT — Do not fail to NOTIFY RECORDS whenever a File is passed direct to another section.

FILE No. 5008 - ~~B18 - 15~~ BRO

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM FEB 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BRO PIPER CUB

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

VOL. 1

5008 - ~~B18~~ BRO

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
APR 1 1952	817	CAR		HLP	MAY 5 1952
MAY 5 1952		CAE (1)			MAY 5 1952
MAY 5 1952		CAI (2)	15/5/52		MAY 9 1952
MAY 9 1952		RFL (3)		WJW	MAY 12 1952
MAY 14 1952	BF 15/5/52	CAI			MAY 15 1952
JUN 30 1952	18772	CAR		JLH	JUL 8 1952
JUL 8 1952		CAE			JUL 9 1952
JUL 31 1952	24129	CAR		LSJ	AUG 6 1952
AUG 6 1952		CAE			AUG 6 1952
APR 10 1953	1569	CAR		LSJ	APR 11 1953
APR 10 1953		CAE			APR 14 1953
JUL 20 1953	26773	CAR		LSJ	JUL 27 1953
JUL 27 1953		CAE			JUL 27 1953
JUL 27 1953		RFL		WJW	JUL 27 1953
JUL 27 1953		CAI			JUL 29 1953
OCT 20 1953	44405	CAR		LSJ	OCT 23 1953
OCT 23 1953		CAE			OCT 23 1953
OCT 23 1953		RFL		WJW	OCT 23 1953
OCT 23 1953		CAI			OCT 26 1953
JAN 19 1954	W.O. Gordon 3371	CAR		WJW	JAN 19 1954
JAN 19 1954		CAI			JAN 20 1954
FEB 9 1954	Snr Gauger	CAR			JAN 19 1954
	Reg Miss Jones	RFL		LSJ	FEB 10 1954
APR 18 1962	7409	JKL			APR 24 1962
APR 24 1962		(DT) Records		GL	APR 24 1962

FILE No. 5008 - B18 - 15 VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM Feb 1946
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BRO PIPER CUB

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
2 1946	37160	S.A.R.		NWL	FEB 25 1946
FEB 25 1946		Treas		Delay	FEB
JUN 22 1946	10514	S.A.R.		BL T.	JUN 28 1946
JUL 17 1946		C.A.R.			JUN 28 1946
	14070	S.A.R.			AUG 28
		C.A.R.			JUL 24 1946
AUG - 2 1946	16200	S.A.R.			AUG 3 1946
OCT 29 1946	29182	S.A.R.			NOV 20 1946
NOV 20 1946		Treas			NOV 29 1946
DEC 3 1946	39731	S.A.R.			DEC 12 1946
MAR 17 1947	75411	C.A.R.			MAR 24 1947
		C.A.R.			
JAN 31 1948	34924	C.A.R.			FEB 5 1948
FEB 13 48	36855	C.A.R.			FEB 24 48
FEB 24 48		L.A.C.			FEB 25 48
EB 25 48		L.A.C.			MAR 4 - 48
EB 26 48 MAR 4 - 48		Loan Accounts			MAR 8 - 48
MAR 2 48	38584, 38585	C.A.R.			MAR 4 - 48
		C.A.E.		M. MAR 4 -	48
NOV 9 - 48	32174	C.A.R.			NOV 13 48
NOV 13 48		L.A.C.			NOV 15 48
OV 15 48		L.R.C.			NOV 16 948
NOV 16 948		Loan Accounts			NOV 17 48
MAR 17 1949	48377	C.A.R.			MAR 13 1949
DEC 30 1949	39600	C.A.R.		SJ	JAN 4 1950
		C.A.E.			JAN 4 1950
MAR 21 1951	47471	C.A.R.			MAR 22 1950
MAR 22 1950		C.A.E.			MAR 27 1951

ORIGINAL ON FILE

COPY

8
9-45

FOR FILE 5008-B18-15

1 Montgomery Avenue, Toronto,
February 1st, 1946.

Pulsifer Bros. Limited,
7 Doyle Street,
HALIFAX, N.S.

Dear Sirs:

Re: Piper Cub J-3 - CF-BRO

Receipt is acknowledged of your application for registration of Piper Cub J-3, CF-BRO, Serial No. 1130, recently purchased by you from the Cub Aircraft Corporation, with the following papers:-

(a) Application form in triplicate.
(b) Bill of Sale, dated January 29th, 1946.
(c) Aeroplane Inspection Release Certificate.
(d) Fee of $10.00

Receipt No. 27989 for the $10.00 fee, in the name of the Cub Aircraft Corporation, was mailed to them this date.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BRO as a commercial aircraft until March 2nd, 1946.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC
c.c. Headquarters
Cub Aircraft Corporation, Ltd.

noted
1/2/1

2

DATE ...January 29, 1946....

BILL OF SALE

PROVINCE OF ONTARIO, CANADA

KNOW ALL MEN BY THESE PRESENTS: That in consideration of one Dollar and other consideration, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto **Pulsifer Bros. Limited Halifax, N.S.** heirs, executors, administrators and assigns, all right, title and interest in and to the following goods and chattels via;

Airplane	**CF-BRO**
Serial	**113 C**
Engine	**Continental A 65**
Serial #	**3679558**

CUB AIRCRAFT CORPORATION LIMITED

Signed.....

CERTIFICATES OF CHIEF FACTORY INSPECTOR.

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origin; that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed J F Gibson Date JAN 29 1946
Chief Inspector
CUB AIRCRAFT CORPORATION LTD. Co. Ltd.

(The following certificate to be executed on the day of test flight).

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and that the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed S Henderson Air Engineer J F Gibson Chief Inspector
JAN 29 1946 Date

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed H. F. Mitchinson Date JAN 29 1946
Test Pilot
CUB AIRCRAFT CORPORATION LTD. Co. Ltd.

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. TRANSPORT.

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category Normal Subdivision a.b.c.d.e is recommended.

Signed W.S. Allgrunn
Resident Inspector, A.I.D.,
Department of Transport.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING A.I.D. CANADA.

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION.

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) _____

Signed _____
District Inspector, Civil Aviation.

RECORD OF WEIGHT AND C. G. POSITION
(See Information Circulars M/8/37 and M/1/38)

	Landplane	Skiplane	Seaplane
MAXIMUM PERMISSIBLE GROSS WEIGHT	1220 lbs.	lbs.	lbs.
Tare weight as determined	699 lbs. ✓	lbs.	lbs.
Disposable load	274 lbs.	lbs.	lbs.

Centre of gravity of aeroplane at above tare weight .16"..inches behind ~~in front of~~

.....

used as a reference datum point with aeroplane in flying position.
(The C.G. position may be calculated from the approved loading diagram of the Type Aeroplane).

LIST OF STANDARD OR ALTERNATIVE EQUIPMENT INCLUDED IN EMPTY WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.
———		———	

LIST OF MOVEABLE EQUIPMENT INCLUDED IN ABOVE TARE WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.
———		———	

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT
(Essential for C. of A. for any class of operation)

DESCRIPTION	MAKER	MODEL	REMARKS
Airspeed Indicator	U.S. Gauge		
Altimeter	Pioneer		
Compass	Pioneer		
Engine Speed Indicator	Stewart-Warner		
Oil Pressure Gauge	Walton		
Liquid Thermometer (for liquid cooled engines only)			
Safety Belt(s)	Air Associates		
Fire Extinguisher(s)	Vanguard		

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT
(Make extra sheets as required using following pro forma and classification)

DESCRIPTION	MAKER	MODEL	REMARKS
AIRCRAFT INSTRUMENTS			
Flying and Navigation, e.g. Bank and Turn Indicator, etc.			
Aircraft Operating e.g., Cabin Temperature Outside " Flap Indicators, etc.			
POWER PLANT INSTRUMENTS			
ELECTRICAL EQUIPMENT other than signalling			
SIGNALLING EQUIPMENT			
SAFETY AND EMERGENCY EQUIPMENT			
AMENITIES			

6

PARTICULARS OF AIRSCREWS

Maker	Sensenich Bros.					
Type	Fixed wood					
Blade Drawing No.	72 C.44					
Blade Serial Nos.	G 8056					
Hub Drawing No.						
Hub Serial No.						
Blade Settings						
Diameter	72"					

PARTICULARS OF ALIGHTING GEAR

WHEELS Make Hayes Model 84 Tire Goodrich 800 x 4

FLOATS Installation Assembly Drawing No. _____

SKIIS Installation Assembly Drawing No. _____

Tail Ski _____

POSITION AND CAPACITY OF FUEL AND OIL TANKS

FUEL Position	Capacity Imp. Gals.	OIL Position	Capacity Imp. Gals.
(1) in fuselage just	9	(1) in sump attached to	5/6
(2) aft of fire wall		(2) lower rear of crank	
(3)		(3) case	
(4)		(4)	
(5)		(5)	
(6)		(6)	

AI-2

AEROPLANE INSPECTION RELEASE CERTIFICATE.

(For Aeroplanes Assembled With Imported Components)

Registration CF-BRO

Aeroplane Type Piper Cub (Landplane / Seaplane / Skiplane) Model J-5

Manufacturer Cub Aircraft Corporation Ltd. Serial No. 113 C

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY

Normal

(a - Public transport passenger
(b - " " mails
(c - " " goods
(d - Private
(e - Aerial work.

~~Aerobatic~~
~~Special~~

~~for Recording Purposes~~
~~for Research or Experimental~~.

PARTICULARS OF ENGINE(S)

	Left Side	Right Side
Type	Continental	
Model	A 65	
Serial No.	3679558	
Take-off Power	65 H.P.	
Take-off R. P. M.	2350	
Take-off Manifold Pressure	—	
Take-off Octane Rating of Fuel	73 or better	
Maximum Power (Continuous operation)	50 H.P.	
Maximum Power R. P. M. ...	2350	
Maximum Power Manifold Pressure	—	
Maximum Power Octane Rating of Fuel	73 or better	

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..Heavier.. made by ..CUB AIRCRAFT CORPORATION..

Type ..Piper Cub J-3.. Maker's No. ..115 C..

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35'-2 1/2 inches	
Length o/a in feet	22'-4 1/2 inches	
Height o/a in feet	6'-8 inches	

Cubic Capacity (of Airship or Balloon) .....

Weight equipped, but without load, fuel, or oil ..699 lbs..

Total weight authorized (fully loaded) in lbs. ..1220.. Air speed ..80.. miles per hour

EQUIPMENT—(Give number and type). Engine Speed - Stewart-Warner

1. Instruments ..Airspeed - U.S. Gauge, Altimeter-Kollsman, Compass-Pioneer..
2. Gauges ..Oil pressure & oil temperature - Walton..
3. Lights .....
4. Signals .....
5. Fire Extinguishers ..Vanguard..
6. Parachutes .....
7. Tools .....
8. Other Equipment .....

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A65 Serial #NRX 5679558			
Pusher or Tractor	Tractor			
Right or Left Hand	Left Hand			
No. of Cylinders	Four (4)			
H.P.	65			
Bore	3 7/8			
Stroke	3 3/8			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on ..January 29th, 1946.

Particulars accurate as corrected ..Yes..

Modifications from type are indicated on annexed sheet ..Yes..

Registration recommended with the following special conditions ..."as is"..

.....

.....

Date ..January 31st, 1946.. Signature ..W.S. Algeine..

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

241.3
6.39

BRO

JAN 14 1946

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect. PULSIFER BROS. LIMITED.

Signature of Applicant.....

Date of Application.....January 29, 1946.....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
O. B. PULSIFER	President	14 Rockliffe St.	Canadian
E. G. PULSIFER	Vice-President	"	"
E. M. NICOLLE	Secty-Treasurer	14 Allen St.	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....

Commercial

Usual Station.....Halifax.....

Date of manufacture or reconstruction.....January 29, 1946.....

Crew required.....1.....

Accommodation for what number of passengers.....1.....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

9

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

TORONTO, February 1st, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-15	Piper Cub J-3 - CF-BRO	5008-B18-15

A37160

TRANSPORT-REGULATIONS
FEB 2 A.M. 1946
File 5008-B18-15

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to registration of Piper Cub J-3, CF-BRO, Serial No. 113C, recently purchased by the Pulsifer Bros. Limited, from the Cub Aircraft Corporation:-

(a) Application form in duplicate.
(b) Fee of $10.00 (See page 144 in Cash Book, Receipt No. 27989)
(c) Aeroplane Inspection Release Certificate.
(d) Bill of Sale, dated January 29th, 1946.
(e) Copy of letter of temporary authority.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

3272(R)
877(A)

12

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3372

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ont.
3. Constructor's serial number	113C
4. Name of owner	Pulsifer Bros. Ltd.,
5. Address of owner	7 Doyle St., Halifax, N.S.
6. Nationality of owner	British
7. Usual station of aircraft	Halifax, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of February, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 18th day of February, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

13

5008-B18-15

REGISTERED

Ottawa, Feb. 19, 1946.

Pulsifer Bros. Ltd.,
7 Doyle St.,
Halifax, N.S.

Gentlemen:-

Enclosed please find Certificate of Registration No. 3372 and Certificate of Airworthiness No. 877, dated February 1, 1946, together with Engine and Journey and Aircraft Log Books, for your Piper J3-C65 aircraft, CF-BRO, Serial No. 1130.

The certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

Noted Jrs.
26-2-46. Jules

M

15

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., June 21, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper CF-BRO	5008-B18-15

TRANSPORT-RECORDS
JUN 22 A.M.
File 5008-B18-15

A10514

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ont.

1. Enclosed herewith is copy of letter from Pulsifer Brothers Ltd., reporting accident to the subject aircraft on May 22, 1946.

2. Submitted for your information and record, please.

noted
AJ

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR
Enc.

D1

COPY

14

PULSIFER BROS. LIMITED

Waterville Airport,
May 23rd, 1946.

District Inspector of
Air Regulations,
Montreal, P.Q.

Dear Sir:

I wish to report an accident which occurred to Cub aircraft CF-BRO on the Waterville Airdrome Wednesday afternoon at 15:30 hrs.

The Aircraft CF-BRO after completing one half hour of take offs and landings by a student pilot. The last landing having been completed the aircraft was stopped and still into wind when a gust of wind picked up the right wing, driving the left wing tip in the soft mud, the nose then went in the mud and the aircraft went over on its back. The pilot was not injured in any respect.

The aircraft sustained the following damage. Propeller broken, rudder tip bent and starboard forward strut slightly bent. A few ribs in the right wing are bent in about one to two eighth of an inch. No further damage was found.

Trusting this will meet with your approval.

I remain,

Yours truly,

(sgd) Donald C. Keith.

ENTERED
IN ACCIDENT
RECORDS
27-6-46
H.J.

27-6-46

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

17 2
8-45

910 Confederation Building,
Montreal 2, Que., July 16, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper CF-BRO	5008-B18-15

TRANSPORT-RECORDS
JUL 17 A.M.
File 5008-B18-15

A14070

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is copy of a letter from Pulsifer Bros. Limited regarding accident to the subject aircraft on July 8, 1946.

2. Submitted for your information and record.

J. L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

PULSIFER BROS. LIMITED

16

New Glasgow, N.S.,
July 10th, 1946.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
910 Confederation Building,
Montreal, Que.

Dear Sir:

Re accident involving aircraft CF-BRO

I was flying Cub CF-BRO on July 8th, 1946, to Cape Stanhope, P.E.I. to pick up a charter passenger. There is no airport in that immediate vicinity, and after looking over the surrounding terrain, I chose the Stanhope Golf Course. I made two runs over my proposed landing path to inspect for possible obstacles, and seeing nothing to prevent my landing, I circled the field and made a normal undershot, precautionary landing at slow speed. I landed successfully, but just before the aircraft was quite finished her landing run, I struck a tee mound with my right under carriage, which folded. The tail raised enough to nick one tip off my propeller. There was no other damage.

The mound was very hard to see from the air as the whole fairway was of clipped grass and the slight mound of ground forming the tee was unnoticed by me on my inspection run prior to landing. I was alone in the aircraft and was unhurt.

Yours sincerely,

(Sgd.) F.M. Fleming

ENTERED
IN ACCIDENT
RECORDS
27-8-46
.....

24-7-46

17A

TRANSPORT-RECORDS
JUL 19 A.M.
File 580 F-B1/B-15

5008-B18-15

910 Confederation Building,
Montreal 2, Que., July 16, 1946.

Pulsifer Bros. Limited,
New Glasgow, N.S.

A14335

Gentlemen:

We are in receipt of a report from Pilot F.M. Fleming regarding damage done to Piper CF-ERO on July 8, 1946.

It is noticed that this aircraft was involved in a previous accident on May 22, 1946, and that list of repairs and certification by your air engineer were never forwarded to this office. We wish to point out that damage to structural parts of aircraft invalidates the Certificate of Airworthiness, which can not be re-instated until such time as we receive the above-mentioned documents.

It is, therefore, requested that you might take steps to forward the necessary information concerning the accident to this aircraft on May 22, 1946, and also that of July 8, 1946, before this machine may resume operations.

It is trusted that this will be borne in mind for future cases.

Yours truly,

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg

18

5008-B18-15

A16200

910 Confederation Building,
Montreal 2, P.Q., August 1, 1946

Mr. Ian Saunders,
Chief Air Engineer,
Pulsifer Bros. Limited,
New Glasgow, N. S.

TRANSPORT-RECORDS
AUG 8 A.M.
5008-B1 8-15
File

Dear Sir:

Receipt is acknowledged of your list of repairs to Piper CF-HRO and your certification as to the airworthiness of this machine under date of July 23, 1946, in view of which we wish to advise that the Certificate of Airworthiness for this machine may now be considered in good standing.

Yours truly,

JB

J. L. Blondeau,
District Inspector, Air Regulations

JLB/BMc

c.c. Headquarters

2

19

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3372

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ont.
3. Constructor's serial number	113C
4. Name of owner	Pulsifer Bros. Ltd.,
5. Address of owner	7 Doyle St., Halifax, N.S.
6. Nationality of owner	British
7. Usual station of aircraft	Halifax, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of February, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 18th day of February, 1946.

for H. L. Murphy
Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

20

910 Confederation Building,
Montreal, P. Que.

October 9, 1946

Messrs. Johnson, Keith & Webber,
Waterville, N. S.

Dear Sirs:

This will serve as your temporary authority to operate Cub J3 aircraft bearing registration markings CF-BRO and CF-DAY commercially not valid after November 9, 1946, pending the issue of the formal certificates.

This authority is issued subject to the aircraft being in an airworthy condition at all times.

Yours truly,

L. Knight,
for J. L. Blondeau,
District Inspector, Air Regulations.

COPY

COPY

21

September 5, 1946.

Bill of Sale

PROVINCE OF NOVA SCOTIA, CANADA

KNOW ALL MEN BY THESE PRESENTS: That in consideration of one Dollar and other consideration, the receipt of which is hereby acknowledged, we do grant sell, transfer and deliver unto:

--------Mr. G. D. Johnson----------

--------Mr. D. C. Keith----------

-------Mr. E. C. Webber----------

heirs, executors, administrators, and assigns, all right, title, and interest in and to the following goods and chattels via:

Airplane: CF - BRO

Serial No.: 113 C

Engine No.: 3679558

PULSIFER BROS. LIMITED

J. R. Kaulbach ..... O. B. Pulsifer .....

(Witness) (O. B. Pulsifer)

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air YES made by COB AIRCRAFT CORP.

Type J.3. High Wing. MONOPLANE. Maker's No. 113C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon) NIL.

Weight equipped, but without load, fuel, or oil 699.

Total weight authorized (fully loaded) in lbs 1220 Air speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments COMPASS, AIRSPEED, ALTIMETER, TACHOMETER (PIONEER)
2. Gauges OIL. PRESSURE. OIL. TEMP. FUEL. FLOAT.
3. Lights NIL.
4. Signals NIL.
5. Fire Extinguishers 1 HAND CO2
6. Parachutes NIL.
7. Tools NIL.
8. Other Equipment SAFETY BELT. FOR EACH OCCUPANT. (2)

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	CONTENENTAL	A.65		
Pusher or Tractor	TRACTOR.			
Right or Left Hand	CLOCKWISE FROM PILOTS SEAT.			
No. of Cylinders	4.			
H.P.	65 AT. 2300 R.P.M			
Bore	3⅞			
Stroke	3⅝			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on Oct 9/46 by A/A.R. L. Knight

Particulars accurate as corrected YES

Modifications from type are indicated on annexed sheet no mods

Registration recommended with the following special conditions

Registration recommended

Date 9/10/46 Signature J L Blondeau

Registration approved and Registration Mark C.F. BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

22 241.1 8-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~) TRIPLICATE

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Re Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Donald Keith, George D. Johnson, Ervin C. Webber

Date of Application Oct. 9th 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
DONALD. C. KEITH.	WATERVILLE N.S.	CANADIAN
ERVIN. C. WEBBER	"	"
GEORGE. D. JOHNSON.	"	"

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)
COMMERCIAL AND INSTRUCTIONAL.

Usual Station WATERVILLE AIRPORT. N.S.

Date of manufacture or reconstruction HAMILTON. ONT. 1946.

Crew required ONE

Accommodation for what number of passengers ONE.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

23 2

8-45

910 Confederation Building,
Montreal 2, Que., October 28, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-H18-15	Piper J3 CF-BRO	5008-H18-15

A29182

TRANSPORT-RECORDS
OCT 29 A.M.
File 5008 B

18-15

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following documents regarding the subject aircraft are enclosed herewith:

(a) Application for Certificates of Registration and Airworthiness as a commercial aircraft in the names of Messrs. D. C. Keith, E. C. Webber and G. D. Johnson. (These three gentlemen are in the process of forming an incorporated company and have applied for a charter. Until such time as they are so organized, they insist that registration of these aircraft be made in their three names.)

(b) Fees $5.00 (Department Receipt No. 84352) will be forwarded under Cash Book Folio No. 3321.

(c) Proof of ownership - Copy of Bill of Sale transferring ownership from Pulsifer Bros. Limited to Messrs. Keith, Johnson and Webber.

(d) Copy of our letter of authority

(e) Lapsed Certificate of Registration No. 3372 and Certificate of Airworthiness No. 877

2. This application appears in order and issue of certificates is recommended.

4016 (R)
877 (A)

J. L. Blondeau

J. L. Blondeau,
District Inspector, Air Regulations.

JLB:AR

23A 8 6-44

ORIGIN ON FILE 5008-D1-25 COPY FOR FILE TRANSPORT RECORDS NOV 9 A.M. 5008-B18-15

LEJG.

CANADIAN NATIONAL TELEGRAPHS

DAY LETTER COLLECT

A31023

910 CONFEDENATION BUILDING
MONTREAL 2 QUEBEC NOVEMBER 5 1946

D KEITH
PULSIFER BROS LIMITED
WATERVILLE NS

AR 562 REWIRE THE PREVIOUS TEMPORARY AUTHORITY ORANTED FOR OPERATION FIPER J 3 CF DOG ABLE YOKE AND CF BAKER ROGER OBOE ARE HEREBY EXTENDED NOT VALID AFTER JANUARY FOURTH FORTY SEVEN SUBJECT THIS MACHINE IN AIR-WORTHY CONDITION STOP E C WEBBER TEMPORARY AUTHORITY TO ACT AS AIR ENGINEER HEREBY EXTENDDD NOT VALID AFTER DECEMBER SIXTH FORTY SIX

J L BLONDEAU

C I V I L A V I A T I O N

PHONED

17.00 hrs.

dg

29/10

26

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 4016

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corp.,Ltd., Hamilton, Ont.
3. Constructor's serial number	1130
4. Name of owner	D.C.Keith, E.C. Webber and G.D.Johnson,
5. Address of owner	Waterville, N.S.
6. Nationality of owner	British
7. Usual station of aircraft	Waterville, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of Oct. 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 19th day of Nov., 1946.

for C. P. Fraser

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

27

5008-B18-15

REGISTERED

Ottawa, Nov. 19th , 1946.

Messrs. D.C.Keith, E.C. Webber
and G.D. Johnson,
Waterville, N.S.

Dear Sir:-

Enclosed please find Certificate of Registration No. 4016 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft CF-BRO , Serial No. 1150.

The certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6101 B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	X
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

WIRE PREPAID

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

To [illegible] & JOHNSON — 920 CONFEDERATION BUILDING
A WATERVILLE — MONTREAL 2 QUE DECEMBER 2 1946
N.S.

AR 646 FORWARD REPORT ON ACCIDENT TO AIRCRAFT BAKER DOGIE CBOE

AS REQUESTED

L KNIGHT

CIVIL AVIATION

DEC 3 A.M. 46

5008-B18-15
File

320/MD

59731

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

30

2

8-45

910 Confederation Building,
Montreal 2, Que., March 14, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper CF-BRO	5008-B18-15

75411

TRANSPORT - RECORDS
MAR 17 A.M.
File 5008-BA-15

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. Enclosed herewith is report of damage to the subject aircraft submitted by Private Pilot W.A. Schurman.

2. This machine has not been flown since the date of this accident.

3. Same has been purchased by Pulsifer Bros. Limited, who will apply shortly for re-registration in their name.

J.L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

O. B. PULSIFER, VICE-PRESIDENT
TEL. 2-3487

A. G. PULSIFER, PRESIDENT
TEL. 3-2173

E. M. NICOLLE, SECTY.-TREAS.

PULSIFER BROS. LIMITED

(AIRCRAFT DIVISION)

DOYLE STREET

HALIFAX, NOVA SCOTIA

DISTRIBUTORS:
"Cub" Aircraft

Department of Transport
CIVIL AVIATION BRANCH
DEC 23 1946
File No.
MONTREAL, P.Q.

New Glasgow, N.S.,
December 18th.,46.

Mr. J.L. Blondeau,
Inspector of Air Regulations,
910 Confederation Building,
Montreal, P.Q.

Dear Sir:

Re damage to Piper Cub Aircraft CF-BRO.

The above a/c was flown from New Glasgow Airport to Stanley Airport for storage. Upon completion of a safe landing at Stanley, I proceeded to taxi the a/c to the hanger. As the steerable tail-wheel was inoperative I had to reley on the brakes for directional control on the ground. The right brake I found to be weak while taxying towards the hanger. In an effort to check a turn to the left towards the hanger caused by wind conditions on the tail of the a/c, I then found that the holding power of the right brake was insufficient to check the turn with the result that the port wing came in contact with the hanger door causing damage. The known total damage consists of a broken propellor and damage to the port wing. An unsuccessful effort was made to check the swing with throttle.

Truly yours,
Walter A. Schurman
Walter A. Schurman.
Private Lic. #5308.

WAS/cc

Mr. Saunders

~~Mr. Pinkie~~

~~C.A.P.~~

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			COLLECT DAY LETTER

Send the following message, subject to the terms on back hereof, which are hereby agreed to

31

Moncton, N.B., January 29, 1948.

Fulsifer Brothers Limited
5 Doyle Street,
HALIFAX, N.S.

TRANSPORT-RECORDS
JAN 31 A.M.
5508-D 18-15
File

A34924

ANN35 THIS WIRE YOUR AUTHORITY CANCELLED PIPER J3 REGISTRATION CF DASH BAKER ROGER OBOE AS COMMERCIAL LANDPLANE OR SKIPLANE PENDING RECEIPT FORMAL CERTIFICATES AIRWORTHINESS AND REGISTRATION THIS AUTHORITY NOT VALID AFTER MARCH 29, 1948 THIS AUTHORITY DOES NOT INCLUDE PERMISSION FOR OPERATION RADIO APPARATUS.

Miss Jones
to note & P.A.

Confirmation

R W GOODWIN
DISTRICT INSPECTOR AIR REGULATIONS

Noted
W

32

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 4016

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corp.,Ltd., Hamilton, Ont.
3. Constructor's serial number	1130
4. Name of owner	D.C.Keith, E.C. Webber and G.D.Johnson,
5. Address of owner	Waterville, N.S.
6. Nationality of owner	British
7. Usual station of aircraft	Waterville, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of Oct. 1946 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 19th day of Nov., 1946.

C. P. Edwards

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

SERVICES
CIVI[illegible]IATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

33

REFER TO FILE NUMBER
5008-B18-15

REGISTERED

Ottawa, Nov. 19th , 1946.

Messrs. D.C.Keith, E.C. Webber
and G.D. Johnson,
Waterville, N.S.

Dear Sir:-

Enclosed please find Certificate of Registration No. 4016 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft CF-BRO , Serial No. 113C.

The certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

C. F. Graham

(S. Graham),
Superintendent, Air Regulations.

Encls.

34

Place Waterville, Kings Co. N.S.
Date Dec. 2nd 1946

BILL of SALE

PROVINCE OF NOVA SCOTIA, CANADA.

KNOW ALL MEN BY THESE PRESENTS: That in consideration of One Dollar and other consideration, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto:

PULSIFER BROS. LIMITED
HALIFAX, N. S.

their heirs, executors, administrators, and assigns, all right, title and interest in and to the following goods and chattels viz:

Airplane: CF - BRO
Serial No.: 113 C
Engine No.: 3679558

Signed Erwin C. Webber
Donald C Keith
George D. Johnson

Witness Lorna Johnson

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **Cub Aircraft Corporation**

Type **Landplane - Cub J-3 Special C-65** Maker's No. **113 C**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' ~~4½"~~ 5"	
Height o/a in feet	6' 8 ""	
Cubic Capacity (of Airship or Balloon)		

Weight equipped, but without load, fuel, or oil **699#**

Total weight authorized (fully loaded) in lbs. **1220** Air speed **75** miles per hour

EQUIPMENT—(Give number and type).

1. Instruments **Alt. A.S.I. Compass**
2. Gauges **Stewart Warner Tachometer, Oil Pressure, Oil Temp.**
3. Lights **NIL**
4. Signals **NIL**
5. Fire Extinguishers **S.O.S. (25% CCl4) 1 Quart**
6. Parachutes **NIL**
7. Tools **NIL**
8. Other Equipment **~~--NIL--~~ Two Safety Belts.**

ENGINES— **3456358**	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental	A-65		
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	Four			
H.P.	65			
Bore	3 7/8			
Stroke	3 5/8			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on Engineers Report Jan 2 1948

Particulars accurate as corrected Correct

Modifications from type are indicated on annexed sheet None

Registration recommended with the following special conditions

Date Feb. 11. 1948 Signature J. Hardman

Registration approved and Registration Mark C.F. allotted.

Registration { approved or not approved for reasons annexed.

Superintendent, Air Regulations

75

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~) triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration C F - B R O $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

PULSIFER BROS. LIMITED.

Signature of Applicant ..... A B Pulsifer

Date of Application January 29, 1948

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Pulsifer Bros. Limited	Halifax, N.S.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
O. B. Pulsifer	President	14 Rockcliffe St.	Canadian
E. G. Pulsifer	Vice. - Pres.	do	do
E. M. Nicolle	Sec. - Treas.	14 Allen St.	do

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station Halifax, N. S.

Date of manufacture or reconstruction

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

36 2 6-46

P.O. Box 42,
Moncton, N.B., February 11, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 18-15	Application for C.ofR. and C.of A. Piper J3-C65 - CF-BRO	5008-B 18-15

A36855

TRANSPORT-RECORDS
FEB 13 P.M.
File 5008-B-18-1

REGISTERED

Controller of Civil Aviation,
No. 3 Temporary Building,
OTTAWA, Ontario

1. With reference to the subject noted application, please find attached hereto the following documents:-

(1) Application form, in duplicate, for registration as a commercial aircraft in the name of Pulsifer Brothers, Limited, Halifax, N.S.

(2) Bill of Sale from Messrs. Ervin C. Webber, Donald C. Keith, and George D. Johnson, to Pulsifer Brothers Limited.

(3) Certificate of Registration No. 4016.

(4) Certificate of Airworthiness No. 877.

2. Official Receipt No. 35216 (Blotter Cash Book No. 8708) has been issued to Pulsifer Brothers, Limited, Halifax, N.S. covering re-registration fee of $5.00.

3. This application appears in order and is recommended to Headquarters for approval.

Miss Jones to
h-R-Rt
Note Enclosure
H&P 14-2-48

Forward to DTAR
Mnctn

6433(R)
877(A)

R.W. Goodwin,
A/District Inspector, Air Regulations,
Moncton, N. B.

Encls.
RWG/H

log books
rec'd

/RM

38

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. ~~4499~~ 6742 (25.2.48)

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	1130
4. Name of owner	Pulsifer Bros. Limited,
5. Address of owner	Halifax, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Halifax, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 29th day of January 1948, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 17th day of February 1948.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

39

Ottawa, Ontario. February 17th, 1948.

Piper J3-C65 CF-BRO 5008-B18-15

REGISTERED

District Inspector,
Air Regulations,
P.O. Box 42,
Moncton, N.B.

1. 6743 Enclosed please find Certificate of Registration No. ~~6433~~ and Certificate of Airworthiness No. 877, for the above-mentioned aircraft owned by Pulsifer Bros. Limited.

2. The Certificates should be forwarded to the owner after a satisfactory inspection of the aircraft has been carried out and you have endorsed the Certificate of Airworthiness.

NOTED

MAR 8 1948

Revenue Audit
Dept. of Transport.

(J. Graham).
Superintendent, Air Regulations.

Encls.

CA

HTP/HMC 40

OTTAWA ONTARIO FEBRUARY 24 1948

5008-B18-15 PIPER J3-C65 CF-HRO 5008-B18-15

AIR MAIL

District Inspector, Air Regulations,
Box-42,
MONCTON, N.B.

1. Please be advised that Certificate of Registration No. 6433 was allotted to this aircraft in error. The Certificate of Registration should read No. 6743.

2. May the appropriate amendment be made through your office, please.

(G. Graham),
Superintendent, Air Regulations

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

41

2
6-46

P.O. Box 42,
Moncton, N.B., February 25, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 18-15	Piper J3-C65 CF-BRO	5008-B 18-15

file Please
MAR 1 1948 CAR

TRANSPORT-RECORDS
FEB 27 A.M.
File 5008-B-18-15

A38585

Controller of Civil Aviation,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. With reference to your letter of February 24th., this is to advise that Certificate of Registration No. 6433 has now been changed to read No. 6743, as requested.

noted
ESJ

R. W. Goodwin,
District Inspector, Air Regulations,
Moncton, N. B.

RWG/H

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

42 2

6-46

P.O. Box 42,
Moncton, N.B., February 25, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 18-15	Piper J3-C65 CF-BRO Pulsifer Brothers, Limited, Halifax, N.S.	5008-B 18-15

TRANSPORT-RECORDS
FEB 27 A.M.
File 5008-B 18-15

Controller of Civil Aviation,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Please be advised that Certificate of Airworthiness No. 877, issued in favour of the subject noted aircraft, has been renewed to read "Valid until February 17, 1949" in view of the satisfactory condition of the aircraft. A-8584

2. Proper log book entries have been made signed by Air Engineer I. Saunders, Certificate No. A-1184, and the aircraft was test flown by Mr. E. C. Dauphinee, holder of Public Transport Pilot's Certificate No. 1124, under date of January 2, 1948.

3. Certificate of Airworthiness No. 877 has been amended as follows:

Item 25: Weight of aircraft empty:
(c) Skiplane.....715 lbs. 25-2-48

Item 31: Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full:
Skiplane.....254 lbs. 25-2-48

Item 32: Maximum total weight authorized:
Skiplane.....1220 lbs. 25-2-48

Item 33: Maximum total weight authorized (write in full)
Skiplane: Twelve hundred & twenty pounds 25-2-48

4. Cub Aircraft Skis type J-3-A316A have been installed on this aircraft in accordance with Cub Aircraft Drawing No. CC-S1.

R. W. Goodwin,
A/District Inspector, Air Regulations,
Moncton, N.B.

RWG/H

43

SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-B18-15

P. O. Box 42,
Moncton, N. B.
November 8. 1948.

Reverend D.R. Chisholm,
New Glasgow, N.S.

Dear Sir:

Receipt is acknowledged of your application for registration of Piper J3-C65 Aircraft, CF-HRO, recently purchased by you from Pulsifer Bros. Limited.

With the following papers:
Application forms
Bill of Sale - Pulsifer Bros. to Rev. D.R. Chisholm,
Air Engineer's and Pilot's Report,
Certificate of Registration No. 6743,
Certificate of Airworthiness No. 877

Receipt No. 35303 issued to cover re-registration fee is attached hereto.

Pending the issue of the formal certificates of Registration and Airworthiness, this letter will be your authority to operate Piper J3-C65 as a Private aircraft on day visual flying, until January 8, 1949. The all-up weight of the aircraft is not to exceed
1220 lbs. as landplane, as seaplane,
1220 lbs. as skiplane.

Yours truly,

R. W. Goodwin,
District Inspector, Air Regulations,
Moncton, N. B.

c.c.: H.Q.

/RM

44

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 6743

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	113C
4. Name of owner	Pulsifer Bros. Limited,
5. Address of owner	Halifax, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Halifax, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 29th day of January 1948, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and ~~has been allocated the~~ nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 17th day of February 1948.

H. L. Pattison

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

45

B I L L O F S A L E.

Halifax, N. S.
November 4, 1948.

PROVINCE OF NOVA SCOTIA, CANADA.

KNOW ALL MEN BY THESE PRESENTS: That in the consideration of One dollar and other consideration, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto

REVEREND D. R. CHISHOLM
NEW GLASGOW, NOVA SCOTIA.

his heirs, executors, administrators and assigns, all right, title and interest in and to the following goods and chattels, viz:

PIPER J3 - C65 AIRCRAFT CF-BRO.

SERIES 1130

ENGINE SERIAL 3456358

PULSIFER BROS. LIMITED

.....
Witness.

W.W. Burgoyne ..... Office Manager.

DESCRIPTION OF AIRCRAFT

Heavier than or Lighter than Air Heavier made by Cub Aircraft Corp.

Type Piper J3 - C65 Maker's No. 1130

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2⅛"	35' 2⅛"
Length o/a in feet	22' 5"	22' 5"
Height o/a in feet	6' 8"	6' 8"

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 699#

Total weight authorized (fully loaded) in lbs. 1220# Air speed 75 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, Altimeter, Airspeed indicator, Rev. indicator.
2. Gauges Oil pressure and oil temperature.
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One pyrene
6. Parachutes Nil
7. Tools Necessary
8. Other Equipment Safety belt for each passenger.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	Left			
No. of Cylinders	Four			
H.P.	65			
Bore	3 7/8"			
Stroke	3 5/8"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected for renewal of Certificates of Registration and Airworthiness - Nov. 4/48. Ian P. Saunders, Air Engineer's Certificate No. A-1184.

Particulars accurate as corrected Correct

Modifications from type are indicated on annexed sheet None

Registration recommended with the following special conditions Recommended

Date Nov. 8 1948

Signature J Hardman

Registration approved and Registration Mark C.F. - BKO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

46

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00 X

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant D R Chisholm

Date of Application November 4, 1948.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
REV. D. R. CHISHOLM	NEW GLASGOW, N. S.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

PRIVATE.

Usual Station TRENTON AERODROME, NOVA SCOTIA.

Date of manufacture or reconstruction FEBRUARY 1, 1946.

Crew required one

Accommodation for what number of passengers one

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

47 2
6-46

P.O. Box 42,
Moncton, N. B. (PLACE) November 8, 1948. (DATE)

YOUR FILE	SUBJECT	OUR FILE
5008-B18-15	Piper J3-C65 Aircraft, CF-BRO Application for C. of R. and C. of A.	5008-B18-15

REGISTERED

TRANSPORT-RECORDS
NOV 9 P.M.
File 5008-B18-15

Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

A32174

Attention: Controller of Civil Aviation.

1. Enclosed please find the following documents for re-registration of Piper J3-C65 Aircraft, CF-BRO.

(1) Application form, in duplicate, for registration as a private aircraft in the name of D.R. Chisholm,
(2) Bill of Sale - Pulsifer Bros. Limited to D.R. Chisholm,
(3) Certificate of Registration No. 6743,
(4) Certificate of Airworthiness No. 877,
(5) Copy of temporary authority to operate.

2. Official Receipt No. 35303, contained in Blotter Cash Book No. 8719, has been issued to cover the re-registration fee of $5.00.

3. This application appears in order, and is recommended to Headquarters for approval.

for W.M. Johnson
(S.S. Foley),
District Controller, Air Services,
Moncton, N. B.

WMJ/L
Encls.

Miss Jones
A/R Re - Reg

H.T.P.

7554 (R)
877 (A)

Ltr & Encl

/RM

49

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7554

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	1130
4. Name of owner	Rev. D.R. Chisholm,
5. Address of owner	New Glasgow, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Trenton, N.S.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 8th day of November 19 48, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 12th day of November 19 48.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after February 17th, 1949, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

AC-5-60

5008-B18-15

REGISTERED

OTTAWA, November 12th, 1948.

Rev. D.R. Chisholm,
New Glasgow,
N.S.

Dear Sir:

Enclosed please find Certificate of Registration No. 7554 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft CF- BRO , Serial No. 1130.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until February 17th, 1949.

Yours truly,

NOTED
NOV 17 1948
Revenue Audit
Dept. of Transport.

(S. Graham)
Superintendent, Air Regulations.

Encls.

cc. D.C.A.O.,
Attn: D.I.A.N. Moncton, N.B.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

61 2 6-47

P.O. Box 42,
Moncton, N.B., March 15, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 18-15	Piper J3 - CF-BRO Rev. D. R. Chisholm, New Glasgow, N.S.	5008-B 18-15

Refer to File Number Please

TRANSPORT-RECORDS
MAR 16 P.M.
5008-B18-15
FILE

A48377

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

Attention: Controller of Civil Aviation

1. Please be advised that Certificate of Registration No. 7554 and Certificate of Airworthiness No. 877, issued in favour of the subject noted aircraft, have been renewed to read "not valid after November 4, 1949". ✓

2. Proper log book entries were made signed by Air Engineer Ian P. Saunders, Certificate No. A-1184, and the aircraft was test flown by Mr. E. C. Dauphinee, holder of Public Transport Pilot Certificate No. 1124 under date of November 4, 1948.

Noted 61

(S. S. Foley),
District Controller, Air Services,
Moncton, N.B.

53

THE FAIREY AVIATION COMPANY OF CANADA LTD

AIRCRAFT WEIGHING FORM

REPORT NO. W7

AIRCRAFT.. Piper ..... MODEL.. J3 - C65 ..... TYPE.. Landplane

REGISTRATION MARK.. CF - BRO ..... OWNER.. Dr. Chisholm

SERIAL NO. OF A/C.... 1130 ..... DATE OF WEIGHING.. 25 October 49

PLACE OF WEIGHING.. Closed Hanger - Pulsifer Bros., Eastern Passage, N. S.

APPARATUS USED FOR WEIGHING... Cox and Stevens Electronic Weighing Kit. Model ES-6A Serial No. 913

CONDITION OF A/C AS WEIGHED... Aircraft in flying position
No fuel - No oil
Equipment as listed below

LEVELLING MEANS.. Top longeron - between front and rear seats

DATUM.... Leading edge - mainplane

SUPPORTS (FRONT)... Main Wheels - Measured 2.5 ins aft of datum

SUPPORTS (REAR) Strong Point Forward of Tail Wheel - Measured 187.2 ins aft of datum

	WEIGHT	ARM (Distance From) Datum)	MOMENT ABOUT DATUM
	Pounds	Inches	Pound-Inches
Front Left Support	332	+2.5	+ 830
Front Right Support	315	+2.5	+ 787.5
Tail Support	58	+187.2	+10857.6
T O T A L	705	+17.70	+12475.1

EQUIPMENT IN AIRCRAFT AT TIME OF WEIGHING		WT	ARM
Item 101	Propellor - Wooden Fixed		
104(a)	Carburetor Air Heater - D78c	2	-39
304(d)	Tail Wheel - Scott 6 x 200 Steerable	+ 4	+197
305(c)	Main Wheel Brake Assy 8.00 x 4 Type 111	+12	+ 3
311(ci)	Engine A - 65 - 8	+10	

Max. Permissible All-Up-Wt = 1220 lb

Permissible C. G. Range (Empty) = 8.5 ins to 20.3 ins. aft of datum
Permissible C. G. Range (Loaded) = 10.6 ins to 22.7 ins aft of datum
C. G. Position Actual (Empty) = 17.70 ins. aft of datum

R. Wallworth
Chief Engineer

Checked Dec 27/49
J.H.

52

THE FAIREY AVIATION COMPANY OF CANADA LTD

AIRCRAFT WEIGHING FORM (SUPPLEMENT)

REPORT NO. W7

AIRCRAFT Piper MODEL J3 - C65 TYPE Landplane

REGISTRATION MARK CF - BRO OWNER Dr. Chisholm

SERIAL NO. OF A/C 113C DATE OF WEIGHING 25 October 49

PLACE OF WEIGHING

APPARATUS USED FOR WEIGHING Cox and Stevens Electronic Weighing Kit. Model ES-6A Serial No. 913

CONDITION OF A/C AS WEIGHED

LEVELLING MEANS

DATUM

SUPPORTS (FRONT)

SUPPORTS (REAR)

NORMAL LOADING CONDITION

	WT	Arm (Distance from Datum)	Moment About Datum
	POUNDS	INCHES	POUND-INCHES
Aircraft Empty	705	+17.70	+12475.1
Fuel - 10 Imp. Gals	72	-18.00	- 1296.0
Oil - 1 Imp. Gal.	9	-29.00	- 261.0
Pilot	170	+ 9.00	+ 1530.0
Passenger	170	+36.00	+ 6120.0
Baggage (Max)	80	+49.00	+ 980.0
	1146	+17.06	+19548.1

MOST FORWARD POSITION OF C2 G.

Aircraft Empty	705	+17.70	+12475.1
Fuel	72	-18.00	- 1296.0
Oil	9	-29.00	- 261.0
Pilot	170	+ 9.00	+ 1520.0
	956	+13.02	+12448.1

MOST AFT POSITION OF C. G.

Aircraft Empty	705	+17.70	+12475.1
Fuel - 45 mins. = 2 1/4 Imp. Gals.	16.2	-18.00	- 291.6
Oil	9	-29.00	- 261.0
Pilot	170	+ 9.00	+ 1530.0
Passenger	170	+36.00	+ 6120.0
Baggage	20	+49.00	+ 980.0
	1090.2	+18.85	+20552.5

R. Wallworth
Chief Engineer

54

TRANSPORT - RECORDS
DEC 30 P.M.
5008-B18-15

DEPARTMENT OF TRANSPORT
Intra-Departmental Correspondence

File: 5008-B18-15

39600

P.O. Box 42,
Moncton, N.B.
December 28, 1949.

To: Director of Air Services, OTTAWA.
Attention: Superintendent, Air Regulations.

From: District Inspector, Air Regulations, Moncton, N.B.

Subject: Renewal Certificates of Registration & Airworthiness.

Aircraft: Piper J3-C65, CF-BRO

C. of R. Number 7554 C. of A. Number 877

Owner: Rev.D.R. Chisholm,

Address: New Glasgow, Nova Scotia.

Date of Test Flight: October 25, 1949

Satisfactory Inspection Report signed by: I. Saunders,
Air Engineer's Certificate No. A-1184

Test Flight Report Signed by: E.C. Dauphinee,
Public Transport Pilot's Cert. #1124.

Certificates Renewed Valid until: October 25, 1950.

Remarks: Weight and Balance Report has been attached to C. of A. #877 and this certificate was endorsed, this date, as follows: "Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried in the aircraft during flight".

Items 25 to 33 inclusive have been deleted, this date, from the C. of A. #877.
NOTE:- Copy of Weight and Balance Report is attached herewith.

(W.M. Johnson)
for District Controller, Air Services,
Moncton, N. B.

Encl.

47471

TRANSPORT - RECORDS
FORM No. 2444
MAR 21 A.M. 1951
File 5008-B18-15

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF-BRO Serial No. 1130

1. C. of A. No. 877 Expires 25/10/50 C. of R. No. 7554 Expires 25/10/50
Aircraft Data - Manufacturer Feb. 1946 - Cub Aircraft Model Piper J3 - C65
Hours flown - Since New 612' 20" Since Overhaul nil 192' 50"
Engine Data - Manufacturer Continental Model A-65

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	3456358	533' 00"	192' 50"
(2)			
(3)			
(4)			

Signature of Applicant D. K. Griffin
Date March 15, 1951

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature]
"B" Engineer
Date March 15, 1951

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed D. K. Griffin
Test Pilot
Date March 14. 1951

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report (when applicable) [X]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed [signature]
District Aircraft Inspector
Date March 19 1951

7. C. of A. and C. of R. renewed, not valid after. 13th March 1952

(Date)- _____
Permissible Gross Weights - Wheels - 1220 165.
- Skis
- Floats

Signed [signature]
District Superintendent, Air Regulations
Date 19/3/51

Other Action:-

8. H.Q. Action C.A.R.

C.A.E.

56

File: 5008-B 18-15

DEPARTMENT OF TRANSPORT

P.O.Box 42,
Moncton, N.B.,
April 3, 1952.

Mr. John M. McKenzie,
13 James Street,
Dartmouth, Nova Scotia.

Dear Sir:-

Receipt is acknowledged of your application for registration of Piper J3-C65 aircraft, CF-BRO, recently purchased by you from Rev. D.R. Chisholm, New Glasgow, N.S., with the following papers:-

(1) Application form, in triplicate.
(2) Bill of Sale.
(3) Certificate of Registration No. 7554.
(4) Certificate of Airworthiness No. 877.
(5) Form No. 2444, in duplicate.
(6) Work Sheet.
(7) $5.00 fee.

Receipt No. 122114 has been issued and forwarded to you by mail.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BRO as a private aircraft. This aircraft must be operated in accordance with the Weight and Balance Report and under the conditions set out in Manufacturer's Aircraft Manual. The all-up weight of the aircraft is not to exceed 1220 lbs. as landplane, ~~---------- lbs. as seaplane, ---------- lbs. as skiplane~~.

This temporary authority is not valid after May 2nd., 1952, and does not include permission for the operation of radio apparatus.

Yours truly,

R.W. Goodwin,
District Superintendent, Air Regulations,
Moncton, N.B.

/3a

57 FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF- BRO **Serial No.** 113C

1. **C. of A. No.** 877 **Expires** Mar.31 1952 **C. of R. No.** 7554 **Expires** Mar.31, 1952
Aircraft Data - Manufacturer Cub Aircraft Corp. **Model** Piper J3C65
Hours flown - Since New 643:30 **Since Overhaul** (Last C.of A. Inspection) 29:40
Engine Data - Manufacturer Continental **Model** A 65-8

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 3456358	563:00	228:55
(2)		
(3)		
(4)		

Signature of Applicant John M McLeggit
Date March 22, 1952

2. **I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.**

Signed E V Skinner QMM9
Engineer Licence No.
Date March 22, 1952

3. **I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.**

Signed E V Skinner QMP 2629
Pilot
Date March 23, 1952.

4. **The following documents are attached:**

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. **When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No.** 7554 **and C. of A. No.** 877, **or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.**

FOR DEPARTMENTAL USE ONLY

6. **Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.**

Signed J Hardman
District Aircraft Inspector
Date April 3 1952

7. **C. of A. and C. of R. renewed, not valid after.**

(Date)- March 22 1953
Permissible Gross Weights - Wheels 1220
- Skis
- Floats

Signed J C Tillson
District Superintendent, Air Regulations
Date April 3rd 1951

Other Actions:-

8. **H.Q. Action** C.A.R.

C.A.E.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

Renewed not valid after November 4, 1949

Renewed not valid after October 25, 1950.

Renewed not valid after March 13, 1952.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

58

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7554

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	113C
4. Name of owner	Rev. D.R. Chisholm,
5. Address of owner	New Glasgow, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Trenton, N.S.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 8th day of November 19 48, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 12th day of November 19 48.

H. Gattuso

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after February 17th, 1949, unless endorsed.

54

Received Feb. 22 1952 ~~1951~~

from John M. MacKenzie

One Thousand Dollars

Payment in full for C.F. BRO. Aircraft

$ 1000.00 D. R. Thurston

60

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00 ✓

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant John M. McKenzie Jr.

Date of Application Mar 23/52

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
McKENZIE	13 JAMES ST.	Canadian
JOHN	DARTMOUTH	
MALCOLM.	N. S.	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)
PRIVATE.

Usual Station DARTMOUTH

Date and place of manufacture or reconstruction HAMILTON ONT.

Crew required One

Accommodation for what number of passengers one

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Cub aircraft Corp.

Type Piper J.3. C65 Maker's No. 1130.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 699 lbs.

Total weight authorized (fully loaded) in lbs. 1220 Air Speed 80 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, Clock, air speed indicator, Altimeter
2. Gauges oil pressure, oil temperature, tachometer.
3. Lights Nil.
4. Signals Nil.
5. Fire Extinguishers one Syrene.
6. Parachutes Nil.
7. Tools Emergency.
8. Other Equipment Safety belts (Rhe(oil)

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	A 65-8 Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	R.H.			
No. of Cylinders	4			
H.P.	65			
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on March 22, 1952 for renewal of Certificates by E.V. Skinner. Licence No. QMM-9.

Particulars accurate as corrected Accurate.

Modifications from type are indicated on annexed sheet None.

Registration recommended with the following special conditions

Recommended.

Date April 3, 1952. Signature J Hardwen

Registration approved and Registration Mark C.F. – BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by CUB AIRCRAFT CORP.

Type PIPER J.3. C65 Maker's No. 113C.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35'2½"	
Length o/a in feet	22'-5"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 699 lbs.

Total weight authorized (fully loaded) in lbs 1220 Air Speed 80 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass. (Clock) air speed indicator, altimeter.
2. Gauges oil pressure (oil temperature) tachometer
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One Pyrene.
6. Parachutes Nil.
7. Tools Emergency.
8. Other Equipment Safety Belts. (Rope) (oil)

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type A65-8	Continental.			
Pusher or Tractor	Tractor			
Right or Left Hand	R.H.			
No. of Cylinders	4			
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on March 22, 1952 for renewal of Certificates by E.V. Skinner, Licence No. QMM-9.

Particulars accurate as corrected Accurate.

Modifications from type are indicated on annexed sheet None.

Registration recommended with the following special conditions

Recommended.

Date April 3, 1952. Signature J Hardmen

Registration approved and Registration Mark C.F. - BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

61

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant John M McKenzie

Date of Application March 23/52

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
McKENZIE	13 JAMES ST.	Canadian
JOHN	DARTMOUTH	
MALCOLM	N.S.	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE.

Usual Station DARTMOUTH.

Date and place of manufacture or reconstruction HAMILTON ONT.

Crew required One.

Accommodation for what number of passengers one.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

b2

3
5-51

Moncton, N.B., April 3, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J3-C65 - CF-BRO Application for Re-registration	5008-B 18-15

TRANSPORT - RECORDS
APR 7 A.M. 1952
File 5008-B18-15

00877

REGISTERED

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Enclosed herewith are the following documents with reference to the subject-noted application:-

(1) Application form, in duplicate, for registration as a private aircraft in the name of Mr. John Malcolm McKenzie.
(2) Bill of Sale - D.R. Chisholm to John M. McKenzie.
(3) Certificate of Registration No. 7554.
(4) Certificate of Airworthiness No. 877.
(5) Form No. 2444.
(6) Copy of temporary authority to operate.

2. Official Receipt No. 122114 has been issued to cover $5.00 registration fee.

3. It is recommended that formal certificates now be issued in the name of Mr. John Malcolm McKenzie.

(J. C. Folkins)
for District Controller, Air Services,
Moncton, N.B.

Encls.

10863 (R)
877 (A)

66

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10863

NATIONALITY AND REGISTRATION MARKS CF-BRO.

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	1138
4. Name of owner	John Malcolm McKenzie.
5. Address of owner	13 James Street, Dartmouth, N.S.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Dartmouth, N.S.
8. Purpose	~~Private~~ Commercial (25.7.52)

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 3rd day of April, 19 52., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 22nd day of April, 19 52.

H L P

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/SEK

67

5008-B18-15

OTTAWA, Ontario.
May 5th, 1952.

Mr. John Malcolm McKenzie,
13 James Street,
DARTMOUTH, N.S.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 10863 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft, CF- BRO , Serial No. 1130.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until March 22nd, 1953.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

cc: MONCTON

(C.T. Travers),
Superintendent, Air Regulations

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

69/3
5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

P.O. Box 42,
Moncton, N. B. (PLACE) June 27, 1952. (DATE)

YOUR FILE	SUBJECT	OUR FILE
5008-B18-15	Piper J3-C65 Aircraft - CF-BRO	5008-B18-15

18772

TRANSPORT - RECORDS
JUN 30 A.M. 1952
File 5008-B18-15

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Please be advised that Item 9 of Certificate of Airworthiness No. 877, issued in favour of subject-noted aircraft, has been amended to include "& Marine - 27 June 1952". ✓

2. Enclosed herewith is copy of Amendment to Weight and Balance Report for Piper J3-C65 aircraft, CF-BRO.

J. C. Folkins

(J. C. Folkins),
for District Controller, Air Services,
Moncton, N. B.

Encl.

Life preservers etc
to be added to Page 3 of 6 pp.

Noted

68

SUPPLEMENT to WEIGHT and BALANCE REPORT.

Prepared to determine centre of gravity of Piper J5C65 CF-BRO Serial #1150 when Edo floats model 60-1520 are installed in lieu of land plane undercarriage.

	Weight	Arm	Moment
A/C weight empty	705		12475.1
Less main U/C	-32	5	-96
Tail skid	-4	190	-760
Tail wheel	-5	197	-985
	664		10654.1
Edo floats installed (Model 60-1520)	174.5	15.7	2739.65
	838.5		15373.75

Centre of gravity as seaplane empty 15.95 inches aft of leading edge of wing.

Weight empty as seaplane 838.5 lbs maximum permissible 1500 lbs.

Empty weight C. of G. range as seaplane

8.7 to 16.8 with Edo 60-1520 floats

1500 lbs maximum weight

Placard: "Solo Flying From Rear Seat Only"

Prepared by
E. V. Skinner

Q.M.M.9.

Checked June 27/52

70

J.-/mlb.

Ottawa, Ontario July 7th, 1952.

008-B18-16 Piper J3-C65 Aircraft CF-BRO 5008-B18-15

District Controller of Air Services,
P.O. Box 42,
Moncton, N.B.

Attention: District Superintendent, Air Regulations.

1. Your letter, 5008-B18-15, dated June 27th, 1952, advising that Certificate of Airworthiness No. 877 covering Piper J3-C65 aircraft CF-BRO has been amended under item 9 to read "and Marine" is acknowledged.

2. We note that an additional amendment on page 3 "D" is required by adding "Life preservers for each occupant when operating as a seaplane". May this office be advised when this amendment has been completed.

(C.T. Travers),
Superintendent, Air Regulations.

24129

JUL 30 P.M. 1952

File 5008-B18-15

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Moncton, N.B., July 25, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J3-C65 - CF-BRO	5008-B 18-15

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. This is to advise that the formal certificates for the subject-noted aircraft have been amended as follows:-

Certificate of Airworthiness No. 877:

Page 1, Item 14: "a, b, c, & e" - 25 Jul. 52.
Page 3, Item D : "Life preservers for each occupant when operating as a seaplane". 25 Jul. 52. ✓

Certificate of Registration No. 10863:

Page 1, Item 8: "Commercial". 25 Jul. 52. ✓

2. The amendment of Item D, Page 3, of the Certificate of Airworthiness was made in accordance with your letter of July 7th, 1952.

(R. W. Goodwin)
for District Controller, Air Services,
Moncton, N.B.

noted

TRANSPORT - AIR BRANCH
72
APR 10 A.M. 1953
File 5008 - B18-15

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF- BRO 01569 Serial No. 1 1 3 C

1. C. of A. No. 8 7 7. Expires March 22 '53 C. of R. No. 10863 Expires _____
Aircraft Data - Manufacturer CUB Aircraft Corp. Model Piper J3-C65.
Hours flown - Since New 781:25. Since ~~Overhaul~~ Last C of A. 137:55.
Engine Data - Manufacturer Continental Model A65-8

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	3456358	700:55	366:50.
(2)			
(3)			
(4)			

Signature of Applicant John M McKenzie
Date January 17th 1953.

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed E H Kennett Q.M.M.9.
~~REX~~ Engineer
Date January 17th 1953.

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed John M McKenzie
Test Pilot
Date January 17th 1953.

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report [X]
(when applicable)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 10863 and C. of A. No. 877 , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed Hardiman
District Aircraft Inspector
Date April 7 1953

7. C. of A. ~~and C. of R.~~ renewed, not valid after.

(Date)- March 21st 1954
Permissible Gross Weights - Wheels 1220
- Skis
- Floats 1300

Signed J.B. Tobin
District Superintendent, Air Regulations
Date April 7th 1953

Other Action:-

8. H.Q. Action C.A.R.

C.A.E.

73

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10863

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	1130
4. Name of owner	John Malcolm McKenzie,
5. Address of owner	13 James Street, Dartmouth, N.S.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Dartmouth, N.S.
8. Purpose	~~Private~~ Commercial 25 Jul. 52

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 3rd day of April, 1952., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 22nd day of April, 1952.

H. L. Patteson
Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

74

BILL OF SALE

Sydney, N.S.,
June 25th, 1953.

TO WHOM IT MAY CONCERN:

This will advise that on this date I have sold to James L. SHANAHAN, F.J.W. SAURIOL and L.A. MACGILLIVRAY of Sydney, Nova Scotia, all rights and interests in Aircraft CF-BRO for the sum of $1.00 and other considerations.

John Malcolm McKenzie
(John Malcolm McKenzie)

Witnessed:

Dorothy M. McKenzie

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Cub Aircraft Corp.

Type J-3-C 65 Maker's No. 1132

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35'2±"	
Length o/a in feet	22'5"	
Height o/a in feet	6'8"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 838.5 (Seaplane)

Total weight authorized (fully loaded) in lbs 1300 Air Speed 75 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, altimeter, a/s indicator
2. Gauges oil pressure, oil temp. & fuel indicator
3. Lights nil
4. Signals nil
5. Fire Extinguishers One
6. Parachutes nil
7. Tools nil
8. Other Equipment Safety belt & life preserver for each occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	tractor			
Right or Left Hand	Right			
No. of Cylinders	four			
H.P.	65			
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on June 21, 1953.

Particulars accurate as corrected Accurate.

Modifications from type are indicated on annexed sheet None.

Registration recommended with the following special conditions

Recommended.

Date June 26, 1953. Signature J Hawkmen

Registration approved and Registration Mark C.F. - BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant J. L. Shanahan
J. L. Shanahan
L. A. MacGillivray

Date of Application June 26, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
J. L. SHANAHAN	174 S. Bentinck St., Sydney, N.S.	Canadian
F. J. W. SAURIOL	217 Charlotte St., Sydney, N.S.	"
L. A. MACGILLIVRAY	250 Park St., Sydney N.S.	"

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) COMMERCIAL AR-304 ~~Private~~

Usual Station Sydney N.S.

Date and place of manufacture or reconstruction 1946, Hamilton, Ont.

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Cub Aircraft Corp.

Type J-3-C65 Maker's No. 1130

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	838.5 lbs. (Seaplane)	
Total weight authorized (fully loaded) in lbs. 1300 # Air Speed 75 miles per hour		

EQUIPMENT—(Give number and type).

1. Instruments Compass, altimeter, a/s indicator,
2. Gauges oil pressure, oil temp & Rev. indicator
3. Lights nil
4. Signals nil
5. Fire Extinguishers One
6. Parachutes nil
7. Tools nil
8. Other Equipment safety belt & life preserver for each occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	tractor			
Right or Left Hand	Right			
No. of Cylinders	four			
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on June 21, 1953.

Particulars accurate as corrected Accurate.

Modifications from type are indicated on annexed sheet None.

Registration recommended with the following special conditions

Recommended.

Date June 26, 1953. Signature J Hardman

Registration approved and Registration Mark C.F. - BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant James L Shanahan
J.L. Shanahan
L.A. MacGillivray

Date of Application June 26th, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
J.L. SHANAHAN	174 So. BENTINCK St., SYDNEY, N.S.	Can.
F.J.W. SAURIOL	217 Charlotte St., Sydney, N.S.	Can.
L.A. MACGILLIVRAY	250 Park St., Sydney, N.S.	Can.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)
COMMERCIAL AR Test ~~Commercial Private~~

Usual Station Sydney, N.S.

Date and place of manufacture or reconstruction 1946, Hamilton, Ontario

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

77 3/5-51

Moncton, N.B., July 16, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J3-C65 - CF-BRO Application for Re-Registration.	5008-B 18-15

TRANSPORT - RECORDS
JUL 20 P.M. 1953
File 5008-B 18-15

26773

REGISTERED

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Enclosed herewith are the following documents with reference to an Application for Registration of the subject-noted aircraft:-

(1) Application form, in duplicate, for registration as a commercial aircraft in the name of Messrs. J.L. Shanahan, F.J.W. Sauriol, and L.A. MacGillivray.

(2) Bill of Sale - John Malcolm McKenzie to Messrs. James L. Shanahan, F.J.W. Sauriol and L.A. MacGillivray.

(3) Certificate of Registration No. 10863.

(4) Certificate of Airworthiness No. 877.

2. Official Receipt No. A-13408 has been issued to cover $5.00 registration fee.

12154 (R)
877 (A)

J.C. Folkins

(J.C. Folkins),
for District Controller, Air Services,
Moncton, N. B.

Encls.

81

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12154

NATIONALITY AND REGISTRATION MARKS CF-HRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	113C
4. Name of owner	SHANAHAN, SAURIOL & MacGILLIVRAY J.L. F.J.W. L.A.
5. Address of owner	174 So. Bentinck Street, Sydney, N.S. 217 Charlotte St., Sydney, N.S. 256 Park St., Sydney, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Sydney, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 26th day of June, 1953 in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-HRO and is of Canadian nationality.

Given at Ottawa this 22nd day of July, 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

SEK

82

...ICES
CIV... ...ON DIVISION

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-B18-15

REGISTERED

OTTAWA, Ontario.
23rd July, 1953.

Messrs. J.L. Shanahan, F.J.W. Saurior and
L.A. MacGillivray,
174 So. Dentinck Street,
SYDNEY, N.S.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 12154 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft, CF- BRO Serial No. 11338.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until March 21st, 1954.

Your attention is drawn to Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

(C.T. Travers),
Superintendent, Air Regulations.

CC: MONCTON

P.S. Propeller Log Book (s) enclosed. Yes No. X

AC-5-60

83

File No: 5008-B18-15

DEPARTMENT OF TRANSPORT

P.O. Box 42,
Moncton, N.B.,
October 8, 1953.

Mr. Wm. J. Pear,
Avalon Club,
Long Pond, Nfld.

Dear Sir:-

Receipt is acknowledged of your application for registration of Piper J3-C65 Aircraft CF-BRO recently purchased by you from J.L. Shanahan, P.J.W. Sauriol & L.A. MacGillivray with the following papers:-

(1) Bill of Sale, in triplicate.
(2) Application form, in triplicate.
(3) Certificate of Registration No. 12154
(4) Certificate of Airworthiness No. 877
(5) $5.00 fee.

Receipt No. A-13617 is enclosed herewith covering the $5.00 application fee.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BRO as a Private aircraft. This aircraft must be operated in accordance with the Weight and Balance Report and under the conditions set out in Manufacturer's Aircraft Manual. The all-up weight of the aircraft is not to exceed 1220 lbs. as landplane, 1300 lbs. as seaplane, XXXXXXX lbs. as ~~skiplane.~~XXXXXXX

This temporary authority is not valid after November 7, 1953, and does not include permission for the operation of radio apparatus.

Yours truly,

R. W. Goodwin,
District Superintendent, Air Regulations,
Moncton, N. B.

Encl.
/MB

84

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12154

NATIONALITY AND REGISTRATION MARKS CF-BRO

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	113C
4. Name of owner	SHANAHAN, SAURIOL & MacGILLIVRAY J.L. F.J.W. L.A.
5. Address of owner	174 So. Bentinck Street, Sydney, N.S. 217 Charlotte St., Sydney, N.S. 250 Park St., Sydney, N.S.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Sydney, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 26th day of June, 19 53., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BRO and is of Canadian nationality.

Given at Ottawa this 22nd day of July, 19 53.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

85

BILL OF SALE

SYDNEY, NOVA SCOTIA
October 2nd, 1953.

TO WHOM IT MAY CONCERN:-

THIS IS TO CERTIFY THAT ON THE THE ABOVE DATE, THE UNDERSIGNED: JAMES L. SHANAHAN, F.J.W. SAURIOL and L.A. MACGILLIVRAY, ALL OF SYDNEY, N.S., HAVE SOLD ALL RIGHTS AND INTERESTS IN AIRCRAFT CF-BRO TO WILLIAM J. PEAR OF ST. JOHN'S, NEWFOUNDLAND FOR THE SUM OF ONE DOLLAR AND OTHER CONSIDERATIONS.

THIS IS ALSO TO CERTIFY THAT THE UNDERSIGNED: JAMES L. SHANAHAN, F.J.W. SAURIOL and L.A. MACGILLIVRAY DO HEREBY RELINQUISH ALL RIGHTS, CLAIMS AND INTEREST TO AIRCRAFT CF-BRO.

Witnessed:
J. W. Ramsay

James L. Shanahan
(James L. Shanahan)

J. W. Ramsay

F. J. W. Sauriol
(F.J.W. Sauriol)

J. W. Ramsay

L. A. MacGillivray
(L. A. MacGillivray)

DESCRIPTION OF AIRCRAFT

Heavier than or Lighter than Air ~~Lighter~~ Heavier made by Cub Aircraft Corporation

Type Land and Marine ~~27-6-53~~ Maker's No. 113 C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil Land- 705 Marine-838.5

Total weight authorized (fully loaded) in lbs Land 1220 Mar-1300 Air speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, altimeter, airppeed indicator, rev.indicator
2. Gauges Oil pressure guage, oil temperature guage
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Safety belt & life preverver for each occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	Four			
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on January 17, 1953 by E.V. Skinner Licence No. QM4-9

Particulars accurate as corrected Accurate

Modifications from type are indicated on annexed sheet None

Registration recommended with the following special conditions Recommended

Date October 14, 1953

Signature J Hardman

Registration approved and Registration Mark C.F. - B R a allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

241.1 86

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~) Triplicate

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... William J. Pear

Date of Application..... Sept 2nd., 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Wm. J. PEAR	Avalon Club, Long pond, Newfoundland.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)..... PRIVATE

Usual Station..... St. Johns, Newfoundland.

Date of manufacture or reconstruction..... 1946

Crew required..... One

Accommodation for what number of passengers..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than or Lighter than Air ~~Lighter~~ Heavier made by Cub Aircraft Corporation

Type Land and ~~Marine~~ ~~27-6-53~~ Maker's No. 113 C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	
Cubic Capacity (of Airship or Balloon)		

Weight equipped, but without load, fuel, or oil Land- 705 Marine-838.5

Total weight authorized (fully loaded) in lbs Land 1220 Mar-1300 Air speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, altimeter, airpeed indicator, rev. indicator
2. Gauges Oil pressure guage, oil temperature guage
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Safety belt & life preverver for each occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	Four			
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on January 17, 1953 by E.V. Skinner Licence No. QMM-9

Particulars accurate as corrected Accurate

Modifications from type are indicated on annexed sheet None

Registration recommended with the following special conditions Recommended

Date October 14, 1953

Signature J Hardman

Registration approved and Registration Mark C.F. -BRO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

87

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in [redacted]) Triplicate

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant..... William J. Pear

Date of Application..... Oct. 2nd, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Wm. J. PEAR	Avalon Club, Long pond, Newfoundland.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)..... PRIVATE

Usual Station..... St. Johns, Newfoundland.

Date of manufacture or reconstruction..... 1946

Crew required..... One

Accommodation for what number of passengers..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

88

3
5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Moncton, N.B., October 15, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J-3 - CF-BRO Application for Re-Registration	5008-B 18-15

44405

TRANSPORT - RECORDS
OCT 19 P.M. 1953
File 5008-B 18-15

REGISTERED

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Enclosed herewith are the following documents with reference to the subject-noted application:-

(1) Application form, in duplicate, for registration as a private aircraft in the name of William J. Pear, Avalon Club, Long Pond, Nfld.

(2) Bill of Sale - Messrs. James L. Shanahan, F.J.W. Sauriol and L.A. MacGillivray.

(3) Certificate of Registration No. 12154.

(4) Certificate of Airworthiness No. 877.

(5) Copy of temporary authority to operate.

2. Official Receipt No. A-13617 has been issued to cover the $5.00 registration fee.

(R. W. Goodwin)
for District Controller, Air Services,
Moncton, N.B.

Encls.

12410(R)
877 (A)

ENGINES

18. Number installed: One
19. Makes: Continental
20. Types: A65
21. International power of the engine or engines at:
(Take-off) (M.E.T.O.) *(a)* Sea Level 65 / 50 H.P. at 2300 / 2100 revolutions per minute.
(International number of revolutions)
(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: *(a)* ..... *(b)* .....
23. Oil: *(a)* ..... *(b)* .....
24. Airscrews: Number fitted One Types Sensenich No. .....
Pitch ..... Diameter .....

25. Weight of aircraft empty (including water in the radiators):	*(a)* Landplane	699 lbs.
	(b) Seaplane	..... lbs.
	(c) Skiplane	715 lbs. (25.2.48)

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	72 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 10 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	9 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 1 Imp. gals.	170
28. Weight allowed for crew	..... lbs.
29. Weight allowed for equipment, excluding wireless apparatus	..... lbs.
30. Weight of wireless apparatus	..... lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full. (Ski) 254 (25.2.48)	(L.P.) 270 lbs.
32. Maximum total weight authorized	..... lbs.
Landplane	1220 lbs.
Seaplane	..... lbs.
Skiplane	1220 lbs. (25.2.48)

Revised 28.12.49

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane: Twelve hundred & twenty pounds
Seaplane: .....
Skiplane: Twelve hundred & twenty pounds (25.2.48)
34. Minimum crew necessary: One
35. Inspections and overhauls: *See* Air Regulations.
36. Stowage. *See* Air Regulations.
37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.
38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.
39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2300 r.p.m.
40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated Feb. 1, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 18th day of February, 19 46.

Superintendent, Air Regulations.

VALID FOR DAY FLYING ONLY

2462
9-39

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 877

(Heavier than air)

~~SHANAHAN, SAURIOL & MACGILLIVRAY (26.6.58)~~
~~J.L. F.J.W. E.A.~~
~~(12x4x52)~~
~~PEAR (8.10.53)~~
~~McKenzie~~
~~(9.10.48)~~

FIRST PART ~~(8.11.48) SHISHOEK~~
~~(29.1.48) PULSIFER BROS. LIMITED,~~

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) ~~Pulsifer Bros. Ltd.~~
2. Christian name ~~D.C. E.C. G.D. R.R.~~, Wm. J. Avalon Club, Long Pond, Nfld. ~~Malcolm~~
3. Address ~~Waterville, N.S. Halifax, N.S.~~ ~~13 James St., Dartmouth, N.S.~~ ~~7 Doyle St., Halifax, N.S.~~
4. Nationality ~~British~~ ~~New Glasgow, N.S.,~~ ~~174 S. Bentinck Street, Sydney, N.S.~~ ~~819 Charlotte Street, Sydney, N.S.~~ ~~250 Park Street, Sydney, N.S.~~

NAME OF CONSTRUCTOR

5. Name Cub Aircraft Corporation

NATIONALITY AND REGISTRATION MARKS

6. CF-BRO

DESCRIPTION OF AIRCRAFT

7. Type Piper Series J3-065 Constructor's No. 1130
8. Place and year of construction of aircraft Hamilton, Ont., 1946.

CLASS OF AIRCRAFT

9. Land and/or marine Land + Marine (27.6.52)
10. Number of planes One
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision ~~a, b, c, d, e, a, b, e, d~~ (25.7.52) 12.11.52
15. Maximum span (in flying position) 35' 2½"
16. Maximum length (in flying position) 22' 5"
17. Total height (with and without trolley in case of seaplanes) 6' 8"

/MIM
/ZC

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Feb. 1, 1947 Oct. 9, 1947 Feb 17/49 4/11/49 25.10.50 March 22, 1953 March 21, 1954	DDM

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

~~62~~ 78/89

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure Gauge
Oil Temperature Gauge
Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant
Life preserver for each occupant when operating as a seaplane (25.75)

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT FORMS PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT. (28.1249)

Note: This certificate is subject to Air Regulations, [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

2462A 92

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12410

NATIONALITY AND REGISTRATION MARKS CF-BRQ

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Hamilton, Ontario.
3. Constructor's serial number	1130
4. Name of owner	William J. Pear
5. Address of owner	Avalon Club, Long Pond, Nfld.
6. Nationality of owner	Canadian
7. Usual station of aircraft	St. Johns, Nfld.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 8th day of October 19 53., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BRQ and is of Canadian nationality.

Given at Ottawa this 23rd day of October 19 53.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

CIVIL SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

93

REFER TO FILE NUMBER
500-218-15

REGISTERED

/WJL

OTTAWA, Ontario.
October 23rd, 1953.

Mr. William J. Pear,
Avalon Club,
Long Pond, Nfld.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 12410 and Certificate of Airworthiness No. 877 for your Piper J3-C65 aircraft, CF- BRO Serial No. 1130.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until March 21, 1954.

Your attention is drawn to Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes X No.
CC. M MOTOR

AC-5-60

7. Number of persons (a).killed Nil (b) seriously injured Nil

8. Nature of accident Aircraft struck bank on approach to lake.

9. Type of flying (Private, non-scheduled, ferry, etc.) Private.

10. Opinion as to the cause of the accident
(Use ICAO Manual of Accident Investigation) Stall (Partial).

11. Infractions of: (a) The Air Regulations Paragraph 4.1

(b) Air Navigation Orders

12. Disciplinary action proposed taken Warning Letter

13. Remarks

On the approach to land at Quidi Vidi Lake, the aircraft was partially stalled which resulted in the aircraft striking a bank before reaching the water, resulting in serious damage to the floats and one lift strut.

14. ~~Remarks~~

The pilot's licence was valid for aeroplanes - single-engine land only. Although the pilot had submitted his licence to this office, along with a recommendation from a Commercial Pilot for a seaplane endorsement, the letter of recommendation submitted did not give sufficient detail to make it acceptable to this office,and the subject pilot's licence was not endorsed to include seaplanes. However, this office had not advised Pilot Greene that the letter was not acceptable at the time the accident occurred. Mr. Greene had incorrectly assumed that his licence would be endorsed and returned to him through normal channels and proceeded to fly the aircraft, which resulted in a breach of the Air Regulations, Paragraph 4.1, inasmuch as the licence held was not appropriate to his duties by reason of it not being endorsed to cover seaplanes. In view of Mr. Greene's past record and relative inexperience, no further disciplinary action, other than a warning letter, is contemplated.

18/1/54

.....
District Controller, Air Services

Note: (1) This report is in amplification of accident notification required.

Inspection Instructions Paragraph 1.2.2 refers.

(2) To be submitted in duplicate.

2448

Date:- January 14,1954.

District File No. 94 5802-536

AIRCRAFT ACCIDENT REPORT

To: Director of Air Services
Department of Transport
Ottawa, Ontario

Attention: Superintendent, Air Regulations

Moncton District

13371

1. (a) Date November 7, 1953. (b) Time (standard): Use 24-hour clock 1945Z

2. (a) Type of Aircraft Piper J-3 (b) Nationality and Registration Marks CF-BRO

(c) C. of A. Valid to March 21, 1954. (d) C. of R. Valid Yes (X) No ( )

TRANSPORT - RECORDS
JAN 18 A.M.
File 5008-B18-15

3. Name of Owner, Operator or Hirer William J. Pear

4. (a) Crew information

Name	Duty	Age	Licences & Ratings			Experience		
			Type	No	Expiry date	Total	On type	
							Total	Within 90 days
Greene, R.J.	Captain	28	Private	QMP-2651	July 21 1954	72:30	1:25	1:25

(b) Now enrolled in Approved School Yes ( ) No (X) Approved School graduate Yes (X) No ( )

(c) Name and location of school Newfoundland Flying Club, St. John's, Newfoundland.

(d) Instructor's name J. Barton Category Class II

(e) Instructor's name who recommended issue of pilot's licence J. Barton Category Class II

(f) Instructor's name who conducted flight test Inspector W.M. Johnson Category N/A

5. (a) Last point of departure Quidi Vidi Lake, St. John's, Newfoundland.

(b) Intended destination Quidi Vidi Lake, St. John's, Newfoundland. (Local)

6. (a) Place of accident Latitude ° 'N. Longitude ° 'W. Altitude ASL 38'

(b) Terrain: Mountain ( ) Prairie ( ) Arctic ( ) Maritime ( ) Bush ( ) Inter-city -populated or semi-populated areas- (X)

(c) Weather:

Ceiling Clear

Visibility 15 +

Wind Speed and direction West 12 to 15

Were icing conditions encountered? Yes ( ) No (X)

COPY ON 5802-28956

Dew point Unknown

Temperature Unknown

	Light	Medium	Heavy
Rain			
Sleet			
Snow			
Hail			
Fog			

Turbulence: light (X) medium ( ) heavy ( )

Entered on Accident Cards

(d) Did pilot obtain weather forecast or attend a meteorological briefing? Yes ( ) No (X) Local Flight

(Over)

95

COPY

ORIGINAL ON FILE 5171-875

COPY FOR FILE 5008-B18-15

12423

DEPARTMENT OF TRANSPORT

TO DAS OW ATTN SUPT AIRWAYS MONCTON NB MAY 27 1954

AWM 341 RE OUTSTANDING ACCOUNT WILLIAM PEAR ON AIRCRAFT CF DASH BRO FOR HANGAR AND HEATING CHARGES AT TORBAY AIRPORT WHICH WE HAVE RECOMMENDED LEGAL ACTION BE TAKEN STOP WE HAVE CLIPPING FROM ST JOHNS NFLD NEWSPAPER STATING THAT JOHN CAHILL SHERIFF OF NFLD IS OFFERING THIS AIRCRAFT FOR SALE BY PUBLIC AUCTION ON FRIDAY 4TH DAY OF JUNE 1954 AT TWELVE OCLOCK NOON STOP BARRISTERS HANDLING THE MATTER ARE MCGRATH AND FURLONG STJOHNS VFLD STOP PLEASE ADVISE

DCAS MONCTON

FOR ACTION SEE ORIGINAL
SGD. OFFICE SERVICES

8
3-53

MEMORANDUM

CLASSIFICATION

TO / A: A.D.M.A., Ottawa, Ontario.

TRANSPORT-RECORDS
APR 16 A.M.
File 5008-BRO

YOUR FILE No. / Votre dossier: 2409

OUR FILE No. / Notre dossier: 5008-1 (ARM)

FROM / De: R.D.A.S., Moncton, N. B.

DATE: April 12, 1962.

FOLD

SUBJECT / Sujet: Civil Aircraft Register - Aircraft CF-BRO and CF-BSZ.

1. It has been noted on reviewing the latest edition of the Aircraft Register that the subject aircraft which have been withdrawn from use are still listed.

2. Forwarded for your information.

for: J. A. Lenahan,
Regional Director, Air Services.

COPY ON
5008-BSZ

CGSB—6GP22a PP&S Cat. No. 3593

LM/hmd

R.D.A.S. - MONCTON

5008-1(ARM)

5008-BRO
~~-BSZ~~

D.C.A.

April 24, 1962.

Civil Aircraft Register - Aircraft CF-BRO and BSZ

1. Reference is made to your letter of April 12th, 1962, concerning the Aircraft Register which still lists both the above aircraft.

2. The reason they are listed is that we have never received an official request for cancellation of the registrations. If your office is in receipt of information regarding cancellation; kindly advise and we will take action to cancel the registrations from the Aircraft Register.

Director, Civil Aviation

MEMORANDUM

CLASSIFICATION

TO A: A.D.M.A.
Ottawa

TRANSPORT-RECORDS
MAY 10 P.M.
File: 5008-BRO

YOUR FILE No. Votre dossier: 6260

OUR FILE No. Notre dossier: 5008-1 (ARM) 5008-14

DATE: 8 May 1962

FROM De: R.D.A.S.
Moncton

FOLD

SUBJECT Sujet: Civil Aircraft Register - Aircraft CF-BRO and BSZ

1. This refers to your letter of 24 April 1962 regarding deletion of the subject noted aircraft from the aircraft register.

2. Both of these aircraft were destroyed and withdrawn from use prior to the fire that destroyed all of the records of this Regional office in 1951. Therefore, we have nothing on file with regard to either aircraft.

3. Also it is not possible to contact the owners listed in the aircraft register since both organizations have now been disbanded. However, Mr. Hardman, the Regional Airworthiness Inspector, is certain both aircraft have been destroyed and withdrawn from use.

Coded RB 15.5.62

for J. A. Lenahan,
Regional Director, Air Services.

Mr. Pinder

On the basis of this letter, will it be in order to cancel these registrations?

LR 14.5.62.

Certs. cancelled LR 16.5.62

COPY ON 5008-BSZ

Mr. Monette:

Yes! LR 14/5/62.

D

CGSB—6GP22a PP&S Cat. No. 3693

FILE No. 5008 - BRT 14-1-46 VOLUME No. 1

VOL. 1
5008 - BRT

DEPARTMENT OF TRANSPORT

FROM FEB. 19, 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - BRT - PIPER J3C65

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

FILE No. 5008 - ~~B18 - 20~~ BRT

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM FEB. 19, 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BRT - PIPER J3C65

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

VOL. 1

5008 - B18 - 20 BRT

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 1 1952	54569	CAR		HLH	FEB 8 1952
1952	—	CAE		— 9 mo	FEB 8 1952
1952		CAE ③		CBB	FEB 11 1952
FEB 11 1952		CRO ③		HLH	FEB 12 1952
FEB 12 1952		RFC		WM	FEB 12 1952
FEB 12 1952	Ray Inc Jones	CAR		GJ	AUG 11 1952
AUG 11 1952	25993	CAE		— 9 mo	AUG 12 1952
AUG 11 1952		CAE		— 9 mo	AUG 12 1952
AUG 31 1953	34761	CAR		GJ	SEP 1 1953
SEP 1 1953	—	CAE		— 9 mo	SEP 2 - 1953
DEC 10 1953	54186	CAR	30 days	HLH	DEC 14 1953
DEC 14 1953	—	CAE		— 9 mo	DEC 15 1953
DEC 21 1953	55929	CAR		GJ	JAN 6 1954
JAN 6 1954	—	CAE		— 9 mo	JAN 7 1954
JAN 7 1954	—	RJL		WM	JAN 7 1954
JAN 7 1954	—	CAI		HLH	JAN 13 1954
JAN 14 1954	13235	CAR		GJ	JAN 14 1954
JAN 14 1954	—	CAE		— 9 mo	JAN 15 1954
19 1954	BF 24/1/24	CAR		HLH	JAN 20 1954
JUN 10 1954	7975	CAR		HLH	JUN 14 1954
JAN 19 1960	44002	SRL		[illegible]	JAN 25 1960
JAN 25 1960	—	SAE/A		GL	JAN 26 1960
JAN 26 1960	—	DATA		DR	JAN 26 1960
	Cancelled — (GL)	Records		GL	JAN 27 1960

FILE No. 5008 - B 18 - 20 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BRT (PIPER CUB)

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")		(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL, TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
28 1948		4016 1	S.A.R.		GJ	MAR 15 1948
MAR 15 1948			Insp.		Julius	
FEB 1 1947		7662	CAR		GJ	FEB 1948
JUN 2 - 1947		7071	CAR		G.	JUN 11 1947
			CAI @			JUN 11 1947
JUN 11 1947			Insp.			JUN 25 1947
	(208-B 18-22)	17511	G.L.		GL	JUL 29 48
JUL 29 48		17770	CAR		GJ	JUL 31 48
AUG 3 48		18022	CAR		GJ	AUG 17 48
AUG 18 48		18944	CAR.		GJ	
			CAE			AUG 20 48
AUG 25 48		21173	CAR		GJ	AUG 27 48
SEP 25 48		25715	CAR		GJ	OCT 1 48
48			CAR①			OCT 1 48
			CRR②			OCT 2 948
OCT 2 948			Insp Accts③			OCT 4 48
FEB 4 1949		42653	CAR		GJ	FEB 1 1949
FEB 17 1949			CAI①			FEB
FEB 1949			CRR②			FEB 23 1949
FEB 23 1949			Insp Accts③			FEB 25 1949
JUL 12 1949		15879	CAR		GJ	JUL 21 1949
NOV 3 - 1949		31603.	CAR		GJ	NOV 7 - 1949
			CAE			NOV 7 - 1949
AUG 21 1950		16861.	CAR		GJ	AUG 21 1950
			CAE			AUG 21 1950
AUG 16 1951		27637	CAR		GJ	AUG 17 1951
AUG 17 1951			CAE			AUG 20 1951

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air heavier made by Cub Aircraft Corporation Ltd.

Type Piper Cub J-5 Maker's No. 118 C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 4½"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon) ——

Weight equipped, but without load, fuel, or oil 705 lbs.

Total weight authorized (fully loaded) in lbs. 1220 lbs. Air speed 80 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Tachometer (Stewart-Warner) Airspeed (U.S. Gauge); Altimeter (Pioneer); Compass (Pioneer);
2. Gauges Oil pressure & Oil temperature (Walton)
3. Lights ——
4. Signals ——
5. Fire Extinguishers Vanguard
6. Parachutes ——
7. Tools ——
8. Other Equipment ——

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A 65 3670558			
Pusher or Tractor	Tractor			
Right or Left Hand	right			
No. of Cylinders	4			
H.P.	65 H.P.			
Bore	3 7/8			
Stroke	3 5/8			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on Feb. 16th, 1946 - J.F. Gibson

Particulars accurate as corrected See Inspection Release Certificate

Modifications ~~from type are indicated on annexed sheet~~ None

Registration recommended ~~with the following special conditions~~ Yes

Date February 19th, 1946.

Signature H.S. Allyne

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
6-39

8

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

CF-BRT 118 C

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....Robert S. Wong.....

Date of Application.....February 16, 1946.....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
ROBERT S. WONG	1528 Danforth avenue, Toronto	British
TOMMY S. WONG	1528 Danforth avenue Toronto	British

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....

Commercial

Usual Station.....Island Airport Toronto, Ontario.....

Date of manufacture or reconstruction.....February 15, 1946.

Crew required.....1.....

Accommodation for what number of passengers.....1.....

NOTED

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

7

DATE February 16, 1946.....

BILL OF SALE

PROVINCE OF ONTARIO, CANADA

KNOW ALL MEN BY THESE PRESENTS: That in consideration of one Dollar and other consideration, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto Robert S. Wong & Tommy S. Wong, 1528 Danforth Ave., Toronto, Ontario heirs, executors, administrators and assigns, all right, title and interest in and to the following goods and chattels via;

Airplane Piper Cub J-3 CF-BRT

Serial 118 C

Engine Continental A 65

Serial # 3670558

CUB AIRCRAFT CORPORATION LIMITED

Signed....

6

A1-2

AEROPLANE INSPECTION RELEASE CERTIFICATE

(For Aeroplanes Assembled with Imported Components)

Registration **CF-BRT**

Aeroplane Type **Piper Cub** (Landplane / Seaplane / Skiplane) Model **J-3**

Manufacturer **Cub Aircraft Corp. Limited** Serial No. **118 C**

Certificate of Airworthiness required for:
(Delete categories and subdivisions - not required).

CATEGORY

Normal

A) - Public transport passenger
B) - " " mails
C) - " " goods
D) - private
E) - Aerial work.

XXXXXXXXX

XXXXXXXXX

XXXXXXXXX

XXXXXXXX

PARTICULARS OF AIRSCREWS

Maker	Sensenich Bros.
Type	Fixed wood
Blade Drawing No.	72 C 42
Blade Serial Nos.	F 5935
Hub Drawing No.	
Hub Serial No.	
Blade Settings	
Diameter	72"

PARTICULARS OF ALIGHTING GEAR

WHEELS Make Hayes Model 84 Tire 800 x 4

FLOATS Installation Assembly Drawing No. _____

SKIIS Installation Assembly Drawing No. _____

Tail Ski _____

POSITION AND CAPACITY OF FUEL AND OIL TANKS

	FUEL Position	Capacity Imp. Gals.		OIL Position	Capacity Imp. Gals.
1)	In fuselage just aft of fire wall	9	1)	In sump attached to lower rear section of crank case	5/6
2)			2)		
3)			3)		
4)			4)		
5)			5)		
6)			6)		

RECORD OF BASIC INSTRUMENTS AND EQUIPMENT
(Essential for C. of A. for any class of operation)

DESCRIPTION	MAKER	MODEL	REMARKS
Airspeed Indicator	U.S. Gauge		
Altimeter	Pioneer		
Compass	Pioneer		
Engine Speed Indicator	Stewart-Warner		
Oil Pressure Gauge	Walton		
Oil Temperature	"		
Liquid Thermometer (for liquid cooled engines only)			
Safety Belt (s)	Air Associates		
Fire Extinguisher (s)	Vanguard		

RECORD OF OTHER FIXED INSTRUMENTS AND EQUIPMENT
(Make extra sheets as required using following pro forma and classification)

DESCRIPTION	MAKER	MODEL	REMARKS
AIRCRAFT INSTRUMENTS			
Flying & Navigation, e.g. Bank & Turn Indicator, etc.			
Aircraft Operating e.g. Cabin Temperature			
Outside "			
Flap Indicators, etc.			
POWER PLANT INSTRUMENTS			
ELECTRICAL EQUIPMENT other than signalling			
SIGNALLING EQUIPMENT			
SAFETY AND EMERGENCY EQUIPMENT			
AMENITIES			

RECORD OF WEIGHT AND C. G. POSITION
(See Information Circulars M/8/37 and M/1/38)

	Landplane	Skiplane	Seaplane
MAXIMUM PERMISSIBLE GROSS WEIGHT	1220 lbs.	lbs.	lbs.
Tare weight as determined	705 lbs.	lbs.	lbs.
Disposable load	249 lbs.	lbs.	lbs.

Centre of gravity of aeroplane at above tare weight . 16. . . inches behind ~~XXXXXXXXXX~~

leading edge of main plane . . . . . .

used as a reference datum point with aeroplane in flying position.
(The C.G. position may be calculated from the approved loading diagram of the Type Aeroplane).

LIST OF STANDARD OR ALTERNATIVE EQUIPMENT INCLUDED IN EMPTY WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.
—		—	

LIST OF MOVEABLE EQUIPMENT INCLUDED IN ABOVE TARE WEIGHT.

DESCRIPTION	LBS.	DESCRIPTION	LBS.
—		—	

CERTIFICATES OF CHIEF FACTORY INSPECTOR.

I hereby certify that the aeroplane described herein has been assembled under my supervisory inspection with imported components whose approved design and construction is evidenced by documentary proof issued by the authorities of the country of origin; that all construction done at this factory conforms to approved type drawings and the workmanship is sound and in accordance with accepted aircraft practice.

Signed J.F. Gleason Date FEB 16 1946
Chief Inspector
CUB AIRCRAFT CORPORATION LTD.
Co. Ltd.

(The following certificate to be executed on the day of test flight).

I hereby certify that the completely assembled aeroplane described herein has been inspected by me, that the complete control system has also been inspected by another licensed Air Engineer and that the aeroplane is airworthy and an entry in the log book to this effect has been made.

Signed S Henderson Air Engineer J.F. Gleason Chief Inspector
FEB 16 1946 Date

CERTIFICATE OF FACTORY TEST PILOT

I hereby certify that I have flown the aeroplane described herein and that its performance, flying qualities and functioning of controls, power plant, and landing gear are up to the standard of the Type Aeroplane.

Signed J.F. Gleason Date FEB 16 1946
Test Pilot
CUB AIRCRAFT CORPORATION LTD. Co. Ltd.

RECOMMENDATION OF RESIDENT INSPECTOR, A.I.D., DEPT. TRANSPORT.

I have seen the documents proving the airworthiness of the imported components and find them satisfactory. The aeroplane has been properly assembled, weighed, and tested, and the issue of a Certificate of Airworthiness in Category normal Subdivision a,b,c,d,e is recommended.

Signed W.S. Glynne
Resident Inspector, A.I.D.
Department of Transport.

DEPARTMENT OF TRANSPORT AERONAUTICAL ENGINEERING A.I.D. CANADA.

CONCURRENCE OF DISTRICT INSPECTOR, CIVIL AVIATION.

I concur in the recommendation for issue of a Certificate of Airworthiness for one year as from (date) 19.2.46

Signed
District Inspector, Civil Aviation.

5008-B18-20

1 Montgomery Avenue, Toronto,
February 19th, 1946.

Messrs. R.S. & T.S. Wong,
1528 Danforth Avenue,
TORONTO, Ontario.

Dear Sirs: Re: Piper Cub - CF-BRT

Receipt is acknowledged of your application for registration of Piper Cub, CF-BRT, Serial No. 118C, which you recently purchased from the Cub Aircraft Corporation, with the following papers:-

(a) Application form in triplicate.
(b) Bill of Sale, dated February 16th, 1946.
(c) Fee of $10.00.
(d) Aeroplane Inspection Release Certificate.

Receipt No. 28027 for the $10.00 fee in the name of the Cub Aircraft Corporation is being mailed to them this date.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BRT as a commercial aircraft until March 21st, 1946.

Yours truly,

D.C. Joy,
District Inspector, Air Regulations,
Toronto.

DCJ/AC

c.c. Headquarters

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

9 2 8-45

TORONTO, February 26th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper Cub - CF-BRT	5008-B18-20

A40161

TRANSPORT-RECORDS
FEB 27 P.M.
File 5008-B18-20

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to registration of Piper Cub J3, CF-BRT, Serial No. 118 C, recently purchased by Messrs. R.S. & T.S. Wong, from the Cub Aircraft Corporation:-

(a) Application form in duplicate.
(b) Fee of $10.00 (See page 146 in Cash Book, Receipt No. 28027)
(c) Bill of Sale, dated February 16th, 1946.
(d) Aeroplane Inspection Release Certificate.
(e) Copy of letter of temporary authority.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

3399 (R)
999 (A)

12

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3599

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ont.
3. Constructor's serial number	1180
4. Name of owner	Robert S. Wong and Tommy S. Wong,
5. Address of owner	1528 Danforth Ave., Toronto, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Toronto, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 19th day of February, 1946 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 13th day of March, 1946.

L. C. Thomas.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

13

GJ/GHH

Ottawa, Ontario, 13th March, 1946.

5008-H18-3
-H18-8
-H18-18
-H18-20
-H19-19
-G11-3
-G11-4
-G11-21
-D2-7
-D4-14

REGISTERED

District Inspector, Air Regulations,
Postal Station "K",
No. 1 Montgomery Ave.,
Toronto 12, Ontario.

1. Enclosed please find Certificates of Registration and Airworthiness for the following aircraft:-

CF-BNC	CF-CKC
CF-BNH	CF-CKD
CF-BNR	CF-CKU
CF-BNT	CF-DDS
CF-BSS	CF-DNH

2. The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. It is expected that these books will be available in about three weeks' time.

(S. Graham),
Superintendent, Air Regulations.

Encls.

Noted Trees taken. 19-3-46

14

5008-B18-20

REGISTERED

OTTAWA, Ontario.
Oct. 30th, 1946.

Messrs. H.S. and T.S. Wong,
1828 Danforth Ave.,
Toronto, Ont.

Dear Sirs:-

Enclosed are Engine and Journey and Aircraft Log Books for your aircraft, CF-BRT.

The Certificates of Registration and Airworthiness must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

198

(S. Graham),
Superintendent, Air Regulations.

16

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

TORONTO February 20th, 1947
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-20	Piper Cub C F / B R T (Serial No. 118 C)	

71662

TRANSPORT - RECORDS
FEB 21 A.M.
File 5008-B18-20

Controller of Civil Aviation,
Department of Transport,
OTTAWA.

1. Piper J.3. aircraft, C F / B R T, owned by Messrs. R.S. & T.S. Wong, was recently re-conditioned at the Island Airport, Toronto.

2. Proper entries were made in the log books of this aircraft as of February 19th, 1947, to the effect that the aircraft was airworthy on that date. These entries were signed by Messrs. Kilburn and Woodley as air engineers and R.S. Wong as commercial pilot.

3. Certificate of Registration No. 3399 and Certificate of Airworthiness No. 999 were renewed until February 19th, 1948 and returned to the owners of the aircraft.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/KC

noted

COPY

16

ORIGINAL ON FILE..... TOR: 5008-B18-20

COPY FOR FILE.....

1 Montgomery Avenue, Toronto,
May 31st, 1947.

Messrs. G.E.D. Davis and
R.H. Wilson,
176 Gainsborough Road,
TORONTO, Ontario.

Dear Sirs:

Receipt is acknowledged of your application for re-registration of Piper J3-C65 CF-BRT Mfgrs. Serial No. 118C, which you recently purchased from Messrs. Robert S. Wong and Tommy S. Wong with the following papers:-

(a) Application forms.
(b) Fee of $5.00.
(c) Bill of Sale - Mr. Robsert S. Wong to you.
(d) Old Certificate of Registration No. 3299.
(e) Old Certificate of Airworthiness No. 999.

Receipt No. 16424 for the $5.00 fee is attached hereto.

Your log books are being returned by registered mail.

Pending the issue of the formal Certificates, this letter will be your authority to operate CF-BRT as a commercial landplane until July 31st, 1947, under the conditions given in the Certificate of Airworthiness No. 999.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/alb
8/2-47 cc - H.Q.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

Renewed - valid until Feb 19 - 1948 AJ

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

17

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3399

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ont.
3. Constructor's serial number	118C
4. Name of owner	Robert S. Wong and Tommy S. Wong,
5. Address of owner	1528 Danforth Ave., Toronto, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Toronto, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 19th day of February, 1946 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 13th day of March, 1946.

C. P. Harris

for *Superintendent, Air Regulations.*

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

18

CENTRAL Airways COMPANY

TELEPHONE
WAverley 9374

ISLAND AIRPORT
TORONTO - CANADA

MAY 19/47

TO WHOM IT MAY CONCERN:—

For a sum of one dollar and other consideration, aircraft, registration CF-BRT, PIPER CUB J-3-65A, now becomes the property of messrs. Roy Wilson and Don Davis, the sole owners of this aircraft from this date thereof.

Robert D. Worg

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Sub Aircraft Corporation

Type Piper J-3 C-65 Maker's No.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2 1/3"	
Length o/a in feet	22 5/12'	
Height o/a in feet	6 2/3'	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 705 lbs.

Total weight authorized (fully loaded) in lbs 1220 Air speed 70 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 1 Compass; 1 altimeter, 1 Airspeed Ind., 1 R.P.M. counter.
2. Gauges 1 Oil temperature, 1 Oil Pressure.
3. Lights —
4. Signals —
5. Fire Extinguishers 1
6. Parachutes —
7. Tools —
8. Other Equipment Safety belt for each occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A-65			
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	4			
H.P.	65			
Bore	3 7/8"			
Stroke	3 5/8"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date May 31/47 Signature S Bell

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

241.3
6.39

CANADA

19

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect. G.E.D. Davis

Signature of Applicant.....Roy H. Wilson

Date of Application.....30 May 1947

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
GEORGE EDWIN DONALD DAVIS	176 Gainsborough Rd. Toronto	Canadian
ROY HAROLD WILSON	R.R. #1, Port Perry Ont.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....

Commercial

ual Station.....Toronto Island Airport Noted

of manufacture or ~~reconstruction~~.....19 Feb. 1946

equired.....one

dation for what number of passengers.....one

e fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for rtificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership hout further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

20 2

6-46

1 Montgomery Avenue, Toronto, May 31st, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Re-Registration of aircraft CF-BRT	5008-B18-20

A 7071

TRANSPORT-RECORDS
JUN 2 A.M.
File 5008-B 18-20

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to re-registration of Piper J3-C65 CF-BRT Mfgrs. Serial No. 118C recently purchased by Messrs. G.E.D. Davis and R.H. Wilson from Messrs. Robert S. Wong and Tommy S. Wong;-

(a) Application forms.
(b) Fee of $5.00.
(c) Bill of Sale - Mr. Robert S. Wong to Messrs. G.E.D. Davis & R.H. Wilson.
(d) Old Certificate of Registration No. 3399.
(e) Old Certificate of Airworthiness No. 999.
(f) Copy of letter of temporary authority.

Miss Jones
O.K. for me

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/alb

5776 (R)
999 (A)

Short letter
add to file 19/2/48
Logbooks
Rec'd

2462A
8-41

22

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5776

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	118 C
4. Name of owner	G.E.D. Davis and R.H. Wilson
5. Address of owner	176 Gainsborough Rd., Toronto, Ont. and R.R. #1, Port Perry, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Toronto, Ontario.
8. Purpose	Commercial (17-8-48) HMC

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 31st day of May 19 47, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 5th day of June 19 47.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after February 19th, 1948, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

5008-B18-29

REGISTERED

OTTAWA, June 5th , 1947.

Messrs. G.E.D. Davis and R.H. Wilson,
176 Gainsborough Rd.,
Toronto, Ontario.

Dear Sir:-

Enclosed please find Certificate of Registration No. 5776 and Certificate of Airworthiness No. 999 for your Piper J3-C65 aircraft CF-BRT , Serial No. 118 C.

The certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

cc. D.I.A.R. Toronto, Ontario.

5008-B18-20 24

A17770

717 Dominion Public Bldg.,
Winnipeg, Manitoba.

July 27, 1948.

TRANSPORT-RECORDS
JUL 29 P.M.
5008-B18-20
File

Messrs. G.E.D. Davis and R.H. Wilson,
176 Gainsborough Road,
Toronto, Ontario.

Gentlemen: Re; Piper J3 - CF-BRT

Pending inspection for renewal this letter constitutes your authority to operate the above noted aircraft in accordance with the terms and conditions of the formal Certificates of Registration and Airworthiness, for a period of thirty (30) days, to be not valid after August 26th, 1948.

It is anticipated an Official of this Department will be visiting Regina before the expiry of this authority and the aircraft should be made available at that time for inspection.

Yours truly,

Department of Transport Civil Aviation Division Ont. & Man.

F. W. Bone.
District Inspector, Air Regulations.

WB/CH

c.c.H.Q.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

717 Dominion Public Bldg.,
Winnipeg, Manitoba, July 30, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Certificate of Registration - CF-BRT	5008-B18-20

TRANSPORT-RECORDS
aug 3 A.M.
File 5008-B18-20

A18022

Director of Air Services,
Dept. of Transport,
Ottawa, Ontario.

Attention: Superintendent of Air Regulations

1. Perusal of Certificate of Registration No. 5776 for the above noted aircraft shows Item 8 "purpose" has been omitted.

2. Please advise whether Registration is "state", "commercial" or "private".

Fredw Bone

for D. G. Joy,
District Controller of Air Services.

JDC/ET

Regina Flying Club

1944]

Airport

Regina - Sask.

MAIL ADDRESS
P.O. BOX 70

July 14,1948.

Weight Report

Aircraft - Piper Cub J3C - CF-BRT

This is to certify that the above aircraft was weighed and that the weights are as follows:

	1st Weighing	2nd Weighing	3rd Weighing
Port	316	316	316
Starboard	328	327	328
Tail Wheel	85	84	84
	729	727	728

Tail up weight - Port 330 Stbd 339 Tail 58 Total 727 lbs.
Mean weight 728 lbs.
Distance from centre Fin post to centre axel 16' 1"
Track 6' 1"

Signed. W.H.G. Maund
Air Engineer
Lisc. A 2508

Dated. July 16/48

Province of Saskatchewan

DEPARTMENT OF PUBLIC HEALTH
AIR AMBULANCE SERVICE
ADMINISTRATION BLDG., AIRPORT

REGINA

REFER TO FILE

July 13th, 1948.

INSPECTION AND WORK REPORT FOR

PIPER CUB CF - BRT

Owner - Messrs. G.E.D. Davis and R.H. Wilson
176 Gainsborough Road, Toronto.
-- c/o Briercrest Bible Institute,
Caron, Sask.

Model - J3C

Serial # - 1186

C of A # - 999

C of R # - ~~3399~~ 5776

Engine - Continental

Model - A65

Serial # - 3670558

Prop Sensenich - # L5628

Nature of work - Inspection and repairs.

Necessity - C of A renewal

Time on Aircraft since new: 797.58
Time on Aircraft since overhaul: No previous overhaul.

Time on Engine since new: 806.38
Time on Engine since overhaul: 195.38

Aircraft weighed as per attached weighing report.

The following Airworthiness Directives have been:

Complied with		Not Applicable
44-6-1	46-37-2	47-46-2
44-6-2	47-50-3	47-50-5
44-6-3	47-50-6	
46-36-1	47-50-7	
46-37-1		

.....(Continued).

Cabin and Cockpit

1. Canvas on rear seat repaired as per directive.
2. Seats and belts examined for condition.
3. Floorboards inspected.
4. Cabin lining inspected.
5. Door mechanism adjusted for rapid opening and proper fit.
6. Fuel tank examined for condition.
7. Fuel selector inspected for condition and operation.
8. Primer checked for leaks.
9. All engine and heat controls examined in cockpit.
10. Engine mount attachment to fuselage checked for cracks and found OK.
11. Throttle control reworked to operate freely.
12. Control column mechanism inspected.
13. Rudder pedals and mechanism examined.
14. Brake cylinders and pedals checked for operation.
15. Fire extinguisher refilled and reinstalled.
16. All windows and windscreen checked for condition and vision.
17. Baggage compartment checked for condition.
18. Ignition switches and wiring OK.

Fuselage

1. All fabric examined for condition.
2. All structure inspected for corrosion, cracks and deformation.
3. Tail gear attachment fittings checked.
4. Main gear attachment fittings checked carefully.
5. Wing strut attachment fittings examined.
6. Wing root attachment fittings examined.
7. All metal around forward section OK.
8. Fire wall examined for cracks and found OK.
9. Stern post checked for accuracy and found OK.
10. New trim tab cable installed and checked.

Empennage

1. Stabilizer rear spar adjustment axle removed and corrosion cleaned from housing. New axle made up from 4130x065 tubing.
2. Stabilizer front spar adjustment axle removed and new one made from 4130x065 installed.
3. Stabilizer adjustment yoke bolts holes drilled out oversize and bushings made up and installed.
4. Stabilizer to elevator hinge bushings and pins all renewed.
5. Stabilizer structure and fabric OK.
6. Elevator structure and fabric OK.
7. Trailing edge of left elevator repaired.
8. All Empennage fabric rejuvenated.
9. All control horns examined for wear.
10. Stabilizer brace wires checked and adjusted.
11. Stabilizer attachment to fuselage examined.
12. All rudder to fin post bushings and pins renewed.

....(continued).....

Wings

1. All Fairings removed.
2. Wing root fittings examined.
3. Wing attachment to lift struts examined.
4. Spars examined and found OK.
5. All rib stitching found OK.
6. Fabric repaired as necessary.
7. Aileron control mechanisms examined.
8. Pitot line blown out.
9. All aileron hinges and pins checked for wear.
10. Lift struts cleaned and primed.
11. Lift struts examined and found OK.

Landing Gear

(Main)

1. Landing gear completely dissasembled and inspected for cracks and wear as per directive.
2. Landing gear reassembled and new shock absorber rings installed.
3. Wheels tires and brakes carefully inspected.

(Tail Gear)

1. Wheel removed and bearings cleaned and lubricated.
2. Springs checked and found OK.
3. Steering horn inspected.

Instruments

1. Altimeter, Airspeed and Tachometer overhauled on Release note (Northwest Industries) and reinstalled.
2. All other instruments, panel and plumbing inspected.

Engine

1. #1 cylinder removed to check for internal corrosion and engine found OK.
2. Spark plugs renewed.
3. Valve tappets checked.
4. Induction system checked.for leaks.
5. Magneto points examined and all ignition wiring inspected.
6. Carburettor removed, cleaned and reinstalled.
7. Oil tank removed, repaired and reinstalled.
8. Crank shaft checked for endplay and found OK.
9. Exhaust system (completely) disassembled and inspected and reinstalled.
10. All baffles, etc., examined.
11. Fuel sediment bulb made to conform with directive.
12. Fuel, oil and instrument lines all OK.
13. Cowls all examined, OK.
14. Engine ground checked OK.

...(continued)...

All engine and flying controls examined in detail for condition, correct action, and the presence of all locking and safety devices.

Air Engineer ..... B. Kost

Air Engineer ..... Drinnaton

I hereby certify that the above work has been completed according to aircraft standards with materials from certified stock. That all manufactures service bulletins and/or their equivalents (CAA Airworthiness Directives) affecting safety have been complied with to date and no unapproved modifications have been incorporated, and the aircraft is airworthy.

Air Engineer "B" ..... Drinnaton

CAR

B18-20

AIRCRAFT INSPECTION REPORT

Date of Inspection July 13, 1948. Owner G. E. D. Davis and R. H. Wilson Registration Markings CF-BRT

Type J3-C65 Serial No. 118C Purpose Commercial

C. of R. 5776 C. of A. 999 Date of Last Inspection February 20, 1947.
Previous C. of R. & A. Expires February 19, 1948. Present C. of R. & C. of A. Expires July 12, 1949.

AIRFRAME

Crew One Passengers One No. of Fuel Tanks One

Capacity 10 Imp. gals. No. of Oil Tanks One Capacity 1 Imp. gal.
Total Hours Since New 79758. Since Overhaul -- Since Reconditioned --

WEIGHTS

		Gross	Tare	Empty	Carrying Capacity
Landplane	Passenger	1220		727	242
	Freighter				
Seaplane	Passenger				
	Freighter				
Skiplane	Passenger				
	Freighter				

TRANSPORT-RECORDS
AUG 9 A.M.
File 500.B18-20

A18944

LEFT ENGINE(S)		RIGHT ENGINE(S)	
Make Continental	Model A65	Make	Model
Serial No. 3670558	H.P. 65	Serial No.	H.P.
Total Hrs. Since New 806:38		Total Hrs. Since New	
Since Complete Overhaul 195:38		Since Complete Overhaul	

LEFT PROPELLER(S)		RIGHT PROPELLER(S)	
Make Sensenich	Model Wood	Make	Model
Diameter	Pitch	Diameter	Pitch
Blade Design		Blade Design	
Mfg.No.1 L3628 2 -- 3		Mfg. No.1 2 3	
Total Hrs.1 2 3		Total Hrs.1 2 3	
Hub Design	Mfg. No.	Hub Design	Mfg. No.
Total Hours	Since Last Overhaul	Total Hours	Since Last Overhaul
Date of Last Overhaul		Date of Last Overhaul	
Date of Last Inspection		Date of Last Inspection	
Date Purchased		Date Purchase	

UNDERGEAR

Skis	--	Pedestals	--
Floats	--	Chassis	--
[illegible]ndard		Chassis	Standard

Cert 3/8

OVER

HTP/HMC

24

OTTAWA, Ontario, August 17, 1948

5008-B18-20; Piper J3-C65, CF-HRT 5008-B18-20;

District Controller of Air Services,
717 Dominion Public Building,
Winnipeg, Manitoba

Attention: District Inspector, Air Regulations

1. Please be advised that the above-mentioned aircraft is registered in a commercial category.

(S. Graham),
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

27 2 6-46

717 Dominion Public Bldg.,
Winnipeg, Man., August 23, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J3-C65 CF-BRT	5008-B18-20

A21173

TRANSPORT-RECORDS
AUG 25 P.M.
5008-B18-20
File

Director of Air Services,
Dept. of Transport,
Ottawa, Canada.

Attention: Supt. of Air Regulations.

1. It is desired to advise that Certificate of Registration No. 5776 for the above noted aircraft has been endorsed to read "Commercial" under Item 8, dated August 23, 1948.

for D. G. Joy,
District Controller of Air Services.

FWB/MC

Miss Jones
L.P.A.
Noted
A.S.J.

C

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

13/4/48 Certificate renewed to be not valid after the 12th July 1948

Department of Transport Civil Aviation Division CANADA

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

/RM

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5776

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	118 C
4. Name of owner	G.E.D. Davis and R.H. Wilson
5. Address of owner	176 Gainsborough Rd., Toronto, Ont. and R.R. #1, Port Perry, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Toronto, Ontario.
8. Purpose	Commercial. (23/8/48 GWB)

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 31st day of May 19 47, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 5th day of June 19 47.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after February 19th, 1948, unless endorsed.

5008-B18-20 21

717 Dominion Public Bldg.,
Winnipeg, Man.

September 21, 1948.

James Horne, Esq.,
Burnham, Sask.

Dear Sir:

Re: Piper J3-C65 CF-BRT

Pending the receipt of formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for Private purposes only, under the same terms and conditions as contained in the formal Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

This authority is valid until October 20, 1948.

Yours truly,

Noted Rey

F. W. Bone,
District Inspector, Air Regulations.

FWB/MC
c.c. H.Q.
c.c. D.C.A.S.

30

August 21st 1948

BILL OF SALE

PROVINCE OF SASKATCHEWAN? CANADA.

KNEW ALL MEN BY THESE PRESENTS: That in consideration of one dollar and other considerations, the receipt of which is hereby acknowledged, we do grant, sell, transfer, and deliver unto

James Kerr.
Burnham Sask.

HEIRS? EXECUTORS? ADMINISTRATORS AND ALL ASSIGNE? ALL RIGHT title and interest in and to the following goods and chattels, viz

Airplane: Piper cub J3 C65 Registration CF-BRT

Serial: 1180

Engine: Continental C-65 Serial No. 3670558

Witness C. W. Schrader.

Signed Roy H Wilson

Signed H.D Davis
per
Roy H Wilson

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by CUB AIRCRAFT CORPORATION

Type PIPER J3-A65 Maker's No. 118C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 5"	
Height o/a in feet	6' 8"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	727	
Total weight authorized (fully loaded) in lbs 1220	Air Speed 73 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments COMPASS, ALTIMETER, AIR SPEED INDICATOR R.P.M. INDICATOR.
2. Gauges O.L. PRESSURE, O.L. TEMPERATURE
3. Lights
4. Signals
5. Fire Extinguishers One Pyrene
6. Parachutes
7. Tools
8. Other Equipment Safety Belt Each Occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A-65			
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	Four			
H.P.	65			
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 13/7/48 Air Engineer D. Watson Certificate No. A-1751 C. of A. valid to 12th July, 1949.

Particulars accurate as corrected Yes

Modifications from type are indicated on annexed sheet Modifications required incorporated.

Registration recommended with the following special conditions For Day Flying only, VFR conditions. Carrying capacity - 242 lbs.

Date 21/9/48

Signature F.W. Bone, District Inspector, Air Regulations.

Registration approved and Registration Mark C.F. - HRT allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

31

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant James Horne

Date of Application SEPT 14, 1948

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
HORNE, JAMES	BURNHAM, SASK	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)
PRIVATE

Usual Station BURNHAM, SASK. Rated

Date and place of manufacture or reconstruction FEB. 1946 HAMILTON, ONT.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3 2 — 2 — 2-48

717 Dominion Public Bldg.,
Winnipeg, Man., September 21, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Piper J3-C65 CF-BRT	5008-B18-20

TRANSPORT-RECORDS
SEP 24 P.M.
File 5008-B18-20

Director of Air Services,
Department of Transport,
Ottawa, Canada.

Attention: Superintendent, Air Regulations.

1. Enclosed are the following papers and documents in connection with the re-registration of the above noted aircraft:

A25715

1. Application (in duplicate) for re-registration in the name of Mr. James Horne.
2. Bill of Sale between G. E. D. Davis and R.H.Wilson and James Horne.
3. Copy of letter of temporary authority dated Sept. 21, 1948.
4. Certificate of Registration No. 5776 for cancellation.
5. Certificate of Airworthiness No. 999 for re-issue in the name of the new owner.

2. Fee in the amount of $5.00 has been received, Receipt No. 66434 issued and the remittance shown in Blotter Cash Book Folio No. 8398, September 1 to 30, 1948.

3. This application appears to be in order and if approved it is recommended that formal Certificate of Registration and Certificate of Airworthiness might issue in the name of Mr. James Horne for private purposes only.

Mrs Jones
p/p Re-Reg/EP

Fred W Bone

for D. G. Joy,
District Controller of Air Services.

7443(R)
999 (A)

FWB/MC
Encs.

/Rm

34

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7443

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	11818 C
4. Name of owner	James Horne,
5. Address of owner	Burnham, Saskatchewan.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Burnham, Saskatchewan.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of September 1948, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 29th day of September 1948.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after July 12th, 1949, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

AC-5-60

5008-B18-20

REGISTERED

OTTAWA, September 30th, 1948.

Mr. James Horne,
Burnham,
Saskatchewan.

Dear Sir:

Enclosed please find Certificate of Registration No. 7443 and Certificate of Airworthiness No. 999 for your Piper J3-C65 aircraft CF-HRT, Serial No. 118 C.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 12th, 1949.

Yours truly,

NOTED
OCT 2 1948
Revenue Audit
Dept. of Transport.

(S. Graham)
Superintendent, Air Regulations.

Encls.

cc. D.C.A.S.,
Attn: D.I.A.E. Winnipeg, Man.

Air Services
Civil Aviation Division

Canada
DEPARTMENT OF TRANSPORT

36

Refer to File Number
5008-B18-20

717 Dominion Public Bldg.,
Winnipeg, Man.

January 31, 1949.

A. B. Newton, Esq.,
Hallinquist, Sask.

Dear Sir: Re: Piper J3-C65 CF-BRT

Receipt is acknowledged of your application for registration of the above noted aircraft, together with the documents, etc., checked below:

(a) Application form in triplicate.	(x)
(b) Fee of $5.00 for Registration.	(x)
(c) Fee of $5.00 for Certificate of Airworthiness	( )
(d) Bill of Sale.	(x)
(e) Customs Receipt.	( )
(f) Certificate of Airworthiness for Export.	( )
(g) Certificate of Registration and Certificate of Airworthiness in the name of the former owner.	(x)

~~Attached hereto is~~ Official Receipt No. 66556 covering the fee of $5.00 was forwarded to Swift Current Air Services on January 19, 1949.

Pending receipt of the formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for PRIVATE purposes, under the same terms and conditions as contained in the formal Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

If registered commercially, this aircraft may not be flown for hire or reward unless the operator is in possession of a Licence issued by the Air Transport Board and an Operating Certificate issued by this Department.

This authority is valid until March 2, 1949.

Yours truly,

F. W. Bone,
District Inspector, Air Regulations.

RLB/MC
c.c. H.Q.

/RM

38

AIR 40-5-68
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-B18-20

REGISTERED

OTTAWA, September 30th, 1948.

Mr. James Horne,
Burnham,
Saskatchewan.

Dear Sir:

Enclosed please find Certificate of Registration No. 7443 and Certificate of Airworthiness No. 999 for your Piper J3-C65 aircraft CF- BRT , Serial No. 118 C.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 12th, 1949.

Yours truly,

H. L. Patterson

(S. Graham)
Superintendent, Air Regulations.

Encls.

/BM

37

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7443

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	118 C
4. Name of owner	James Horne,
5. Address of owner	Burnham, Saskatchewan.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Burnham, Saskatchewan.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of September 1948, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 29th day of September 1948.

H. L. Patteson

/ *Superintendent, Air Regulations.*

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after July 12th, 1949, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

39

Swift Current Air Services

AIRCRAFT SALES AND SERVICE

Flight Instruction Charter Service

Phone 2712

Swift Current, Sask.

BILL OF SALE

PROVINCE OF SASKATCHEWAN:

KNOW ALL MEN BY THESE PRESENTS: that in consideration of One Dollar and other consideration, the receipt of which is hereby acknowledged, I do grant, sell, transfer and deliver unto:

Arling B. Newton, Hollinquist, Sask.,

heirs, executors, administrators, and assigns, all right title, and interest in and to the following goods and chattels, Viz:

Airplane	Cub J3	Registration	CF-BRT
Serial No.	118 C		
Engine Continental	65	Serial No.	3670558

Date Jan 8. 1949.

R. J. Horne

J. J. Horne.

Burnhan, Sask.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by Cub Aircraft Corp. Ltd.

Type Piper J3-C65 Maker's No. 11&-C

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½''	
Length o/a in feet	22' 5''	
Height o/a in feet	6' 8''	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	727 lbs	
Total weight authorized (fully loaded) in lbs 1220	Air Speed 75 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments Tachometer, Airspeed, Compass, Sensitive Atimeter, Bank Indicator.
2. Gauges Oil Pressure, Oil Temperature
3. Lights
4. Signals
5. Fire Extinguishers PYRENE
6. Parachutes
7. Tools
8. Other Equipment Safety Belt for each Occupant

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental C 65.	Serial 3670 S.S.8		
Pusher or Tractor	Tractor			
Right or Left Hand	Right Handed			
No. of Cylinders	Four			
H.P.	65			
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on July 13, 1948. Air Engineer D. Watson, Certificate No. 1751 C. of A. valid until 12th July, 1949.

Particulars accurate as corrected Yes.

Modifications from type are indicated on annexed sheet Modifications required incorporated.

Registration recommended with the following special conditions VFR Day Flying only.

Carrying capacity - 242 lbs. (skiplane - 236 lbs.)

Date 12/1/49 Signature J.W.C. Watson, for F.W.Bone, District Inspector, Air Regulations.

Registration approved and Registration Mark C.F.-BRT allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

40

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Arling B. Newton

Date of Application Jan 8th 1949

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
~~ROBERT JAMES~~		
~~HORNE~~	~~HALLINQUIST, SASK.~~	CANADIAN
ARLING B NEWTON	HALLINQUIST	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station HALLINQUIST, SASK.

Date and place of manufacture or reconstruction FEBRUARY '46, CUB AIRCRAFT CORP, LTD.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

717 Dominion Public Building,
Winnipeg, Manitoba, February 1, 1949.

Your File	Subject	Our File
5008-B18-20	Piper J3-C65 CF-BRT	5008-B18-20

Director of Air Services,
Department of Transport,
Ottawa, Canada.

A42653

TRANSPORT-RECORDS
FEB 4 A.M.
File 5008-B18-20

Attention: Superintendent, Air Regulations.

1. Enclosed please find the papers and documents checked below, which were submitted in connection with the registration of the above noted aircraft:

1. Application (in duplicate) for Registration of an Aircraft, submitted by A. B. Newton (x)
2. Bill of Sale between R.J.Horne and A.B.Newton (x)
3. Certificate of Registration No. 7443 for cancellation. (x)
4. Certificate of Airworthiness No. 999 for re-issue in the name of the new owner. (x)
5. Customs Receipt No. dated ( )
6. Certificate of Airworthiness for Export No. ( )
7. Aircraft Inspection Report dated ( )
8. Copy of letter of temporary authority dated January 31,1949 (x)

2. Fee in the amount of $5.00 has been received, Receipt No. 66556 issued, and the remittance shown in Blotter Cash Book Folio No. 8407, January 1 to 31, 1949.

3. This application appears to be in order and, if approved, it is recommended that formal Certificates of Registration and Airworthiness might issue.

4. It is drawn to your attention that endorsement of the Certificate of Airworthiness for operation as a skiplane has been inserted under paragraphs 25(c), 31, 32 and 33. Further to this endorsement, please refer to our teletype ARW 18, dated January 26, 1949 and your reply CAR 42 dated January 28, 1949. If the above mentioned ski installation approval is forthcoming, please note the endorsement for your records and if not, deletion will be made on return of the Certificate of Airworthiness to this office for distribution to the owner.

for D. G. Joy,
District Controller of Air Services.

RLB/MC

Not eligible as ski plane make ref. in our covering letter H.P.

7732 (R)
999 (A)

/RM

42

2462A
4-48

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7732

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	118 C
4. Name of owner	Arling B. Newton,
5. Address of owner	Hallinquist, Saskatchewan.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hallinquist, Sask.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 31st day of January 1949, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 11th day of February 1949.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after July 12th, 1949, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/MM

43

Ottawa, Ontario. February 16th, 1949.

5008-B18-20 Piper J3-C65 CF-BRT 5008-B18-20

REGISTERED

District Controller of Air Services,
717 Dominion Public Building,
WINNIPEG, Manitoba.

Attention: District Inspector, Air Regulations.

1. Reference your letter dated February 1st, 1949, enclosed please find Certificate of Registration No. 7732 and Certificate of Airworthiness No. 999, for the above-mentioned aircraft owned by Mr. Arling B. Newton.

2. As the aircraft is not eligible for ski installation, please delete the endorsement on the Certificate of Airworthiness.

3. Please forward the Certificates to the owner, and draw Mr. Newton's attention to Information Circular T/8/39.

NOTED

FEB [illegible] 1949

Revenue Audit
Dept. of Transport

(S. Graham),
Superintendent, Air Regulations.

Encls.

17-Feb-49

CAR Records

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

44 2 2-48

717 Dominion Public Bldg.,
Winnipeg, Man., February 22nd, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-20	Piper J3-C65 CF-BRT	5008-B18-20 5008-E5-1

TRANSPORT-RECORDS A45421
FEB 23
File 5008-B1 8-20

URGENT

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Chief Aernnautical Engineer

1. Reference is made to Headquarters' letter, dated February 16th, 1949, paragraph 2, which states that Piper J3-C65 is not eligible for ski installation.

2. It is desired to advise that CAA Aircraft Specification A-691-8, Page 7, Note 310 states: "Federal SA-1 and SC-1 eligible provided the propeller installation meets minimum ground clearance." Therefore, as Federal SA-1 and SC-1 ski is approved for static load per ski of 600 and 700 pounds respectively it would be quite in order to accept type A-1500 approved to 750 pounds per ski for installation on Piper J3-C65.

3. May this office be advised if the above interpretation is correct in respect to Headquarters' letter of February 16th pertaining to Federal Skis.

2 copies
25/2/49
m

A H Walker

D. G. Joy,
District Controller of Air Services.

AHW/AB

COPY ON
5010-4
5010-1027

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102.B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	/
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			Transport - Air - 2120

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

CNT:MB

(CNT)

5008-B18-20
5010-4
5010-10-27

Ottawa, February 24, 1949

District Controller of Air Services
717 Dominion Public Building
Winnipeg

CAR 20 REURLET FEBRUARY 22 PIPER J5-C65 NOW APPROVED BY DOT WITH FEDERAL A1500 OR A1500A SKIS STOP INTERPRETATION PARAGRAPH 2 YOUR LETTER INCORRECT AS SIDE LOAD AND TORQUE MUST ALSO BE CONSIDERED BESIDES VERTICAL LOADS IN APPROVAL SKI INSTALLATION

Wallington

Civil Aviation

CANADIAN PACIFIC TELEGRAPHS

World Wide Communications

CLASS OF SERVICE DESIRED	
Full Rate	
Day Letter	X
Night Message	
Night Letter	

PLACE X OPPOSITE SERVICE DESIRED

W. D. NEIL, GENERAL MANAGER, MONTREAL

ACCOUNTING REFERENCE	CHECK	TIME FILED
		46

Send the following message, subject to the conditions on the back thereof, which are hereby agreed to.

TRANSPORT - RECORDS
8 P M
File S.008-B18-20

(COLLECT)

15879

WINNIPEG MANITOBA JULY 15 1949

A B NEWTON
HALLONQUIST SASKATCHEWAN

PENDING RENEWAL OF FORMAL CERTIFICATES OF REGISTRATION AND AIRWORTHINESS THIS TELEGRAM CONSTITUTES YOUR TEMPORARY AUTHORITY OPERATE PIPER CUB CF DASH BRT IN ACCORDANCE WITH SAID CERTIFICATES FOR PERIOD THIRTY DAYS VALID UNTIL AUGUST FOURTEENTH NINETEEN FORTY NINE

Frederick Bone

DISTRICT INSPECTOR AIR REGULATIONS

FWB/AB
c.c. H.Q.

31603

TRANSPORT - RECORDS
NOV 5 A.M.
File 5508-B18-20

51

AIRCRAFT INSPECTION REPORT

Date of Inspection 1/10/49 ✓ Owner A.B. Newton Reg. Marks CF-BRT

Type Piper J3 Serial No 118C Purpose Private

C. of R. No 7732 C. of A. No 999 Present C. of R. & A. Expires Sept. 30, 1950. ✓

AIRFRAME

Crew One Passengers One No. of Fuel Tanks One

Fuel Capacity 10 Imp.Gals. No. of Oil Tanks one Oil Capacity 1 Imp.Gals.

Total Hours Since New 987:20 Date Last Overhaul N/A Hours Since Overhaul N/A

ENGINES

LEFT		RIGHT	
Make Continental	Model A65	Make	Model
Serial No 3670558	H.P 65	Serial No	H.P
Total Hours Since New 995:45	Since c/Overhaul 384:45	Total Hours Since New	Since c/Overhaul

PROPELLORS

LEFT		RIGHT	
Make Sensenich	Model Wood F.P.	Make	Model

UNDERGEAR

Main Ski Base Federal A1500A Main Ski Pedestals Federal

Floats Float Chassis

Wheels Standard Wheel Chassis Standard

WEIGHTS

	EMPTY	GROSS	COMMERCIAL LOAD
Landplane	727	1220	242
Seaplane		~~1220~~	
Skiplane	733	1220	236

AMENDMENTS TO CERTIFICATES & REMARKS

The Certificate of Airworthiness has been endorsed as follows:

Items 25 - 37 deleted en bloc. ✓

Page 3 inserted: "Weight and Balance Report inserted in this Certificate to form part thereof and must be carried on board the aircraft at all times when in flight". ✓

Aircraft inspected, considered airworthy and recommended for renewal of the Certificate of Airworthiness for 12 months.

Signed N/A
District Aircraft Inspector.

C. of A. renewed by F.W. Bone
Date November 1, 1949.

Work Sheets & Copy of Wt. & Balance Report Attached.
FWB/AB

F. W. Bone,
District Inspector, Air Regulations.

58

Swift Current Air Services

Cessna Aircraft Sales and Service

FLIGHT INSTRUCTION CHARTER SERVICE PHONE 2712

SWIFT CURRENT, SASK.

WORK SHEET C of A RENEWAL PIPER CUB CF BRT.

Piper J3, CF BRT.
Serial #11800.
Owner A.Newton, Hallonquist,Sask.
C of A #999.
C of R# 7732.
Time since new: 987hrs 20mins.
Time singe O/haul: No previous overhaul.

Engine: Continental A65
Serial #3670558
Time since new; 995hrs 45mins.
Time since opte O/haul: 384hrs 45mins.
Propellor: Sensenich #L3628.

The following Airworthiness Directives have been:

Complied with		Not Applicable
44-6-1	46-37-2	47-40-3
44-6-2	47-50-3	47-50-5
44-6-3	47-50-6	
46-56-I	47-50-7	
46-37-I	49-14-1	

Cabin Enclosure.

I.Seats and belts examined.
2.Floorboards inspected.
3.Lining checked.
4.Exit and exit hinges examined.
5.Fuel tank inspected internally and externally.
6.Fuel selector examined .
7.Primer checked for condition and leaks.
8.Engine controls checked for security, wear, full and free operation.
9.Engine mounts and attachments checked for damage or bow.
I0.Control column mechanism inspected and lubricated as necessary.
II.Control column torque tube rear bearing reworked to eliminate play.
I2.Rudder pedals and mechanism checked.
I3.Fire extinguisher checked.
I4.Side windows and windscreen checked.
I5.Baggage compartment checked.
I6.Ignition switches and wiring checked.

Fuselage.

I. Fabric inspected for condition. Found generally good.



Swift Current Air Services

Cessna Aircraft Sales and Service

FLIGHT INSTRUCTION CHARTER SERVICE PHONE 2712

SWIFT CURRENT, SASK.

Fuselage.(Cont.)
2. Main structure examined for cracks, corrosion, damage.
3. Tail gear and attachment fittings checked.
4. Main gear and attachment fittings carefully checked.
5. Wing lift struts and attachments checked.
6. Wing root attachments checked.
7. Fire wall checked.
8. Stern post checked for alignment.

Empenage.

I. Tailplane actuating mechanism checked for excessive wear and operation.
2. Elevator hinges inspected.
3. Rudder hinges inspected.
4. Bracing wires for tension and security.
5. Control horns inspected for security and wear.
6. Main structures inspected.
7. Fabric checked and found good.

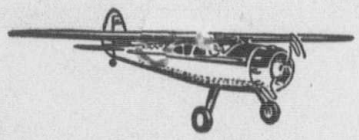
Mainplanes.

I. All fairings and inspection covers removed.
2. Wing root fittings inspected.
3. Wing attachment to lift struts examined.
4. Spars inspected.
5. Fabric and rib stitching checked.
6. Aileron control mechanism inspected.
7. Ailerons checked for damage, free movement and wear.
8. Aileron mounting brackets checked for security and cracks.
9. Aileron hinges checked.
10. Pitot line checked.
11. Lift struts inspected.

Undercarriage.

I. Attahhment points and bolts inspected.
2. Shock cords inspected.
3. Axles checked for wear and security.
4. Wheels and tyres checked.
5. Brakes and drums checked for excessive wear.
6. Wheel bearings cleaned, greased and checked.

Tail gear.



Swift Current Air Services

Cessna Aircraft Sales and Service

FLIGHT INSTRUCTION CHARTER SERVICE PHONE 2712

SWIFT CURRENT, SASK.

Tail gear.
1. Wheel removed, bearing cleaned, greased and checked.
2. Spring checked.
3. Spring attachments inspected.
4. Steering horn and springs inspected.

Engine.

1. Engine cleaned down and externally checked.
2. Oil drained and sump flushed.
3. Oil filters removed cleaned.
4. C.B. points cleaned and adjusted.
5. Fuel sediment bowl and filters cleaned.
6. Intake manifold elbows tightened.
7. Engine generally checked for tightness.
8. Exhaust and muffs checked for security and damage.
9. Crankshaft endplay found O.K.
10. Baffles and cowlings checked for damage and security
11. Carb. drained. Fuel flow checked.
12. Spark plugs removed, serviced and replaced.
13. Ignition wiring, fuel and oil lines, instrument lines found O.K.
14. Engine ground tested. R.P.M., oil pressure and temp, mag drop normal.

All engine and flying controls examined in detail for condition, correct action and the presence of all locking and safety devices.

Air Engineer.... J.B. Mott.... Oct 1st 49

Air Engineer. H.W. Kanigan 1/10/49

I hereby certify that the above work has been completed according to aircraft standards with material from certified stock, that all manufacturers service bulletins and/or their equivelants affecting safety have been complied with to date, that no unaproved modifications have been incorporated and that the aircraft is airworthy.

Air Engineer.. H.W. Kanigan A-654

H.A. 1 S

I hereby certify thatvI have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivelant to the standards of the type.

Date.. 1/10/49 ..

.. D.M. Kay .... Certificate No. 1372

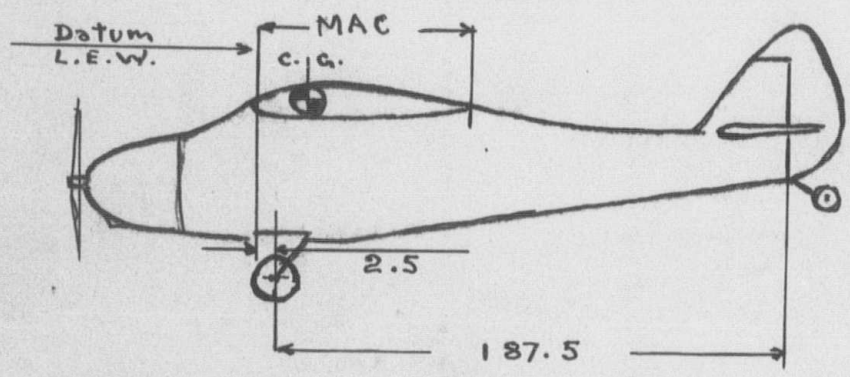
CF- [illegible]

WEIGHT & BALANCE CHART

Piper J3C-65

Serial No. 118C

41



Empty Weight (as weighed On 3 readings.)

Left	316	316	330	
Right	328	327	339	(Tail Up)
Tail	85	85	59	
Total	729	728	728	

Empty Weight C.G. is aft of Wheel C.L. $\frac{59 \times 187.5}{728}$ = 15.2

Distance Wheel C.L. aft of Datum . . . . . = 2.5

C.G. (Within Limits) is aft of Datum . . 15.2 + 2.5 = 17.7

C.G. Range. (Empty) +8.5 to + 20.3

C.G. Range. (+10.6) 16.8% MAC to (+22.7) 33% MAC

LOADING	WEIGHT	ARM	MOMENT	INCH LBS.
OIL (1 Imp.Gal)	9	− 29	261	" "
FUEL (10 Imp.Gal)	72	− 18	1236	" "
PILOT (Front Seat)	170	+ 9	1530	" "
AIRCRAFT EMPTY	728	+ 17.7	12885.6	" "
TOTAL	979			
MAX. WEIGHT	1220			
USEFUL LOAD	241			
MAX. BAGGAGE	20	+49	980	" "
Passenger (Rear Seat)	221	+36	7956	" "

Approved By: [signature]

Date: 25/10/49

MEDICINE HAT AIR SERVICES.

Medicine Hat, Alberta.

55

TRANSPORT - RECORDS
File 5008-B18-20

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS 16861

Registration - CF- BRT Serial No. 1186

1. C. of A. No. 999 Expires Sept 30/50 C. of R. No. 7732 Expires Sept/30/50
Aircraft Data - Manufacturer Cub Aircraft Corporation Model J3C65
Hours flown - Since New 1069:55 Since Overhaul No previous overhaul
Engine Data - Manufacturer Continental Motor Corp Model C65

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	3670558	1082	471:25
(2)			
(3)			
(4)			

Signature of Applicant A B Newton
Date July 31st, 1950

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed T.R.Mapson
"B" Engineer
Date July 31st, 1950

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed D M Tate
Test Pilot
Date July 31st, 1950

4. The following documents are attached:
Certificate of Airworthiness [X]
Certificate of Registration [X]
Weight and Balance Report (when applicable) [X]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 7732 and C. of A. No. 999 pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed B/ Bunbury
District Aircraft Inspector
Date August 16th, 1950.

7. C. of A. and C. of R. renewed, not valid after.

(Date)- July 30th, 1951. ✓

Permissible Gross Weights - Wheels 1220 lbs.
- Skis 1220 lbs.
- Floats

noted B7E NOTED SJ

Signed B/ Bunbury
District Superintendent, Air Regulations
Date August 16th, 1950.

Other Action:-
Items 26 - 32 - deleted en bloc. ✓

8. H.Q. Action C.A.R.
C.A.E.

53

Fuselage:

1. Fuselage structure given extensive inspection for servicability.
2. All fabric checked, top surface of main planes rejuvinated and redoped, all other fabric rejuvinated where necessary and condition now good.
3. Wing root attachments inspected.
4. Port wing tip repaired according to aircraft standards.
5. Lift struts and fittings examined in detail.
6. All fairings inspected and made servicable, properly secured.
7. Fin structure examined and found in good condition.
8. Stern post inspected.
9. All flying control mechanisms and attachments to fuselage inspected in detail.
10. Fuselage inspectedat under gear attachment points, and lift strut attachments.

Empennage:

1. All fabric inspected and repaired where necessary.
2. Stabilizer strucure examined in detail.
3. Stabilizer incidense gear examined in detail for proper operation.
4. Rudder to stern post hinges and pins examined in detail.
5. Elevator to tailplane hinges and pins examined in detail.
6. Stabilizer brace wires checked for proper tention.
7. Elevator bell crank mechanism inspected.
6. Rudder horns inspected.

Mainplanes:

1. Fabric and rib stiching inspected.
2. Top surface of mainplanes rejuvinated and redoped.
3. Port wing tip repaired according to aircraft standards.
4. Nose and main ribs examined and all found in good condition.
5. Compression tubes examined.
6. Drag and anti drag wires inspected for proper tention.
7. Main spars examined.
8. Lift strut attachments checked for serviceability.
9. Lift strut fork ends inspected for bends and cracks, as per directive 48-46-1
10. Pitot line inspected.
11. Ailerons and hinges given ~~xxxxx~~ careful inspection.
12. Bell carnk and turn buckle ends examined.
13. Control cables and pulleys inspected.

Undercarriage(main):

1. All gear attachment points and bolts checked.
2. Gear structure examined and found in good condition.
3. Bungee cords inspected and found in good condition.
4. Wheels removed, tires, axle, and brakes inspected, wheels repacked and replaced, and safetyed.
5. Shock struts inspected as per directive 47-50-6 and found O.K.

Undercarriage(Tail)

1. Leaf springs examined.
2. Steering mechanism isspected.
3. Wheel and tire checked.
4. Assembly lubricated.
5. Attachment to fuselage checked for security.

54

INSPECTION REPORT & WORK SHEET

Aircraft: Cub J3 CF-BRT
Serial #: 118 C
Owner: A.Newton,Hallinquist,Sask.
C of R #: 7732
C of A #: 999
Time since new: 1069:55
Time since overhaul: No previous overhaul

Engine: Contimental A 65
Serial#: 3670558
Time since new: 1082
Time since overhaul: 471:25

Propeller: Sensenich
First employed: July 12th,1947
Time since new: 429:10

Rrason for work: C of A renewal.

The following Airworthiness Directives have been:

Carried Out		Not Applicable	
46-37-1	50-5-1	46-36-1	49-14-1
47-50-3		46-37-2	
47-50-6		47-40-2	
48-46-1		47-50-5	

No alteration in Weight & Balance. F.R.M.

Cabin Enclosure:
1. Windshield and windows inspected and found in good condition.
2. Cabin door checked for operation and security.
3. Cabin linning inspected.
4. Floorboards and attachments inspected and found secure.
5. Fuel tank examined for security and leaks.
6. Fuel selector checked for proper operation.
7. Canvas seat inspected as per directive 47-50-3.
8. Seats and attachments checked for condition and securiety.
9. Seat belts examined for condition.
10. Brake cylinders checked for operation.
11. Ignition system and wiring checked.
12. Primer and line checked for operation and leaks.
13. Engine bearers and attachments inspected for security.
14. Baggage compartment checked.

52

Instruments:

1. All flying instruments checked for serviceability and proper functioning.
2. Panel and plumbing examined for condition.
3. All engine instruments checked for proper functioning.
4. Stainless steel name plate present.
5. Aircraft palcarded "No Smoking".

Engine:

1. Engine cleaned down and generally inspected.
2. Gasket and metal sediment bowl removed cleaned, replaced and secured.
3. Spark plugs removed, cleaned and replaced.
4. Crankshaft end play checked, found well witin limits,
5. Engine generally check tightened.
6. Ignition wiring and system inspected.
7. All fuel and oil lines inspected for condition.
8. Propellor checked for serviceability and track.
9. All baffles inspected for condition and security.
10. Engine cowls checked for condition.
11. Engine groun tested, all instruments and mag drop normal.

The above listed work has been done in accordance with aircraft standards, all material been drawn from certified stock.

All flying and engine controls inspected, examined in detail, for soundness condition, correct action and presence of all locking and safety devices.

Air Engineer...T.R. Morton. B"

Air Engineer...D. McKay

I hereby certify that all manufacturers bulletins and/or their equivalent (CAA Airworthiness Directives) affecting safety have been complied with to date, that no unauthorized modifications have been incorporated and that the aircraft is airworthy.

Air Engineer...T.R. Morton. B"

Date...July 31st/50.....

I hereby certify that I have flown this aircraft and that its performance, functioning of controls, power plant etc., are equivalent ~~xxxx~~ to the standards of the type.

Test Pilot...D. McKay...

Date...July 31st/50.....

To: Director of Air Services,
Dept. of Transport,
Ottawa, Ont.
(Att: S.A.R.)

57/2444 8-50

CANADA

27637

TRANSPORT - RECORDS
AUG 16 P.M. 1951
File 5008-B18-20

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— BRT SERIAL No. 1180

1. C. of A. No 999 Expires July 30/51 C. of R. No. 7752 Expires July 30/51
AIRCRAFT DATA—Manufacturer Cub Aircraft, Hamilton, Ont Model J3
Hours flown—Since New 1134:40 " " Since Overhaul none previous
ENGINE DATA—Manufacturer Continental Model A65-8F

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	5859078	649:25	48:25
(2)			
(3)			
(4)			

Date August 6th, 1951 Signature of Applicant J. B. Newton

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Date August 6th, 1951 Signed D M Hak W/Cdr ENGINEER

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date August 6th, 1951 Signed D M Hak TEST PILOT

4. The following documents are attached:
Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report ☒ (when applicable)

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No.....
and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Date Aug. 9/51 Signed for A. I. DISTRICT AIRCRAFT INSPECTOR

DEPARTMENT OF TRANSPORT CANADA AIR ENGINEERING

7. C. of A. and C. of R. renewed, not valid after (Date) 5th August 1952
Permissible Gross Weights— Wheels 1220
Skis 1220
Floats

Date 10th Aug 1951

Other Action:—

Signed DISTRICT SUPERINTENDENT, AIR REGULATIONS

8. H.Q. Action— C.A.R.
C.A.E.

56

RENEWAL OF CERTIFICATE OF AIRWORTHINESS REPORT

Swift Current Air Services,Swift Current,Sask.

Type of Aircraft. Piper .....Model.. J3 .....Registration.. Cf-HRT ...Serial.. 1186 .....

Time since new. 1134:45 .....Since overhaul.. None previous .....

Type of Engine.. Continental ..Model.. A65-8F .....Serial. 5939878 .....

Time since new. 649:25 .....Since overhaul.. 48:25 .....

Type of Propellor.. Lewis ....Model.. BK-42 .....Serial. 12100 .....

All fairings,cowlings and inspection ports were removed and a complete inspection was carried out.The following work was carried out.

Fuselage fabric rejuvinated where required,one small patch on backm and three on belly,dope built up and finished with piper cub yellow.
Starboard undercarriage vee strut recovered and doped.
Engine cowlings patched and painted.
All hinge points lubricated.
Engine given 50 hour inspection in accordance with manual.
Compass recalibrated.
Tail gear attachment points tightened.
Brakes filled with Univis J43.
Cabin enclosure cleaned out and lining repaired where required.
Fork ends on port lift struts renewed in accordance with directive 51-15-1.
Starboard fork ends inspected 113.40hours since new.
Canvas seats inspected in accordance with Directive 47-50-3
All Airworthiness Directives and Service Bulletins checked,all applicable other then above have been previously carried out.
Weight and Balance of the Aircraft estimated within 2%.of original.

I hereby certify that all Airworthiness Directives(or equivalent)and Manufacturers Service bulletins affecting safety have been complied with to date,that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed. D. M. Daly .....
Engineer WGM 54.

Date.. Aug. 6/51 .....

I hereby certify that I have flown this aircraft and that its performance,flying qualities,operation of flying controls,power plant,landing gear etc.,are equivalent to the standards of the type.

Signe. D. M. Daly .....
Test Pilot.

Date.. Aug. 6/51 .....

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

1/10/49 Certificate renewed to be not valid after the 30 September 1950
Frederick Bone
Certificate renewed to be not valid after 30-7-1951 unless endorsed
R/Sinclair 16 8/50

10/8/51. Certificate renewed to be not valid after the 5th August 1952.
Frederick Bone

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

54

2462A
4-48

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7732

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Ltd., Hamilton, Ontario.
3. Constructor's serial number	118 C
4. Name of owner	Arling B. Newton,
5. Address of owner	Hallinquist, Saskatchewan.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hallinquist, Sask.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 31st day of January 19 49, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 11th day of February 19 49.

H. Wattleworth

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after July 12th, 1949, unless endorsed.

59

PROVINCE OF SASKATCHEWAN

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS; that in consideration of ONE DOLLAR and other considerations, the receipt of which is hereby acknowledged, we do grant, sell, transfer and deliver unto: James D. McLean, Gull Lake, Saskatchewan, heirs, executors, administrators, and assigns, all right titles, and interest in the following goods and chattles, viz:

Airplane Piper Cub J3 Registration CF-BRT
Serial 118C

Engine Continental ØØØ A65 Serial 5939878

Witness. K. G. Hueman A. Elmer B. Newton

Date Dec 2/51

60

Air Services
Civil Aviation Division

Refer to File Number

5008-H18-20

Canada
DEPARTMENT OF TRANSPORT

509 Power Building,
Winnipeg, Manitoba.

January 29, 1952.

Mr. James D. McLean,
Quill Lake, Saskatchewan.

Re: Piper J3-C65, CF-HHT

Receipt is acknowledged of your application for registration of the above noted aircraft, together with the documents, etc., checked below:

(a) Application form in triplicate.	( )
(b) Fee of $5.00 for Registration	(x)
(c) Fee of $5.00 for Certificate of Airworthiness	(x)
(d) Bill of Sale	( )
(e) Customs Receipt	(x)
(f) Certificate of Airworthiness for Export	( )
(g) Certificate of Registration and Certificate of Airworthiness in the name of the former owner.	x

Attached hereto is Official Receipt No. 192916 covering the fee of $5.00

Pending receipt of the formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for _____ purposes, under the same terms and conditions as contained in the ~~Permit~~ Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

If registered commercially, this aircraft may not be flown for hire or reward unless the operator is in possession of a Licence issued by the Air Transport Board and an Operating Certificate issued by this Department.

This authority is valid until February 28, 1952.

Yours truly,

F. W. Bone,
District Superintendent, Air Regulations.

FWB/MR
Enc.

cc-H. O.
Swift Current Air Services

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..Heavier.. made by ..Cub Aircraft Corporation..

Type ..Piper J3-C65.. Maker's No. ..1180..

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35'2½"	
Length o/a in feet	22'5"	
Height o/a in feet	6'8"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	728	

Total weight authorized (fully loaded) in lbs. ..1220.. Air Speed ..75.. miles per hour

EQUIPMENT—(Give number and type).

1. Instruments ..Compass, air speed, altimeter,..
2. Gauges ..Revolution indicator, oil pressure, oil temperature.
3. Lights
4. Signals
5. Fire Extinguishers ..One..
6. Parachutes
7. Tools
8. Other Equipment ..safety belt-each occupant.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	right			
No. of Cylinders	4			
H.P.	65			
Bore	3 5/8			
Stroke	3 7/8			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 6 Aug 1951 AME D.M.Wolz. Form 2444 issued

Particulars accurate as corrected Yes. C of A valid to 5th Aug 1952

Modifications from type are indicated on annexed sheet —

Registration recommended with the following special conditions For Day Flying only under V.F.R conditions Eligible on wheels & skis.

Date 27 Jan 1952 Signature Fredk W Bone D.S.A.R. Winnipeg

Registration approved and Registration Mark C.F. BRT allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

61

2413
11-48

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00 ✓

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant James D McLean

Date of Application Nov 19/52

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
McLEAN JAMES D.	GULL LAKE, SASK.	CAN.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station GULL LAKE, SASK.

Date and place of manufacture or reconstruction 1946 HAMILTON, ONT

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..... Heavier ..... made by Cub Aircraft Corporation

Type ..... Piper J3-C65 ..... Maker's No. 1180

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35'-2⅓"	
Length o/a in feet	22'-5"	
Height o/a in feet	6'-8"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	728	
Total weight authorized (fully loaded) in lbs.	1220 Air Speed	75 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments ..... Compass, air speed, altimeter,
2. Gauges ..... Revolution indicator, oil pressure, oil temperature.
3. Lights .....
4. Signals .....
5. Fire Extinguishers ..... One pyrene.
6. Parachutes .....
7. Tools .....
8. Other Equipment ..... safety belt each occupant.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental			
Pusher or Tractor	Tractor			
Right or Left Hand	Right			
No. of Cylinders	4			
H.P.	65			
Bore	3 5/8			
Stroke	3 7/8			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on ..... 6 August 1951 AME D. M. Walz. Form 2444 refers

Particulars accurate as corrected ..... Yes. C. of A. valid to 5th August 1952.

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions ..... For day flying only under VFR conditions. Eligible on wheels and skis.

Date ..... January 26, 1952. Signature ..... F. Lucas Bone D. S. A. R. - Winnipeg

Registration approved and Registration Mark C.F. ..... BRT ..... allotted.

Registration { approved or / not approved for reasons annexed.

..... Superintendent, Air Regulations

62

2413
11-48

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant James D McLean

Date of Application January 19, 1952

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
McLean, James D.	Gull Lake, Sask.	Canadian.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Gull Lake, Sask.

Date and place of manufacture or reconstruction 1946, Hamilton, Ont.

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

63

54569

TRANSPORT - RECORDS
FEB 1 A.M. 1952
File 5008-B18-20

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

501 Power Building,
Winnipeg, Manitoba, January 29, 1952.

Your File	Subject	Our File
5008-B18-20	Piper J3-C65, CF-BRT	5008-B18-20

Director of Air Services,
Department of Transport,
Ottawa, Canada.

Attention: Superintendent, Air Regulations

1. Enclosed please find the papers and documents checked below, which were submitted in connection with the registration of the above noted aircraft:

1. Application (in duplicate) for Registration of an Aircraft, submitted by James D. McLean (x)
2. Bill of Sale Arling B. Newton, Hallinquist, Sask. (x)
3. Certificate of Registration No. 7732 for cancellation (x)
4. Certificate of Airworthiness No. 999 for re-issue in the name of the new owner. (x)
5. Customs Receipt No. dated ( )
6. Certificate of Airworthiness for Export No. ( )
7. Form 2444 -Application for Renewal of Certificate of Airworthiness ( )
8. Copy of letter of temporary authority dated January 29, 1952. (x)

2. Fee in the amount of $5.00 has been received, Receipt No. 192916 issued, and the remittance shown in Blotter Cash Book Folio No. 8471 January 1-31, 1952.

3. This application appears to be in order and, if approved, it is recommended that formal Certificates of Registration and Airworthiness might issue.

10719(R)
999(A)

for District Controller of Air Services.

FWB/MH
Encs.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

67 2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10719

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Limited Hamilton, Ontario
3. Constructor's serial number	118 C
4. Name of owner	James D. McLean
5. Address of owner	Gull Lake, Saskatchewan
6. Nationality of owner	British
7. Usual station of aircraft	Gull Lake, Saskatchewan
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 29th day of January, 1952, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, ~~1938~~, ~~as amended~~, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 6th day of February, 1952

Superintendent, Air Regulations.

~~Attention is drawn to the extracts from Air Regulations, 1938, overleaf.~~

68

5008-B18-20

OTTAWA, Ontario.
February 7th, 1952.

Mr. James D. McLean
Gull Lake, Saskatchewan.

Dear Sir~~/s~~-

Enclosed are Certificate of Registration No. 10719 and Certificate of Airworthiness No. 999 for your Piper J3-C65 aircraft, CF- BRT , Serial No. 118 C

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until August 5th, 1952.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

H.P.

(C.T. Travers),
Superintendent, Air Regulations.

cc Winnipeg
P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

Added 2nd 8 & 1.
11/2/52

Director of Air Services,
Dept. of Transport, Ottawa. (Att: B.A.R.)

DEPARTMENT OF TRANSPORT

TRANSPORT - RECORDS
AUG 11 A.M. 1952
File 5008-B18-20

Application for Renewal of Certificate of Airworthiness

Registration CF- BRT 25993 Serial No. 1160

1. C. of A. No 999 Expires Aug. 5, 1952 C. of R. No 10719 Expires Aug 5, 1952.
Aircraft Data Manufacturer Piper Model J3
Hours flown Since New 1190:45 Since Overhaul no previous
Engine Data Manufacturer Continental Model C65

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	5939878	705:45	104:35
(2)			
(3)			
(4)			

Date July 29/52 Signature of Applicant Jane D.M. McLean

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Date July 29/52 Signed D. M. Wahl
W & M 54 "A" Engineer

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date July 29/52 Signed D. M. Wahl
Test Pilot

4. The following documents are attached:
Certificate of Airworthiness 999 Certificate of Registration 10719 Weight & Balance Report (when applicable) no

5. When sections 1,2,3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No 10719 and C. of A. No 999, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended. (SEE OVER)

Date Aug 1/52 Signed R C Smith
District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after (Date) AUG 5 1953
Permissible Gross Weights — Wheels 1220
Skis N.R.
Floats N.A.

Date 5th Aug 1952.

Other Action: Item 33. Skiplane weight deleted.

Signed Ludlow Bone
District Superintendent, Air Regulations

8. H.Q.Action C.A.R.
C.A.E.

Noted 53

SWIFT CURRENT AIR SERVICES

69

INSPECTION REPORT
for
RENEWAL OF CERTIFICATE OF AIRWORTHINESS

DATE July. 29/52

Type of aircraft Piper .....Model... J3...Registration. CF-BRT....Serial. 1180 .....

Time since new..1190:45.....Time since overhaul...No. previous.....

Type of engine Continental...Model..~~5939878~~ C65.....Serial. 5939878.....

Time since new..705:05.....Time since overhaul. 104:35.....

Propellor ~~XXXXXXXX~~ Lewis ....Model.....Wood.....Serial..~~Xxxx~~ 12100

Time since new.....No record kept.....Time since overhaul.....

INSPECTION: All fairings, cowlings and inspection ports were removed and a complete inspection was carried out.

THE FOLLOWING WORK WAS CARRIED OUT:

100 hour inspection carried out on engine in accordance with manual.
Small amount of rejuvination carried out on fuselage.
Leavens Brothers emerency exit window installed in accordance with Para 2.14.1.
Canvas seatsinspected in accordance with Directive 47-50-3.
Directive 52-7-3(Lift Strut Fork ends) to be carried out as soon as kits available.
Lift strut fork ends inspected and considered airworthy until above modification completed.
Main wheels removed and regreased, brakes checked and bled.
All hinge points lubricated.
Three small fabric patches put on fuselage belly.
Cabin interior cleaned and harness inspected.
All Airworthiness Directives and Service Bulletins checked and those applicable other then above have been found previously carried out.
Weight and Balance estimated within 2%.

I hereby certify that all Airworthiness Directives (or equivalent) and Manufacturers Service Bulletins affecting safety have been complied with to date and that no unapproved modifications have been incorporated and that the aircraft is airworthy

Signed. D. M. Wah .....
Air Engineer WGM 54
Date. July 29th, 1952 .....

I hereby certify that I have flown this aircraft and that it's performance and flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed. D. M. Wah .....
Test pilot
Date. July 29th, 1952 .....

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations

CANADA

34761

TRANSPORT - RECORDS
AUG 31 A.M. 1953
File 5008-B18-20

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION - CF - BRT SERIAL No. 118C

1. C. of A. No. 999 Expires Aug 5/53 C. of R. No. 10719 Expires Aug 5/53
Aircraft Data—Manufacturer Piper Model J3C65
Hours flown—Since New 1223:25 Since Overhaul
Engine Data—Manufacturer Continental Model A65

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	5939878	137:25	
(2)			
(3)			
(4)			

Canadian Aircraft Company
Signature of Applicant L. J. McKENNA
P.O. Box 13 REGINA, Sask.
Date Aug 5/53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed L J McKenna
"M" Licence No.
Date Aug 5/53 199

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed L J McKenna
Pilot
Date Aug. 2/53

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed R L Smith
District Aircraft Inspector
Date Aug 26/53

7. C. of A. and C. of R. renewed, not valid after.

Date AUG 1 1954

Permissible Gross Weights—Wheels 1220
—Skis N A
—Floats N A

Signed Fredd V Bone
District Superintendent, Air Regulations
Date AUG 26 1953

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

72

INSPECTION REPORT

Aircraft Piper
Registration Marking CF - BRT
Serial No. 118C
Owner Mr. James D. McLean, c/o Canadian Aircraft Co, Regina.
C of A 999
C of R 10719
Aircraft Time since new 1223:25

Engine Continental A65
Serial No. 5939878
Engine time since new 137:25

Propeller Lewis~~mich~~
Model Wood~~s~~
Serial No. 12100
Prop time since new

Airworthiness Directives if applicable complied with.
All bulletins complied with, including strut modification Service bulletin #120.

The following components have been inspected and where work was carried out 'x' is indicated in front of item. In these instances please see footnote.

Cabin and Cockpit

1. All seats removed
2. All safety belts
3. All cabin lining
4. Floor boards
5. Control column
6. Elevator trim
7. All controls to engine, throttle mixture and carb heat.

Fuselage

1. All fuselage structure
2. Fuselage fabric
3. All fittings for wings stabilizer and vertical fin
4. All U/C fittings
5. All flight control cables
6. All fairings

Wings

1. All inspection panels removed for inspection of main spars & ribs
2. All control cables
3. Ailerons checked
4. All attachment points at wings root fittings check
5. All fabric

Empennage

1. Fabric
2. All attachment points at fuselage, vertical fin, rudder & elevator
3. All flying wires,
4. Control surfaces
5. Trim stabilizer

Landing Gear

X 1. Landing gear
2. Attachment points
3. Tires
X 4. Brakes and brake lines

Propeller

1. Propeller
2. Propeller bolts

51

Engine

1. Engine mounts
2. All controls
3. Oil and fuel lines & primer
4 Exhaust stacks and heater muff
5. Spark plugs
6. Gas strainers and carb screen
7. Cabin heat

Instruments and Guages

All instruments and guages - altimeter, airspeed, turn & bank, Gyro compass, oil temperature, oil pressure, all connections.

The above listed inppection has been compiled according to aircraft standards and work completed in accordance with Technical Circular T/3/50.

Air Engineer.....J.J. McKee.....

Date.....Aug. 5/52.....

I hereby estimate that the total weight of the aircraft has not changed more than 2%.

Air Engineer.....J.J. McKee.....

The following work was found necessary after inspection and has been carried out.

CF - BRT

New bungee cords
New brake shoes
New right wheel dust cover
New tail spring installed.

74

Air Services
Civil Aviation Division

Canada
DEPARTMENT OF TRANSPORT

Refer to File Number
5008-B18-20

501 Power Building,
Winnipeg, Manitoba.
December 7, 1953.

Mr. Harry Jeschke,
P.O. Box 176,
Nokomis, Saskatchewan.

Re: Piper J3-C65 CF-BRT

Receipt is acknowledged of your application for registration of the above noted aircraft, together with the documents, etc., checked below:

(a)	Application form in triplicate.	(x)
(b)	Fee of $5.00 for Registration	(x)
(c)	Fee of $5.00 for Certificate of Airworthiness	( )
(d)	Bill of Sale	(x)
(e)	Customs Receipt	( )
(f)	Certificate of Airworthiness for Export	( )
(g)	Certificate of Registration and Certificate of Airworthiness in the name of the former owner.	(x)

Attached hereto is Official Receipt No. 87300 covering the fee of $5.00.

Pending receipt of the formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for private purposes, under the same terms and conditions as contained in the formal Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

If registered commercially, this aircraft may not be flown for hire or reward unless the operator is in possession of a Licence issued by the Air Transport Board and an Operating Certificate issued by this Department.

This authority is valid until January 6, 1954.

Yours truly,
ORIGINAL SIGNED BY
F. W. BONE
District Superintendent, Air Regulations.
F. W. Bone,
District Superintendent, Air Regulations.

cc: H.Q. Attn: S.A.R. ✓
Encl.
FWB/DT

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10719

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation Limited Hamilton, Ontario
3. Constructor's serial number	118 C
4. Name of owner	James D. McLean
5. Address of owner	Gull Lake, Saskatchewan
6. Nationality of owner	British
7. Usual station of aircraft	Gull Lake, Saskatchewan
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 29th day of January, 19 52, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, ~~1938~~, as amended, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 6th day of February, 19 52

H. Statham

Superintendent, Air Regulations.

~~Attention is drawn to the extracts from Air Regulations, 1938, as amended~~

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

78

Date ..December.1,.1953.....

BILL OF SALE

PROVINCE OF SASKATCHEWAN, CANADA

KNOW ALL MEN TO THESE PRESENT: that in consideration of One Dollar and other considerations, the receipt of which is hereby acknowledged, I do grant, sell, transfer and deliver unto Mr. Harry Jeschke, Box 176, Nokomis, Saskatchewan. his heirs, executors, administrators, and assigns, all right, title and interest in and to the following goods and chattels, viz:

Airplane - Piper Cub CF - BRT
Serial No. - 118C
Engine - 5137968

Canadian Aircraft Company
L. J. McKENNA
P.O. Box 13 REGINA, Sask.

A. Russell
Witness

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..... made by Piper Aircraft

Type J3 - C65 Maker's No. 10719

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 4½"	
Height o/a in feet	6' 8"	

Cubic Capacity (of Airship or Balloon) .....

Weight equipped, but without load, fuel, or oil 680 lbs

Total weight authorized (fully loaded) in lbs. 1,220 Air Speed 83 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, Altimeter, Airspeed indicator, Revolution indicator
2. Gauges Oil Pressure Guage, Oil Temperature Guage
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One (Hand 1 Qrt. Pyrene.)
6. Parachutes Nil.
7. Tools Nil.
8. Other Equipment Safety belt for each occupant.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A-65 5137968			
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on 5th August, 1953. AME L. J. McKenna. WRM-199.

Particulars accurate as corrected Yes. Cert of Airworthiness No. 999 valid to the 1st Aug.1954.

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions For Day Flying only under Visual Flight Rules.

Eligible as a Landplane. W & B report refers.

Date .....

Signature .....

Registration approved and Registration Mark C.F. BRT. allotted.

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

2413
7-50

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Harry L. Jeschke

Date of Application December 1, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Mr. Harry Jeschke	Box 176, Nokomis, Saskatchewan	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private) Private

Usual Station Nokomis, Saskatchewan

Date and place of manufacture or reconstruction Oct. 23, 1946 Cub Aircraft Co. Hamilton

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air ..... made by Piper Aircraft

Type J3 - C65 Maker's No. 10719

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	35' 2½"	
Length o/a in feet	22' 4½"	
Height o/a in feet	6' 8"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	680 lbs	

Total weight authorized (fully loaded) in lbs 1,220 Air Speed 83 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Compass, Altimeter, Airspeed indicator, Revolution indicator
2. Gauges Oil Pressure Guage, Oil Temperature Guage
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One (Hand 1 Qrt. Pyrene.)
6. Parachutes Nil.
7. Tools Nil.
8. Other Equipment Safety belt for each occupant.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Continental A-65 5137968			
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.	65			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on 5th August. 1953. AME L. J. McKenna. WGM-199.

Particulars accurate as corrected Yes. Cert of Airworthiness No. 999 valid to the 1st Aug. 1954.

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions For Day Flying only under Visual Flight Rules.

Eligible as a Landplane. W & B report refers.

Date

Signature Leslie Bone

Registration approved and Registration Mark C.F. BRT. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
7-50

80

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Harry L. Jeschke

Date of Application December 1, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Mr. Harry Jeschke	Box 176, Nokomis, Saskatchewan	Canadian Pilot Letter 55929

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private) Private

Usual Station Nokomis, Saskatchewan

Date and place of manufacture or reconstruction Oct. 23, 1946 Cub Aircraft Co. Hamilton

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

TRANSPORT - RECORDS
DEC 10 A.M. 1953
File 5008-B18-20

81

DEPARTMENT OF TRANSPORT

54186

Intra-Departmental Correspondence

501 Power Building,
Winnipeg, Manitoba, December 7, 1953.

Your File	Subject	Our File
5008-B18-20	Piper J3-C65 CF-BRT	5008-B18-20

Director of Air Services,
Department of Transport,
Ottawa, Canada.

Attention: Superintendent, Air Regulations

1. Enclosed please find the papers and documents checked below, which were submitted in connection with the registration of the above noted aircraft:

1. Application (in duplicate) for registration of an Aircraft, submitted by ..... (x)
2. Bill of Sale ..... (x)
3. Certificate of Registration No. 10719 for cancellation ..... (x)
4. Certificate of Airworthiness No. 999 for re-issue in the name of the new owner. ..... (x)
5. Customs Receipt No. ..... dated ..... ( )
6. Certificate of Airworthiness for Export No. ..... ( )
7. Form 2444 - Application for Renewal of Certificate of Airworthiness ..... ( )
8. Form 2443 - Certification of Aircraft Imported Complete ..... ( )
9. Copy of letter of temporary authority dated December 7/53 (x)

2. Fee in the amount of $5.00 has been received and Receipt No. 87300 issued.

3. This application appears to be in order and, if approved, it is recommended that formal Certificates of Registration and Airworthiness might issue.

Fredk W Bone
District Controller of Air Services.

Encs.
FWB/DT

JCF/ER

92

OTTAWA, Ontario, December 14th, 1953.

5008-B18-20

Piper J3C-65, CF-BRT

5008-B18-20

District Controller of Air Services,
612 Power Building,
Winnipeg, Manitoba.

Attn: District Superintendent, Air Regulations.

1. Your letter 5008-B18-20, dated December 7th, 1953, with enclosed documents covering the registration of Piper J3C-65 aircraft CF-BRT in the name of Harry Jeschke, Nokomis, Sask., is acknowledged.

2. We note the following discrepancies in the documentation covering this application:

(a) Mr. Jeschke has not completed the "Nationality" column on his application.

(b) The change of ownership is not complete as this aircraft is registered in the name of James D. McLean, Gull Lake, Sask., whereas the Bill of Sale accompanying the application is from the Canadian Aircraft Company to Harry Jeschke.

3. As soon as these discrepancies are clarified to the satisfaction of the Department, we will proceed with the issue of formal registration.

(G.T. Travers),
Superintendent, Air Regulations.

80

Date .....November.12,.1953.

BILL OF SALE

PROVINCE OF SASKATCHEWAN, CANADA

KNOW ALL MEN TO THESE PRESENT: that in consideration of One Dollar and other considerations, the receipt of which is hereby acknowledged, I do grant, sell, transfer and deliver unto Leo. J. McKenna, Canadian Aircraft Co. Regina, Sask. his heirs, executors, administrators, and assigns, all right, title and interest in and to the following goods and chattels, viz:

Airplane - Piper Cub CF - BRT

Serial No. - 118C

Engine - 5939878

A.K. Leonard
Witness

James D. McLean

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

84/2

9-49

501 Power Building,
Winnipeg, Manitoba, December 18, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-20	Piper J3C-65 CF-BRT	5008-B18-20

TRANSPORT RECORDS
DEC 21 A.M 1953
File 5008-B18-20

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

55929

Attention: Superintendent, Air Regulations.

1. In reply to Headquarters letter dated the 14th December in connection with the re-registration of the above noted aircraft, May Headquarters copies of form 2413 be amended by the addition of "Canadian" inserted in the Nationality column. This may be confirmed by reference to Headquarters file number 5802-36617 and form 2416 and AC - 5 - 78.

2. Attached hereto is Bill of Sale between James D. McLean and L. J. McKenna, Canadian Aircraft Company.

3. It is now understood that the above will clarify the discrepancies raised and that the processing of the application for issue of formal registration in favour of Mr. Harry Jeschke might proceed.

4. Submitted.

W. M. W. Jones
It is now in order to proceed with registration as applied for by Harry Jeschke.
Dec 21/53.

Frederick Bone

FWB/RC
Enc.

District Controller of Air Services.

12573(R)
999(A)

ENGINES

18. Number installed ..... One .....

19. Makes ..... Continental .....

20. Types ..... A-65 .....

21. International power of the engine or engines at .....

(Take-off) (M.E.T.O.) (a) Sea Level ..... 65 / 50 ..... H.P. at ..... 2300 / 2100 ..... revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews { Number fitted ..... One ..... Types ..... Sensenich No. .....
Pitch ..... Diameter .....

25. Weight of aircraft empty (including water in the radiators): (a) Landplane ..... 727 ~~705~~ lbs. (3.8.48)
(b) Seaplane ..... lbs.
(c) Skiplane ..... ~~705~~ lbs. (21.6.49

WEIGHT OF FUEL AND OIL

26. Fuel ..... 72 lbs.
(at 7·2 lbs. per gallon)
(a) Number of tanks ..... One .....
(b) Capacity of tanks ..... 10 ..... Imp. gals.

27. Oil ..... 9 lbs.
(at 9·0 lbs. per gallon)
(a) Number of tanks ..... One .....
(b) Capacity of tanks ..... 1 ..... Imp. gals.

Walker 1.10.49

28. Weight allowed for crew ..... 170 lbs.

29. Weight allowed for equipment, excluding wireless apparatus ..... lbs.

30. Weight of wireless apparatus ..... lbs.

31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full ..... L.P. 242 ~~264~~ lbs. (3.8.48)

32. Maximum total weight authorized ..... lbs.
Landplane ..... 1220 lbs.
Seaplane ..... lbs.
Skiplane ..... lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full) .....
Landplane ..... Twelve hundred & twenty pounds .....
Seaplane .....
Skiplane ..... ~~Twelve hundred and twenty pounds (26.1.48)~~ .....

34. Minimum crew necessary ..... One .....

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of .....inches and.....inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed ..... 2100 .....r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed ..... 2300 .....r.p.m.

40. The indicated air speed must never exceed (a) .....m.p.h. and (b) .....m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated ..... Feb. 19th. 1948 ..... in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, ~~1938~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this ..... 13th ..... day of ..... March, ... 19 46

.....
Superintendent, Air Regulations.

Valid for day flying only

2462
9-39

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 999

(Heavier than air)

FIRST PART

JESCHKE (7.12.53) Harry (30.1.52)---McLEAN

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) (31.5.47)--DAVIS---and---WILSON,
2. Christian name James Arling Br., Robert S.
3. Address P.O. Box 176, Nokomis, Sask. 176 Gainsborough Rd., Toronto, Ont. and R.R. #1, Port Perry, Ont.
4. Nationality British

NAME OF CONSTRUCTOR

5. Name Cub Aircraft Corporation Ltd.

NATIONALITY AND REGISTRATION MARKS

6. CF-BRT

DESCRIPTION OF AIRCRAFT

7. Type Piper Series J3-C65 Constructor's No. 118 C
8. Place and year of construction of aircraft Hamilton, Ont.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal
14. Subdivision A B C D & E
15. Maximum span (in flying position) 35' 2½"
16. Maximum length (in flying position) 22' 5"
17. Total height (with and without trolley in case of seaplanes) 6' 8"

/MTM
/ZC
/MM

86

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Feb.19th,1947	
		Feb. 19th, 1948. b/	
		July 12th, 1949.	
		30.9.50	
		30.7.51	
		5.8.52	
		August 1, 1954	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Revolution Indicator
Oil Pressure Gauge
Oil Temperature Gauge

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

Safety belt for each occupant

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT FORMS PART OF THIS CERTIFICATE OF AIRWORTHINESS AND MUST BE CARRIED IN THE AIRCRAFT DURING FLIGHT. (1.10.49)

Note: This certificate is subject to Air Regulations, [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

88

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12573

NATIONALITY AND REGISTRATION MARKS CF-BRT

1. Type and description	Piper J3-C65
2. Name and address of constructor	Cub Aircraft Corporation, Ltd., Hamilton, Ont.
3. Constructor's serial number	118 C
4. Name of owner	Harry Jeschke,
5. Address of owner	Box 176, Nokomis, Sask.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Nokomis, Sask.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 7th day of December 19 53, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BRT and is of Canadian nationality.

Given at Ottawa this 29th day of December 19 53.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

JCF/ER

89

OTTAWA, Ontario. January 5, 1954.

5008-B18-20 Piper J3C-65 aircraft, CF-BRT 5008-B18-20

REGISTERED

District Controller of Air Services,
612 Power Building,
Winnipeg, Manitoba.

Attention: District Superintendent, Air Regulations.

1. Enclosed are Certificates of Registration No. 12573 and Airworthiness No. 999 covering Piper J3C-65 aircraft CF-BRT, registered in the name of Harry Jeschke, Box 176, Nokomis, Saskatchewan.

2. We draw to your attention that on August 5th, 1952, the Skiplane Condition under Item 33 was deleted from the certificate but the Empty Weight endorsement as a Skiplane, Item 25 (c) appears to have been overlooked and remains a condition of the certificate.

3. After comparing the document with your record, may we be advised of any amendment that you decide upon.

(C. T. Travers)
Superintendent, Air Regulations.

Encl:

99

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

90 2/9-49

501 Power Building,
Winnipeg, Manitoba, January 11, 1954.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B18-20	Piper J3-C65 CF - BRT	5008-B18-20

TRANSPORT - RECORDS
JAN 14 A.M.
File 5008-B.18-20

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

13235

Attention: Superintendent, Air Regulations.

1. In reply to Headquarters letter dated the 5th January 1954, in connection with the above noted aircraft and the discrepancy raised covering item 25 (c) as shown on the Certificate of Airworthiness.

2. Please be advised that the Certificate of Airworthiness has this date been amended by the deletion of "733 lbs" under item 25 (c). ✓

3. A communication has been dispatched to the owner Mr. Harry Jeschke, advising him of the requirements for an endorsement to authorize the operation of this aircraft when equipped as a Ski-plane and requesting, if he so desires, the submission of the appropriate Weight and Balance supplement.

4. Submitted please.

Noted
FWB

Fredw Bone

FWB/RC District Controller of Air Services.

JJ

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

AC-5-132

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL - HQ FILE NO. B18-20

DUPLICATE - PORT FILE NO. B18-20

TRANSPORT JUN 10 A.M. 91 File SWY-B18-20

TO: Director of Air Services, Ottawa [illegible]t. Attn: S.A.R.

AIRCRAFT LICENSING RECORDS

07975

1. Registration mark CF- BRT 2. Old C of R No. ~~12573~~

3. New C of R No. ..... Date .....

4. C of A No. 999 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes: State ☐ to Commercial ☐ to Private ☐
Commercial ☐ to State ☐ to Private ☐
Private ☒ to Commercial ☒ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... JESCHKE (Leased by Canadian Aircraft Co.) Citizen of .....
Christian name ..... Harry .....

8. Address of owner ..... Box 176, Nokomis, Sask. .....
.....
Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew #		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not ~~C. of A. - Item 14, "A, B, C, and E" inserted.~~
otherwise covered .....
.....
.....

13. C of A valid from ..... to .....

Temporary authority from ..... to .....

Date ... June 7th, 1954. .....

F.W. Bone,
District Superintendent Air Regulations

TRANSPORT - RECORDS
JAN 18 P.M.
File 5008-B18-20
YOUR FILE No.

93

MEMORANDUM • GOVERNMENT OF CANADA

44002

TO: Director General, Air Services. OTTAWA.

FROM: Regional Director, Air Services. WINNIPEG.

OUR FILE No: 5008/I-24-17, E-2-21, E-2-25, J-17-18, L-19-9, J-22-23, E-7-22, G-15-21, E-5-5 B-18-20 D-12-10 E-7-14

5008-14

SUBJECT: Aircraft - CF- IKQ, EBU, EBY, JQR, LSI JVW, EGV, GOU, EEE, BRT DLJ, and EGN

DATE: January 14, 1960.

1 Enclosed herewith please find a copy of a letter from Mr. L.J. McKenna (Op. as CANADIAN AIRCRAFT COMPANY), P. O. Box 13, Regina, Saskatchewan, which is self-explanatory.

2 Piper J3C-65, CF- B R T, registered in the name of Mr. Harry JESCHKE, P. O. Box 176, Nokomis, Saskatchewan, was leased to Mr. L. J. McKenna. On July 5, 1954, this machine was damaged by a cyclone, and, on July 31, 1954, was sold to Mr. L. J. McKenna, in a damaged condition. In view of this, it was never registered in the name of L. J. McKenna.

COPY ON 5008-L19-9

-I24-17 ✓
-E2-21 ✓
-E2-25 ✓
-J17-18 ✓
-J22-23 ✓
-E7-22 ✓
-G15-21 ✓
-E5-5 ✓
-D12-10 ✓
-E7-14

3 With reference to CF- L S I, Piper PA-18A, it is requested that Headquarters refer to our letter of January 13, 1960.

4 The Certificate of Registration No. 12573 and the Certificate of Airworthiness No. 999, for CF- B R T, Piper J3C-65, are placed on file at this Office and marked cancelled.

5 Would Headquarters, please, delete all the above registration markings from the Civil Aircraft Register, and amend their records accordingly.

Coded & Noted
Lm
22.1.60

Certs. cancelled
Lm
22.1.60

for Regional Director, Air Services.

enc.

CGSB Standard 6—GP—22; P P & S Cat. No. 3590

VOL. 1

5008 - BSO

FILE No. 5008 - BSO 26-10-65 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JAN. 3, 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION. INSPECTION & OPERATION
FILE TITLE CF - BSO - DH 82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

FILE No. 5008 - ~~B 19 15~~ B 50 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM JAN. 3. 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BSO - DH 82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

5008-40

FILE No. 5008 - B19 - 15 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM Jan 3, 1946
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BSO - D.H.82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JAN 4 - 1946	33319	L.A.R.		WL	JAN 23 1946
JAN 21 1946		Treas		CRB	FEB 16 1947
MAR 14 1946	Requested	Mr Bulger			MAR 18 1946
MAY - 1 1946	Requested	Sask		LST	1946
FEB 21 1947	71453	C.A.R.		LST	
OCT 3 - 47	21021	CAR			NOV 7 47
NOV 7 47		Opr C.		W.H.D.	NOV 10 47
JUN 14 48	11158	CAR			JUN 18 48
JUN 18 48		C.A.R. ②			
JUN 18 48		C.R.C. ③			JUN 21 '48
JUN 21 '48		Treas Accounts			JUN 25 1948
AUG 30 1949	21610	CAR		LST	SEP 1 - 1949
		C.A.R. ②			SEP 1 - 1949
JUN 6 - 1950	9587	C.A.R. ③		LST	JUN 9
		C.A.R.		LST	JUN 9 - 1950
NOV 10 1950	24323	CAR		WHP	NOV 13 1950
NOV 13 1950		C.A.R. ②			NOV 15 1950
NOV 15 1950		C.R.C. ③			NOV 20 1950
NOV 20 1950		Treas Accounts ④			NOV 29 1950
NOV 29 1950		R.C.A.F.			NOV 30 1950
JUL 19 1951	22062	CAR		LST	JUL 23 1951
JUL 20 1951		CAE			
NOV 10 1951	If Wanted 42073	CAR		LWO	DEC 11 1951
		CAI		RA	DEC 12 1951
DEC 11 1951	28065	ARL		LST	NOV 3 - 1960
OCT 31 1960		SAE/A		LST	NOV - 3 1960
NOV - 3 1960	NOV 3 - 1960	DATA			NOV - 3 1960
NOV - 3 1960					
	Cancelled (AP)	Records		GLC	

FILE No. 5008 - B19 - 15 VOL. No. 1.

ORIGINAL ON FILE

COPY

FOR FILE TOR:5008-B19-15.

8
9-45

1 Montgomery Avenue, Toronto.
January 3rd, 1946.

Mr. E.M. Pritchard,
Brant Norfolk Aero Club,
Box 550,
BRANTFORD, Ontario.

Dear Sir:

Receipt is acknowledged of your application for Registration of Tiger Moth Aeroplane CF-BSO, RCAF No. 4249 Mfgr. Serial No. 0579, with the following papers:

(a) Application forms.
(b) Fee of $10.00 (Receipt No.27955 sent to the Weston Aircraft Corporation)
(c) Copy of Bill of Sale.
(d) Air Frame and Engine Log Books (Being returned by Canadian National Express)
(e) Certificate re Airworthiness.

It is regretted that the temporary authority to operate this Aircraft as a Commercial Aircraft, may not be issued until the Aircraft has been inspected by an Official of this Department.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/HF.
c.c. to H.Q.

2

309 Journal Bldg.
OTTAWA, Ontario
21, December, 1945

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

In Account with Brant-Norfolk Aero Club.

No. of units. Final Bill Re Sale of Tiger Moth Aircraft.

5	Tiger Moth Aircraft	at $275.00	$ 1375.00

R.C.A.F. Number	Manufacturers' No.
8994	1796
4249	0579
1270	1473
9690	----
3847	1508

CERTIFIED TRUE COPY OF INVOICE.

[signature]

Copy for Office of District Inspector.

3

Tiger Moth Aircraft CF-BSO (Formerly RCAF Tiger Moth #4249) received at Weston Aircraft Limited for Certificate of Airworthiness and the following work was carried out:

Weight - 1297 lbs. complete with battery.
R.C.A.F. Registration removed.
Wings and fuselage redoped.
Civil registration CF-BSO installed on top & bottom wings, and on both sides of fuselage.
Gipsy Major engine #85983 removed and Gipsy Major engine #89376 installed.
Propeller, drawing #GG100B, Serial #A1785 manufactured by Granby Aviation.
Oil tank drained and refilled with Imperial Oil #80.
Gas strainer cleaned and saftied.
All hose connections renewed.
Fire extinguishers checked and new pressure bulb fitted in front one.
Upper right elevator cable fitting bolt replaced.
Rudder lower hinge pin replaced.
Rudder center hinge bushing replaced.
Fibre fairlead on right hand elevator cable at fuselage fitted.
Crash pads replaced on instrument panel
Engine cowls bumped out and repainted.
Pitot tubes repaired at interplane strut.
Canopy readjusted and put in working order.
Gasoline tank repainted.
Stbd. engine bearer replaced.
All control points lubricated.
Compasses swung.

I hereby certify that all work listed has been done using certified materials and according to accepted practice; that all manufacturers' service bulletins affecting safety have been complied with to date and that no unapproved modifications have been incorporated and that the airframe is airworthy.

WESTON AIRCRAFT LIMITED,

F. Killurn
A-844

All controls checked for soundness, correct action and for presence of all locking devices.

R J Kelly
A-1983

This is to certify that I have test flown Tiger Moth CF-BSO, and that it performed in a satisfactory manner.

J H Reed
C-1522

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: **Heavier** made by: **DeHavilland Aircraft**

Type: **D.H. 82 C** Maker's No.: **0579**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	Same
Length o/a in feet	23' 11"	
Height o/a in feet	8' 10"	

Cubic Capacity (of Airship or Balloon):

Weight equipped, but without load, fuel, or oil: **1297 lbs complete with battery**

Total weight authorized (fully loaded) in lbs: **1825** Air speed: **90** miles per hour

EQUIPMENT—(Give number and type).

1. Instruments: **Bank & Turn, Altimeter, R.P.M. Indicator, Airspeed Indicator, Compass.**
2. Gauges: **Oil Temperature & Pressure**
3. Lights: **Navigation, cockpit, downward identification.**
4. Signals: **None**
5. Fire Extinguishers: **Two**
6. Parachutes: **None**
7. Tools: **None**
8. Other Equipment: **Safety Belt for each passenger**

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C Serial #89376			
Pusher or Tractor	Tractor			
Right or Left Hand	Clockwise			
No. of Cylinders	4			
H.P.	120			
Bore	4.646"			
Stroke	5.512"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on: DECEMBER 4/45

Particulars accurate as corrected: SATISFACTORY.

Modifications from type are indicated on annexed sheet:

Registration recommended with the following special conditions:

Date: 3/1/46

Signature: C. A. Brethour

Registration approved and Registration Mark C.F.: BSO allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

This aircraft from R.C.A.F Reg. #4249

2413
9-39

4

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect. BRANT NORFOLK AERO CLUB (1944)

Signature of Applicant.....

Date of Application.....December 28,1945.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Brant-Norfolk Aero Club (1944)	(Temporary-Burtch,Ont.) Box 550 Brantford	British

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
A.E.Taylor	President	Cainsville,Ont.	English
E.M.Pritchard	Secretary	Brantford, Ont.	English
F.C.Richardson	Treasurer	Brantford, Ont.	Canadian

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Commercial

Usual Station.....Brantford

Date of manufacture or reconstruction.....

Crew required.....1.

Accommodation for what number of passengers.....1.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2 S2
8-45

TORONTO, January 3rd, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	TIGER MOTH CF-BSO - Serial No. 0579.	5008-B19-15.

A33319

TRANSPORT-RECORDS
JAN 4 A.M. 1946
File 5008-B19-15

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to registration of Tiger Moth CF-BSO, Mfgrs. Serial No. 0579, R.C.A.F. No. 4249, recently purchased by the Brant Norfolk Aero Club from War Assets Corporation through the Royal Canadian Flying Clubs Association:

(a) Application form in duplicate.
(b) Fee of $10.00 (See page 142 in Cash Book, Receipt No. 27955)
(c) Certificate as to Airworthiness.
(d) Copy of Bill of Sale.
(e) Copy of Letter to Mr. E.M. Pritchard, Brant Aero Norfolk Club.

DJT

3327(R)
834(A)

Weight light 1297 lbs.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/HT.
ENCL.

War Assets Sales Order No. 5302-R2

8

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3327

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ont.
3. Constructor's serial number	0579
4. Name of owner	Brant-Norfolk Aero Club,
5. Address of owner	Box 550, Brantford, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 4th day of December, 19 45, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 16th day of January, 19 46.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

5008-B19-15

REGISTERED

Ottawa, Jan. 17, 1946.

Brant-Norfolk Aero Club,
Box 550,
Brantford, Ont.

Gentlemen:-

Enclosed please find Certificate of Registration No. 3327 and Certificate of Airworthiness No. 834, dated December 4, 1945, together with Engine and Journey and Aircraft Log Books, for your D.H.82C Tiger Moth aircraft, CF-BSO, Serial No. 0579.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

noted
CRS
26/1/46

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

5

2
8-45

TORONTO February 19th, 1947
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 1 9 - 1 5	Tiger Moth C F / B S O. Serial No.0579	

71453 ~~71454~~

TRANSPORT - RECORDS
FEB 20 A.M.
5008-B19-15
File

Controller of Civil Aviation,
Department of Transport,
OTTAWA.

1. Tiger Moth aircraft C F / B S O, owned by the Brant-Norfolk Aero Club has recently been re-conditioned and inspected for airworthiness by the Cub Aircraft Corporation, Hamilton.

2. Proper entries were made in the log books of this aircraft as of February 16th, 1947 to the effect that the aircraft was airworthy at that time. These certifications were signed by Messrs. Gibson and Lachman. Mr. F.E. McFadden was the test pilot.

3. Certificate of Registration No. 3327 and Certificate of Airworthiness No. 834 have been re-newed valid until February 16th, 1948.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/KC

L.P.

COPY

6

ORIGINAL ON FILE ..... 5008-B13-1 .....

COPY FOR FILE ..... 5008-B19-15 .....
D5-23
B11-12
5258-421

A21021

DEPARTMENT OF TRANSPORT

TORONTO, September 30th, 1947.

RE: CF/BMA
CF/BSO
CF/DCW
CF/BKL
RE: TRIPP FLYING SERVICES LIMITED.

TRANSPORT-RECORDS
OCT 3 A.M.
File 5008 B/9-15

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Mrs. Myrtle Milson, Messrs D.D. McLaren and H.S. Thomson formerly entire owners of the Tripp Flying Services Ltd., Barker Airport, Toronto, have recently sold a considerable interest of the business to Messrs A.F. Martindale and ML. Martindale of Stoney Creek, Ontario.

2. The name of the Company is not to be changed, we believe however, that the changes in directors, and ownership of the Company may effect the license issued this concern by the Air Transport Board, and the records of ownership of the aircraft as given on their Registration Certificates. May we be advised please, if it will be necessary to re-register the aircraft.

3. We have received at this office application forms with the Certificates of Registration and Airworthiness but no fees.

8
4-47

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/HT.

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102 B

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE MESSAGE	
DAY LETTER	X
NIGHT MESSAGE	
NIGHT LETTER	
EVENING & SUNDAY	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
TGS/HMC			TRANSPORT AIR 3712

Veuillez expedier la dépêche suivante aux conditions mentionnées au verso auxquelles je consens par les présentes
Send the following message, subject to the terms on back hereof, which are hereby agreed to

File Numbers: 5258-421;
~~5008-B11-12;~~
5008-D3-23;
5008-B19-15;
5008-B13-1;

OTTAWA ONTARIO OCTOBER 9 1947

DISTRICT INSPECTOR AIR REGULATIONS
I MONTGOMERY AVENUE
TORONTO ONTARIO

AR87 RELET ~~SEPTEMBER~~ THIRTIETH TRIPP FLYING SERVICES LIMITED STOP

APPLICATIONS SHOWING NEW DIRECTORSHIP FEES PROOF OF OWNERSHIP CF DASH BAKER MIKE ABLE

CF DASH BAKER SUGAR OBOE CF DASH DOG CHARLIE WILLIAM CF DASH BAKER KING LOVE REQUIRED

STOP IN THIS INSTANCE YOU MAY ENDORSE CERTIFICATES AND RETURN THEM TO TRIPP FLYING

SERVICES LIMITED STOP ADVISE JIM ALBANI PHONE MAYFAIR THREE THREE EIGHT ZERO

CIVIL AVIATION

FWM 48

HTP/EM

Ottawa, Ontario, November 6th, 1947.

5008-D19-15

Re-registration Aircraft Tripp Flying Services Ltd.

5008-D19-15
5008-B19-15

District Inspector, Air Regulations,
1 Montgomery Ave.,
Postal Station "K",
Toronto 12, Ont.

1. In your letter of September 30 to the Controller of Civil Aviation with respect to the re-registration of aircraft in the name of Tripp Flying Services Ltd. you refer to CF-BSO.

2. Our records at Headquarters indicate that CF-BSO refers to aircraft DHB2C Brant-Norfolk Aero Club.

3. It rather appears that instead of reading CF-BSO this should read CF-DSO as this aircraft is a Piper J3 - C65 registered under the name of Tripp Flying Services Ltd.

4. Submitted for your information please.

(H. Topham),
Superintendent, Air Regulations.

9

5008-B19-15

1, Montgomery Avenue, Toronto.
12th June, 1948.

Mr. M.R. Robertson,
180 West Street,
Brantford, ONTARIO.

Dear Sir:

Receipt is acknowledged of your application for re-registration of Tiger Moth CF-BSO, which you recently purchased from the Brant-Norfolk Aero Club, with the following papers:

(a) Application forms.
(b) Bill of Sale.
(c) $5.00 fee - Receipt No. 44808 is attached hereto.
(d) Old Certificates of Registration and Airworthiness.
(e) Log Books - returned herewith.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your authority to operate CF-DSO as a private aircraft, under the conditions given in Certificate of Airworthiness No. 834, until August 11th, 1948. This authority does not include permission for the operation or radio apparatus.

Yours truly,

for District Inspector,
Air Regulations,
Toronto.

/AM

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

Department of Civil Aviation Division

ENDORSEMENTS

19/2/47 - renewed - valid until February 16th, 1948

11/6/48 - renewed valid until June 10th, 1949 -

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

- 10

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3327

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ont.
3. Constructor's serial number	0579
4. Name of owner	Brant-Norfolk Aero Club,
5. Address of owner	Box 550, Brantford, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 4th day of December, 19 45, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 16th day of January, 19 46.

Ian Sheild

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

11

BILL OF SALE

This is to certify that we have this date sold, assigned and transferred all right, title, and interest in, Tiger Moth, Regis. CF-BSO, Engine Serial No. 87167, to Mr. M. Ross Robertson, 180 West Street, Brantford, Ontario, for the sum of One Dollar ($1.00) and other valuable consideration, receipt of which is hereby acknowledged. We also certify that there is no lien or encumbrance against this machine.

Dated at Brantford, Ont. this 21st day of May, 1948

BRANT-NORFOLK AERO CLUB (1944)

Isobel Ballantine
Witness

Leonard P. Browne.
for Owner

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by de Havilland aircraft

Type Tiger moth Maker's No. 0579

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet 29' 4"		
Length o/a in feet 23' 11"		
Height o/a in feet 8' 9"		

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 1297

Total weight authorized (fully loaded) in lbs 1825 Air speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 1 air speed, 1 tachometer 1 compass 1 altimeter 1 turn & bank.
2. Gauges 1 oil pressure, 1 oil temp.
3. Lights x
4. Signals x
5. Fire Extinguishers one
6. Parachutes x
7. Tools x
8. Other Equipment x

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy major 1 c			
Pusher or Tractor	Tractor			
Right or Left Hand	Left Hand.			
No. of Cylinders	4			
H.P.	125/130			
Bore	118 MM			
Stroke	140 MM			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

P8824 12
No 44808
5.00

CANADA CF-BSO

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate) Triplicate

The Controller of Civil Aviation.
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant M R Robertson

Date of Application June 10/48

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
M. R. ROBERTSON	180 WEST ST BRANTFORD	Can.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Brantford

Date of manufacture or reconstruction 1942 Toronto

Crew required one

Accommodation for what number of passengers one

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

13 — 2 — 6-46

TORONTO (PLACE) 12th June, 1948. (DATE)

YOUR FILE	SUBJECT	OUR FILE
	CF-BSO, TIGER MOTH.	5008-B19-15

TRANSPORT-RECORDS
JUN 14 A.M.
File 5008-B19-15

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

A11158

1. Attached hereto are the following papers relating to an application for re-registration for Tiger Moth, CF-BSO recently purchased by Mr. M. Ross Robertson from the Brant-Norfolk Aero Club:

(a) Application forms.
(b) $5 fee - see page 8824 in cash book, Receipt No. 44808.
(c) Bill of Sale.
(d) Old Certificate of Registration and Airworthiness.
(e) Copy of letter of temporary authority.

2. This aircraft has recently been reconditioned and inspected for airworthiness. Proper entries have been made in the log books of this aircraft to the effect that it was airworthy on June 10th, 1948. These entries were signed by Messrs. W. Lachman and R. Seaton as Air Engineers and Mr. K. Parr as Test Pilot.

3. Certificate of Registration No. 3327 and Certificate of Airworthiness No. 834 were renewed until June 10th, 1949.

Miss Jones
for Re-Registration

(for),
District Inspector, Air Regulations,
Toronto.

/AM

7007 (R)
834 (A)

Copy sent

/RM

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7007

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	~~DeHavilland Aircraft of Canada Limited,~~ Toronto, Ontario.
3. Constructor's serial number	0579
4. Name of owner	M.R. Robertson,
5. Address of owner	180 West St., Brantford, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 12th day of June 19 48, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 15th day of June 19 48.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after June 10th, 1949, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

" 6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

" 7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RH

AC-5-60

16

5008-B19-15

REGISTERED

OTTAWA, June 15th, 1948.

Mr. M.B. Robertson,
180 West St.,
Brantford, Ontario.

Dear Sir:

Enclosed please find Certificate of Registration No. 7007 and Certificate of Airworthiness No. 634 for your D.H. 82C aircraft CF- HSO , Serial No. 0579.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until June 10th, 1949.

Yours truly,

NOTED

JUN 21 1948

Revenue Audit
of Transport

(S. [redacted])
Superintendent, Air Regulations.

Encls.

cc. D.I.A.R. Toronto, Ont.

OTTAWA

17

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-B19-15

21610

TOR: 5008-B19-15
Toronto, Ontario.

TRANSPORT - RECORDS
AUG 29 P.M.
5008-B19-15
Filed

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings C.F.-B.S.O.....

Aircraft Type .....D.H.82C.....

Owner .....M.R. Robertson.....

Place of Inspection ..Leggat Aircraft, Toronto, Ont.....

Date of Inspection ...July 19th, 1949.....

Satisfactory inspection report has been received from Air Engineers .....J.C. Leggat..... and Test Pilot .....M.R. Robertson.....

C. of R. No. ...7007..... and C. of A. No. ..834.....

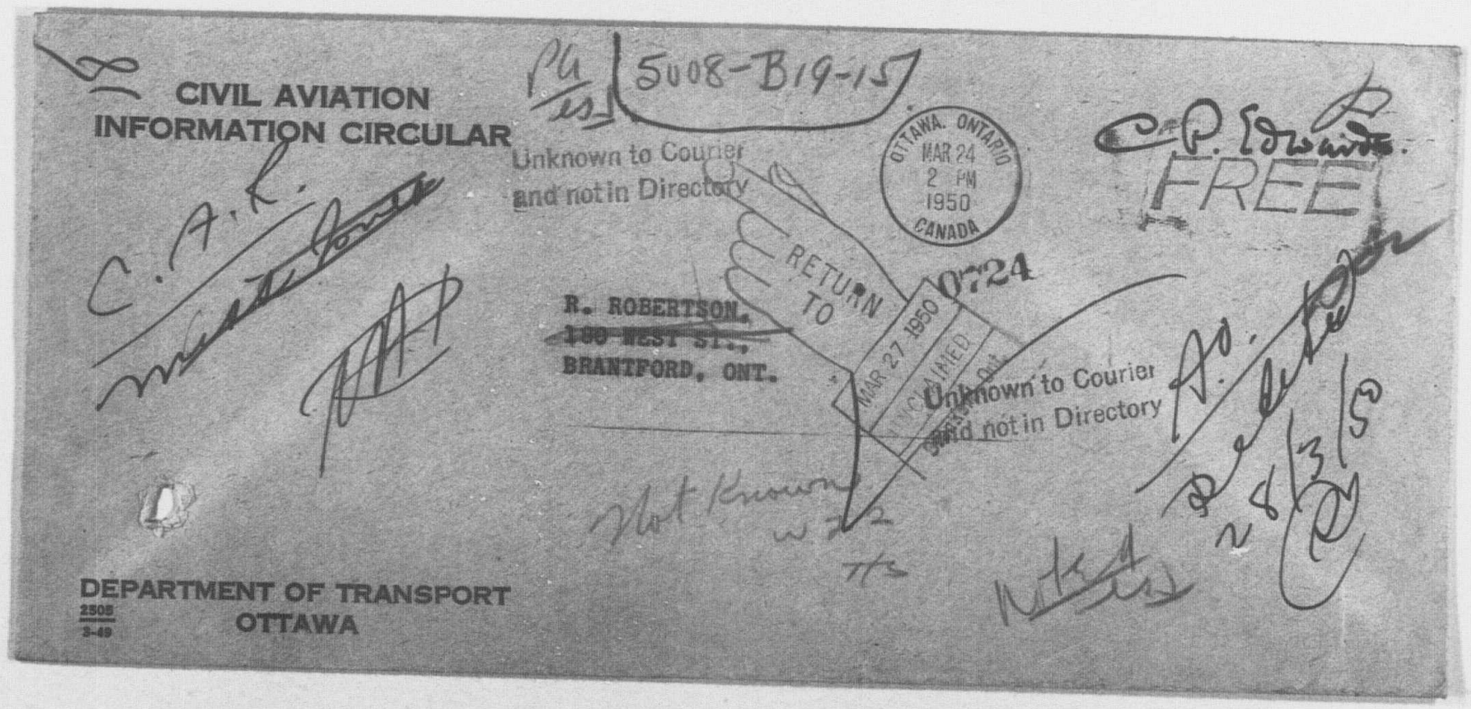
were renewed on August 25th, 1949... valid until .....July 19th, 1950.

Remarks C. of A. endorsed to read:- "The Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried on the aircraft during flight."

.....C. of A. amended this date as follows:.....
Item 25. Landplane 1261 lbs.
Item 31. " 239 lbs.

A.R. Pinder
for (D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

Noted


CIVIL AVIATION
INFORMATION CIRCULAR
5008-B19-15
Unknown to Courier
and not in Directory
OTTAWA. ONTARIO
MAR 24
2 PM
1950
CANADA
C.P. Edwards
FREE
C.A.R.
RETURN
TO
0724
R. ROBERTSON,
100 WEST ST.,
BRANTFORD, ONT.
MAR 27 1950
CLAIMED
Unknown to Courier
and not in Directory
Not Known
DEPARTMENT OF TRANSPORT
OTTAWA
2508
3-49

(OTTAWA)

19

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-B19-15

TOR: 5008-B19-15

9587

Toronto, Ontario.
June 2nd, 1950.

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration Airworthiness

TRANSPORT - RECORDS
JUN 6 P.M.
5008-B19-15
File

Registration Markings C.F-BSO

Aircraft Type D.H.82C

Owner M.R. Robertson

Place of Inspection Leggat Aircraft, Toronto, Ont.

Date of Inspection May 30th, 1950

Satisfactory inspection report has been received from Air Engineers J.C. Leggat and W. Lachman and Test Pilot K. Parr

C. of R. No. 7007 and C. of A. No. 834 were renewed on June 2nd, 1950 valid until May 30th, 1951.

Remarks Items 26 to 32 inclusive on the Certificate of Airworthiness have been deleted.

noted BJE

NOTED

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

TOR:5008-B19-

260 Richmond St. W., Toronto,
November 9th, 1950.

Mr. Peter John Holtendorp,
Bell Lane,
Farringdone Hill P.O.,
Brantford, Ontario.

Dear Sir:

Pending issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSO as a private aircraft on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 834 and valid until February 9th, 1951.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

ARP

(D.W. Saunders),
District Superintendent, Air Regulations,
Toronto.

/alb
cc:Headquarters
cc:DSR - Toronto.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

August 25th, 1949 - Renewed valid until July 19th, 1950 - A.R. Pinder

June 2nd, 1950 - Renewed valid until May 30th, 1951 [illegible]

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

2/

2462A
5-47

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 7007

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	0579
4. Name of owner	M.R. Robertson,
5. Address of owner	180 West St., Brantford, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 12th day of June 19 48, in accordance with the Convention on International Civil Aviation dated December 7, 1944, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 15th day of June 19 48.

H. L. Patteson

/ *Superintendent, Air Regulations.*

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after June 10th, 1949, unless endorsed.

SALE OF AIRCRAFT CF-BSO

OCT 21 1950

TO BOY WOODSTOCK

I, M. ROSS ROBERTSON HEREBY TRANSFER ALL TITLE, RIGHT AND OWNERSHIP IN TIGER MOTH

CF-BSO

TO / MR PETER HOLTENDORP

BELL LANE, BRANTFORD, ONT

FARRINGTON HILL POST OFFICE

FOR THE SUM OF ONE DOLLAR AND OTHER VALUABLE CONSIDERATION

I ALSO CERTIFY THERE IS NO LIEN AGAINST CF-BSO.

WITNESS OCT 21/50
Charles. Ladd.

M. Ross Robertson

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **DeHavilland Aircraft of Canada Ltd.**

Type **D.H. 82C** Maker's No. **0579**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet		
Length o/a in feet		
Height o/a in feet		
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil		
Total weight authorized (fully loaded) in lbs.	Air Speed	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes (SEE ORIGINAL APPLICATION)
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

C F - B S O 5008-B19-15

23

2413
11-48

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant P J Holtendorp

Date of Application Nov. 6 1950

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
PETER JOHN HOLTENDORP	BELL LANE FARRINGDONE HILL. P.O BRANTFORD ONT.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Brantford Ont.

Date and place of manufacture or reconstruction Toronto, Ontario

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

24 2/6-47

Toronto, Ontario, November 9th, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-15	Re-Registration of aircraft - CF-BSO	5008-B19-15

24323

TRANSPORT - RECORDS
NOV 10 1950
File 5008-B19-15

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Herewith the following documents relating to re-registration of D.H.82C aircraft, CF-BSO, Serial No. 0579, recently purchased by Mr. Peter John Holtendorp from Mr. M.R. Robertson:-

(a) Application form in duplicate.
(b) $5.00 fee - see official receipt no. 110929.
(c) Bill of Sale.
(d) Old Certificate of Registration No. 7007.
(e) Old Certificate of Airworthiness No. 834.
(f) Weight and Balance Report (landplane).
(g) Copy of letter of temporary authority.

ARPsnider

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.(7)

To owner
9097 (R)
834 (A)

/RM

28

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 9097

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	De Havilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	0579
4. Name of owner	Peter John Holtendorp,
5. Address of owner	Bell Lane, Farringdone Hill P.O., Brantford, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of November 19 50, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 10th day of November 19 50.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 30th, 1951, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

DELETED (2.6.50)

ENGINES

18. Number installed: One
19. Makes: DeHavilland
20. Types: Gipsy Major 1C
21. ~~International~~ power of the engine or engines at

(a) Sea Level 125/130 H.P. at 2100 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....
23. Oil: (a) ..... (b) .....
24. Airscrews { Number fitted: One Types: No:
Pitch: Diameter: (25.8.49) 126 1297

25. Weight of aircraft empty (including water in the radiators):

(a) Landplane	1297	lbs.
(b) Seaplane		lbs.
(c) Skiplane		lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	137	lbs.
(a) Number of tanks: One		
(b) Capacity of tanks: 19 Imp. gals.		
27. Oil (at 9·0 lbs. per gallon)	18	lbs.
(a) Number of tanks: One		
(b) Capacity of tanks: 2 Imp. gals.		
28. Weight allowed for crew	170	lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus (25.8.49)		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	239 ~~223~~	lbs.
32. Maximum total weight authorized		lbs.
* Landplane (Aerobatic) 1770 lbs. (Normal)	1825	lbs.
Seaplane		lbs.
* Skiplane (Aerobatic) 1770 lbs. (Normal)	1825	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane (Normal) Eighteen hundred & twenty-five pounds
Seaplane
Skiplane (Aerobatic) Seventeen hundred & seventy pounds
34. Minimum crew necessary: One
35. Inspections and overhauls: *See* Air Regulations.
36. Stowage. *See* Air Regulations.
37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.
38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.
39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2400 r.p.m.
40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated December 4, 1945 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 16th day of January 1946

Superintendent, Air Regulations.

* If flown acrobatically the maximum weight must not exceed 1770 pounds.

Valid for day flying only.

2462
9-39

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

834

CERTIFICATE OF AIRWORTHINESS No.....

(Heavier than air)

FIRST PART (9.11.50) HOLTENDORP
~~(12.6.48) ROBERTSON~~

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) ~~Brant-Norfolk Aero Club~~
2. Christian name ~~Bell Lane, Farringdone Hill P.O.,~~ ~~Mr.~~ Peter John,
3. Address ~~160 West St., Brantford, Ont.~~ ~~Box 550, Brantford, Ontario~~
4. Nationality Brantford, Ont.

NAME OF CONSTRUCTOR

5. Name De Havilland Aircraft of Canada Limited

NATIONALITY AND REGISTRATION MARKS

6. CF-BSO

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 82C Constructor's No. 0579
8. Place and year of construction of aircraft Toronto, Ontario

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes Two
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal & Acrobatic
14. Subdivision ~~a, b, c, d, & e~~
15. Maximum span (in flying position) 29'4"
16. Maximum length (in flying position) 23'11"
17. Total height (with and without trolley in case of seaplanes) 8'9"

26 6

/MIM
/ZC

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Dec. 4, 1946. Feb. 16, 1948. June 10, 1949 19.7.50 30.5.51	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure Gauge
Oil Temperature Gauge
Regolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extenguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

(Normal) Safety belt for each occupant.
(Acrobatic) Safety harness must be installed.

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT
FORMS PART OF THIS CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT. (25.9.49)

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

/RM

29

5008-B19-15

Ottawa, Ontario,
November 13th, 1950.

REGISTERED

Mr. P.J. Holtendorp,
Bell Lane,
Farringdone Hill P.O.,
Brantford, Ontario.

Dear Mr. Holtendorp,

Enclosed are Certificate of Registration No. 9097 and Certificate of Airworthiness No. 834 for your D.H. 82C aircraft, CF-BSO, Serial No. 0579.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until May 30th, 1951.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

NOTED
NOV 28 1950
Re ... Audit
Dept. of Transport.

Yours truly,

(C.T. Travers),
Superintendent, Air Regulations.

cc. D.S.A.R. Toronto, Ont.

Encls.

2444
4-50

30

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— BSO SERIAL NO. 0579

1. C. of A. No. 834 Expires 30/5/51 C. of R. No. 9097 Expires 30/5/51

AIRCRAFT DATA—Manufacturer Dehavilland Aircraft Ltd. Model 82C

Hours flown—Since New 2592.10 Since Overhaul 441.10

ENGINE DATA—Manufacturer Dehavilland Aircraft Ltd. Model IC

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	87167	1526.55	519.25
(2)			
(3)			
(4)			

Signature of Applicant Peter J. H. Teadon

Date July 7th. 1951

---

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature] "B" ENGINEER

Date July 7th. 1951

---

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed Peter J. H. Teadon TEST PILOT

Date July 7th. 1951

---

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☒

---

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No..... and C. of A. No....., pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature] DISTRICT AIRCRAFT INSPECTOR

Date July 18/51

---

7. C. of A. and C. of R. renewed, not valid after (Date) July 7th, 1952

Permissible Gross Weights— Wheels 1,825 pounds.
Skis 1,825 pounds.
Floats

Signed Harris E. Leach DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date July 18th, 1951.

Other Action:—

---

8. H.Q. Action— C.A.R.

C.A.E.

22062

TRANSPORT - RECORDS
31
JUL 19 A.M. 1951
File 5008-B19-15

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W.....July.18th..1951.

Your File 5008-B19-15 SUBJECT Renewal of Certificates of Registration and Airworthiness CF-BSO Our File 5008-B19-15

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for D.H.82C aircraft, CF-BSO.

Maurice E. Louch

for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

33

File: 5001-13
5008- B19-15
5802-05366

AIRCRAFT ACCIDENT REPORT (TORONTO DISTRICT)

Toronto, Ontario
...24-9-51.....
(Date)

SUBJECT: CF-BSQ ..... Holtendorp P.J. .....
(Aircraft Registration) (Owner)

1. As required under Information Circular No. 0/36/50, which concerns the reporting of aircraft accidents in accordance with The Air Regulations, Part VIII, Paragraph 20, sub-paragraph (2), the accident involving the m/n aircraft has been investigated and the following information obtained, action taken and/or recommended:

1. Date of Accident: Sept. 12/51

2. (a) Place: (b) Weather:

3. Type of Aircraft: ~~Tiger Moth~~ DH82C C. of A. and C. of R. Valid ...Yes.....
(Yes or No)

4. (a) Pilot's name: Holtendorp (b) Passengers: 1

Licence No. 7136 Valid ..Yes (Yes,No)

5. Number of people injured, (if any): N.A.

6. Extent of injuries, (if applicable): N.A.

7. Extent of damage to:

(a) Aircraft
Undercarriage damaged
Fin and rudder damaged

(b) Engine/s
Propeller and cowling

8. Type of flying, (Private, Commercial, etc.): Private

9. Summary of events immediately prior to and including the accident:
Pilot attempted landing in rough field, hit a rise in the ground and overturned.

10. Opinion as to the cause of the accident:
Aircraft hit uneven ground upon landing

11. Infractions of The Air Regulations:
Nil

12. Disciplinary Action: Nil

13. (a) Pilot's report, copy attached ....Yes.....
(Yes, No)

(b) Owner's report, copy attached ...Yes...
(Yes, No)

14. General Comments: Obvious

D Sanders

32

C O P Y

Dear Sir:

I wish to report accident of my aircraft CF-BSO, Tiger Moth, certificate of reg. no. 9097; certificate of airworthiness No. 834. Accident occurred on Sept. 12 due to landing in rough field. Aircraft hit a rise in ground and was turned over damaging propeller, cowling, undercarriage, fin, and rudder. Top wings survived damage. Aircraft can be repaired but I am going to salvage it due to cost of repairs, as aircraft is valued at four hundred dollars. My passenger and myself were not hurt. Could not contact depot on Saturday. Could you please tell me what to do about log books and certificates.

Cordially yours

Mr. P.J. Holtendorp,
Farringdone Hill P.O.
Brantford, Ontario.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-47

Toronto, Ontario. November 7, 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-15	DH 82 Aircraft CF-BSO	5802-05366 5008-B19-15 ~~5001-13~~

TRANSPORT - RECORDS
NOV 9 P.M. 1951
File 5008-B19-15

In Reply Refer to File

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

42073

ATTENTION C.A.R.

1. Please find enclosed aircraft accident report covering Tiger Moth aircraft CF-BSO owned by Mr. P.J. Holtendorp.

2. It will be noted that section 2A (place) and section 2B(weather) have not been completed on this form. This information was omitted in the pilot's report and subsequent inquiries from this office by registered mail have not been acknowledged to date. When such information is available it will be forwarded to Headquarters.

Maurice E. Louch
for (D.W. Saunders)
District Superintendent, Air Regulations,
for District Controller, Air Services,
Toronto.

Encl. 1

COPY ON
5802-22139

WMJ/MM OTTAWA, Ontario, November 12th, 1951.

5502-05366
5006-B19-15
5001-13

Accident, BN2S Aircraft, CF-BSO. → 5006-B19-15(GAR)
~~5502-22139~~

District Controller of Air Services,
260 Richmond Street, West,
TORONTO 2B, Ontario.

Attn:- District Supt., Air Regulations.

1. Reference is made to your letter of November 7th, 1951, enclosing Accident Report and correspondence in connection with the subject accident.

2. Perusal of our files indicates that Mr. Holtendorp's last medical examination was dated June 1st, 1950. Therefore, his licence was medically invalid at the time of the accident on September 12th, 1951.

(C. [illegible] Travers),
Superintendent, Air Regulations.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(a) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(b) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

July 18th, 1951 - Renewed valid until July 7th, 1952 - M. R. Lamb.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

40

2462A

CANADA

DEPARTMENT OF TRANSPORT

AIR SERVICES BRANCH

CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 9097

NATIONALITY AND REGISTRATION MARKS CF-BSO

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	De Havilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	0579
4. Name of owner	Peter John Holtendorp,
5. Address of owner	Bell Lane, Farringdone Hill P.O., Brantford, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 9th day of November 19 50, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSO and is of Canadian nationality.

Given at Ottawa this 10th day of November 19 50.

H. Patterson

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 30th, 1951, unless endorsed.

Engines

18. Number installed: One
19. Makes: DeHavilland
20. Types: Gipsy Major 1C
21. International power of the engine or engines at

(a) Sea Level 125/130 H.P. at 2100 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....
23. Oil: (a) ..... (b) .....
24. Airscrews { Number fitted: One Types: No: .....
Pitch: Diameter: .....
25. Weight of aircraft empty (including water in the radiators): (a) Landplane: ARP 1261 ~~1297~~ lbs. (b) Seaplane: ..... lbs. (c) Skiplane: ..... lbs.

Weight of Fuel and Oil

26. Fuel (at 7·2 lbs. per gallon)		137 lbs.
(a) Number of tanks	One	
(b) Capacity of tanks	19 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)		18 lbs.
(a) Number of tanks	One	
(b) Capacity of tanks	2 Imp. gals.	
28. Weight allowed for crew		170 lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full		ARP ~~203~~ 239 lbs.
32. Maximum total weight authorized		lbs.
* Landplane (Acrobatic) 1770 lbs.	(Normal)	1825 lbs.
~~Seaplane~~		lbs.
* Skiplane (Acrobatic) 1770 lbs.	(Normal)	1825 lbs.

Compulsory Conditions

33. Maximum total weight authorized (write in full)
Landplane (Normal) Eighteen hundred & twenty-five pounds
~~Seaplane~~
Skiplane (Acrobatic) Seventeen hundred & seventy pounds
34. Minimum crew necessary: One
35. Inspections and overhauls: *See* Air Regulations.
36. Stowage. *See* Air Regulations.
37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.
38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.
39. Except in emergency the speed of the engine must ~~not exceed 2100~~ never exceed 2400 r.p.m.
40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated December 4, 1945 in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 16th day of January 1946

Superintendent, Air Regulations.

* If flown acrobatically the maximum weight must not exceed 1770 pounds.

Valid for day flying only.

39

2462
9-39

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 834

(Heavier than air)

FIRST PART (9.11.50) HOLTENDORP
~~(12.6.48) ROBERTSON~~

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) ~~Brant-Norfolk Aero Club~~ M.R.,
2. Christian name Peter John,
3. Address Bell Lane, Farringdone Hill P.O., ~~100 West St., Brantford, Ont.~~ Box 550, Brantford, Ontario
4. Nationality Brantford, Ont.

NAME OF CONSTRUCTOR

5. Name De Havilland Aircraft of Canada Limited

NATIONALITY AND REGISTRATION MARKS

6. CF-BSO

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 82C Constructor's No. 0579
8. Place and year of construction of aircraft Toronto, Ontario

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes Two
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal & Acrobatic
14. Subdivision ~~a., b., c., d., & e.~~
15. Maximum span (in flying position) 29'4"
16. Maximum length (in flying position) 23'11"
17. Total height (with and without trolley in case of seaplanes) 8'9"

38

DETERMINATION OF EMPTY WEIGHT CENTER OF GRAVITY LOCATION

Type of aircraft: Tiger Moth model 82c Registration: CF-BSO

Aircraft was jacked into flying position and a scale was placed under each main whell and the tailwheel.

Leveling means: Top longeron front and rear cockpits moulding removed
Datum point: 5/16" bolt at joint E top longeron.
C.G. range: 22.5" to 30.7" All conditions of weight and loading satisfied within these limits.
Maximum weight: 1825 lbs.
Empty weight includes: pressure type fire extinguisher
hand type fire extinguisher
harness front and rear cockpit.

	Scale reading	take	net	arm
Left hand wheel	587 lbs.	nil	587 lbs.	8"
Right hand wheel	573 lbs.	nil	573 lbs.	8"
Tailwheel	101 lbs.	nil	101 lbs.	221"
Totals	1261 lbs.		1261 lbs.	

Distance between center lines undercarriage and tailwheel .....213"
Distance between center line undercarriage and datum ..... 8"
Distance empty weight C.G. is aft of center line undercarriage: Tailwheel scale weight multiplied by the distance between the centerlines of the undercarriage and the tailwheel axle divided by the actual empty weight
(101 x 213) ÷ 1261 equals.....17.0"
Distance between the undercarriage and the datum line..... 8.0"
Distance empty weight C.G. is aft of the datum line.....25.0"

July 19th. 1949
Weights and computations carried out by:

J.C.Leggat
LEGGAT AIRCRAFT

Ottawa Factory
A Wells
5th Aug. 49

37

/MIM
/ZC

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		Dec. 4, 1946.	
16/2/47 Cub Aircraft Corp. June 10th, 1948	airworthy "Airworthy"	Feb. 16, 1948 June 10, 1949	
July 19 1949 Leggat Aircraft	"Airworthy"	July 19 1950	AR Pinder
May 30 1950 Leggat Aircraft	"Airworthy"	May 30 1951	
July 7th, 1951 Leggat Aircraft	"Airworthy"	July 7th, 1952	M. E. Leach

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure Gauge
Oil Temperature Gauge
Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extenguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

(Normal) Safety belt for each occupant.
(Acrobatic) Safety harness must be installed.

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

The Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried in the aircraft during flight.

Date 25-9-49 A R Pinder

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

P.A.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

4

2
9-50

Toronto, November 22nd, 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-15 (CAR) 5802-22139	DH82C Aircraft, CF - BSO	5802-05366 5008-B19-15

H.T. Patterson
for D.C.A.E.

REGISTERED

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

46098

TRANSPORT - RECORDS
NOV 24 A.M. 1951
5008 - B19-15
File

Attention: C. A. R.

1. Further to our letter of November 7th, 1951, the following information is supplied.

(a) The Location of the Accident:
Approximately two miles south east of the Village of Drumbo.

(b) Weather at the Time of the Accident:
CAVU

2. The owner of the aircraft Mr. P.J. Holtendorp has informed this office that the aircraft will not be rebuilt or repaired.

3. Certificate of Airworthiness No. 834 and Certificate of Registration No. 9097 are enclosed for cancellation.

Maurice E. Louch

District Superintendent, Air Regulations,
(for) District Controller, Air Services,
Toronto, Ontario.

Encls.

R

MEMORANDUM • GOVERNMENT OF CANADA

25 St. Clair Avenue East, Toronto 7, Ontario.

42

TO : Assistant Deputy Minister, Air - Ottawa

YOUR FILE No:

FROM : Toronto Regional Office

OUR FILE No: 5008-B19-15

5008-14

SUBJECT: DH82C aircraft, CF-B S O.

DATE:

28065

TRANSPORT - RECORDS
OTTAWA
File 5008-B 19-15

26th October, 1960.

1. In reviewing the latest copy of the Canadian Civil Aircraft register dated September 30th, 1960, it has been noted that the subject aircraft is still listed.

2. Our file with respect to this aircraft indicates that, on November 22nd, 1951, this office notified Headquarters that the owner had no intention of rebuilding the aircraft which received substantial damage upon being involved in an accident on September 12th, 1951. It is further noted, that the Certificates of Registration and Airworthiness were submitted to Headquarters at that time for cancellation.

3. In view of the foregoing, it would appear that this aircraft should be deleted from the aforementioned register.

Regional Director, Air Services,
Toronto.

CGSB Standard 6 GP-22; PP&S Cat. No. 3990

FILE No. 5008 - BSS 23-5-67 VOLUME No. 1

VOL. 1 5008 - BSS

DEPARTMENT OF TRANSPORT

FROM FEB. 25. 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION
SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION
FILE TITLE CF - BSS - DH 82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS
MAY 22 1962	8027	DRL			MAY 24 1962

IMPORTANT — Do not fail to NOTIFY OFFICE SERVICES whenever a File is passed direct to another section.

FILE NO. 5008 - ~~B 19 - 19~~ B S S

VOLUME NO. 1

DEPARTMENT OF TRANSPORT

FROM FEB. 25, 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BSS -DH 82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

VOL 1 5008 - B S S

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
	Reg No Allotted	ARL		[illegible] MAY	17 1957
1957	9069	ARC		SJ MAY	17 1957
JUN 21 1957		RFL		[illegible]	JUN 24 1957
JUN 24 1957	under folio 9069	OSP		[illegible]	
	Reg Miss Jones	BBL		[illegible]	
17 1957	11477	ARC		SJ	JUL 16 1957
SEP 9 1957	16101	ARC		SJ	SEP 1957
SEP 10 1957		OSP		D.L.	SEP 1957
	—	RFL		[illegible]	SEP 1957
SEP 13 1957	17078	ARC		[illegible]	SEP 11 1958
MAR 1 1960	50454	ARL		SJ	MAR 1 1960
MAY 3 1960	4658	ARC		[illegible]	MAY 5 1960
MAY 5 1960		SAE/A		CH	MAY - 6 1960
MAY - 6 1960	—	DATA		L.P.	MAY 13 1960
L - 7 1961	18511	ARL		LB	

FILE No. 5008 - B 19 - 19 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM FEB 25, 1946
TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE OF - BSS - ~~DH 82~~ TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
27 1951	L.F 30/4/51	Trans		EO	APR 30 1951
1 1951	14462	CAR		SJ	JUN 11 1951
11 1951	—	CAE		— 9 zu	JUN 13
6 1951	36222	CAR		KLP	OCT 20 1951
20 1951	—	CAE ①		9 zu	OCT 20 1951
0 1951		CAL ②			OCT 22 1951
		GRL ③			
22 1951					OCT 23 1951
23 1951		Lea A ④			OCT 25 1951
3 1951		RFL	①		OCT 23 1951
	BF 22/11/51	Cai			NOV 23 1951
AUG 15 1952	21456	CAR			AUG 19 1952
19 1952	—	CAE		9 zu	AUG 20 1952
0 1952		RJL			AUG 20 1952
AUG 20 1952		CAJ			AUG 25 1952
FEB 23 1953	54337	CAR		SJ	FEB 28 1953
28 1953	—	CAE		— 9 zu	MAR 2 - 1953
- 1953		RJL			MAR 1953
3		CAJ			MAR 6 1953
JUN 17 1953	19643	CAR		SJ	JUN 24 1953
24 1953	—	CAE		— 9 zu	JUN 25 1953
25 1953		RJL			JUN 25 1953
JUN 25 1953		CAJ			JUN 26 1953
NOV 6 1953	48370	CAE		FF	NOV 6 1953
6 1953	51867	CAR			NOV 30 1953
0 1953	—	CAE		— 9 zu	NOV 30 1953
JUN 24 1955	9702	ARL		SJ	JUN 27 1955
N 27 1955	—	CAI			JUN 27 1955

FILE No. 5008 - B 19 - 19 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BSS (TIGER MOTH)

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
FEB 28 1946	40163	S.A.R.		GT	MAR 15 1946
MAR 1 5 1946		Mas.		Jaley	MAY 2 1946
	Requested	Sap		GT MAY - 1946	
MAY - 1 1946		CAR		GT	
APR 21 1947	5793	CAR		GT MAY 18 48	
MAY 17 48	6835	CAR		GT MAY 20 1948	
MAY 27 1949	8157	CAR		GT MAY 30 1949	
OCT 19 1945	29122	CAR		GT OCT 25 1949	
		CAE ①		GT OCT 25 1945	
OCT 25 1949		CAE ②		OCT 25 1949	
OCT 25 1949		CAR ③		OCT 26 1949	
OCT 26 1949		L Accts ④			
NOV 10 1949	32438	CAR		GT NOV 14 1949	
		CAE		NOV 14 1949	
MAY 29 1950	8332	CAR		GT JUN 2 - 1950	
		CAE		JUN 2 - 1950	
SEP 12 1950	18961	CAR		GT SEP 21 1950	
		CAE ①		SEP 21 1950	
SEP 21 1950		CAE ②		SEP 21 1950	
SEP 21 1950		CAR ③		SEP 25 1950	
SEP 23 1950		Lucas A ④			
		RAF		WM SEP 23 1950	
FEB 26 1951	43639	CAR		GT FEB 27 1951	
FEB 27 1951		CAE ①			
		CAE ②			
FEB 28 1951		CAR ③		GT MAR 5 - 1951	
MAR 5 - 1951		Lucas A ④		MAR 6 - 1951	
MAR 6 - 1951		RAF		MAR 6 - 1951	

FILE No. 5008 - B 19 - 19 VOL. No. 1

ORIGINAL ON FILE

COPY

FOR FILE

0-45

TOR:5008-B19-19

1 Montgomery Avenue, Toronto.
February 25th, 1946.

Weston Aircraft Company,
WESTON,
Ontario.

Dear Sirs: Re: Tiger Moth - CF-BSS.

Receipt is acknowledged of application for registration of Tiger Moth, CF-BSS, Serial No. 1847, in the name of the Brant-Norfok Aero Club, with the following papers:

(a) Application form in duplicate.
(b) Fee of $10.00
(c) Report on overhaul - signed by F. Kilburn & R.F. Kelly- air engineers and J.F. Reed - test pilot.
(d) Copy of Bill of Sale.

Receipt No. 28044 for the $10.00 fee is attached hereto.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BSS as a commercial aircraft until March 27th, 1946.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/KC

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

2

PATRON
HIS EXCELLENCY THE RIGHT HON. THE EARL OF ATHLONE, K.G.
GOVERNOR-GENERAL OF CANADA

Honorary-President
HONORARY AIR MARSHAL W. A. BISHOP, V.C., D.S.O. . . . . Ottawa

President
H. F. DOUGALL . . . . . Fort William

First Vice-President
W. M. ALEXANDER . . . . . Toronto

Secretary-Treasurer
H. A. YATES . . . . . Ottawa

Representative in Canada for
Federation Aeronautique Internationale

JOURNAL BUILDING
OTTAWA, *Canada*

DIRECTORS

Maritime Zone	J. W. HUMPHREY	Moncton
St. Lawrence Zone	W. H. HERRINGTON, K.C.	Kingston
Central Zone	S. BERNARDO	Oshawa
Mid-West Zone	J. MORGAN	Winnipeg
Saskatchewan Zone	G. C. ROOKE	Regina
Alberta Zone	D. K. YORATH	Calgary
Pacific Zone	W. G. MACKENZIE, M.C.	Vancouver

309 Journal Building
Ottawa, Ontario
21, December, 1945

In account with Brant-Norfolk Aero Club.

No. of units.	Final Bill Re Sale of Tiger Moth Aircraft.	
5	Tiger Moth Aircraft at $275.00	$1375.00

R.C.A.F. Number	Manufacturers' No.
8994	1796
4249	0579
1270	1473
9690	----
3847	1508

CERTIFIED TRUE COPY OF INVOICE

Tiger Moth Aircraft, CF-BSS, (Formerly RCAF Tiger Moth #9690), received at Weston Aircraft Limited, Oshawa, Ontario, for Certificate of Airworthiness, on behalf of Brant-Norfolk Aero Club, Brantford, Ontario, and the following work was carried out.

Weight, less gasoline and oil, but including battery.- 1245 lbs.
RCAF registration removed.
Wings, fuselage and tail assembly rejuvenated and redoped.
Civil registration CF-BSS installed on top and bottom wings, and on both sides of fuselage.
Engine #89147 removed.
Engine #89315 installed and thoroughly checked.
Oil tank drained and flushed and refilled with Imperial Intava Oil #80.
Oil filters cleaned
Gas strainers cleaned.
Tappets adjusted and rocker boxes refilled with oil.
Winter cowling and oil tank covers installed.
Hose connections renewed.
Fire extinguishers checked, new bulb in pressure system.
Engine cowls bumped out and repainted.
Rudder hinge bushings replaced.
Tail wheel bearings renewed.
Tail shock strut bushes renewed.
Aileron cable shackle pin at control stick end replaced.
Rigging checked.
Compass swung.
Crash pads repaired and rejuvenated

I hereby certify that all work listed has been done using certified materials and according to accepted practice; that all manufacturers' service bulletins affecting safety have been complied with, to date, and that no unapproved modifications have been incorporated and that the airframe is airworthy.

WESTON AIRCRAFT LIMITED,

Frank Hilburn
A-844 Feb. 20/46

All controls checked for soundness, correct action and for presence of all locking devices.

R. J. Kelly
A-1983 Feb. 20/46

This is to certify that I have test flown Tiger Moth Aircraft, CF-BSS, and that it performed in a satisfactory manner.

J. H. Reed
C-1522 Feb. 20/46

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **DeHavilland Aircraft**

Type **D.H. 82 C** Maker's No. **1847**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	Same
Length o/a in feet	23' 11"	"
Height o/a in feet	8' 10"	"

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil **1245 (with battery)**

Total weight authorized (fully loaded) in lbs Air speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments **Bank & Turn, Altimeter, R.P.M. Indicator, Airspeed Indicator, Compass**
2. Gauges **Oil Temperature & Pressure**
3. Lights **Navigation, Cockpit downward identification**
4. Signals **None**
5. Fire Extinguishers **Two**
6. Parachutes **None**
7. Tools **None**
8. Other Equipment **Safety Belt for each passenger**

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C Serial #89515			
Pusher or Tractor	Tractor			
Right or Left Hand	Clockwise			
No. of Cylinders	4			
H.P.	120			
Bore	4.646"			
Stroke	5.512"			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on **February 20th, 1946. Frank Kilburn**

Particulars accurate as corrected **See Inspection Report**

Modifications ~~from type are indicated on annexed sheet~~ **None**

Registration recommended ~~with the following special conditions~~ **Yes**

Date **February 25th, 1946.**

Signature *W.S. Algeine*

Registration approved and Registration Mark C.F. **BSS** allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

This aircraft from R.C.A.F. Reg. 9690

2413
9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

BRANT-NORFOLK AERO CLUB

Signature of Applicant.....

Date of Application.....February 22nd, 1946

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Brant-Norfolk Aero Club	Brantford, Ontario	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
S. R. Bernardo	President	Brantford	Canadian
E. C. Ellis	Vice-President	Brantford	Canadian
E. M. Pritchard	Secretary	Brantford	Canadian

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....

Commercial

Usual Station.....Brantford

Date of manufacture or reconstruction.....11/10/41

Noted
E.J.

Crew required.....1.

Accommodation for what number of passengers.....1.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

Mar Asst. Jas. Order on 5302-R

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

TORONTO, February 26th, 1946
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Tiger Moth CF-BSS. Serial No. 1847.	5008-B19-19

A40163

TRANSPORT-RECORDS
FEB 27 P.M.
File 5008-B19-19

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to registration of CF-BSS, Tiger Moth, Serial No. 1847, recently purchased by the Brant-Norfolk Aero Club through the Royal Canadian Flying Clubs Association, with the following papers:

(a) Application form.
(b) Report on overhaul - signed by F. Kilburn, R.F. Kelly, as air engineers and J.F. Reed as test pilot.
(c) Copy of Bill of Sale.
(d) Copy of letter of temporary authority.
(e) Fee of $10.00 (See Receipt No. 28044 - page 146 in Cash Book)

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/KC

3396 (P) (A)
996

8

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5396

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C. Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Can. Ltd., Toronto, Ont.
3. Constructor's serial number	1847
4. Name of owner	Brant-Norfolk Aero Club,
5. Address of owner	Brantford, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of February, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 15th day of March, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

GJ/CEN

Ottawa, Ontario, 13th March, 1946.

5008-B18-3
-B18-8
-B18-18
-B18-20
-B19-19
-C11-3
-C11-4
-C11-21
-D2-7
-D4-14

REGISTERED

District Inspector, Air Regulations,
Postal Station "K",
No. 1 Montgomery Ave.,
Toronto 12, Ontario.

1. Enclosed please find Certificates of Registration and Airworthiness for the following aircraft:-

CF-BRC	CF-CKC
CF-BRH	CF-CKD
CF-BRR	CF-CKU
CF-BRT	CF-DBC
CF-BSS ✓	CF-DBH

2. The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. It is expected that these books will be available in about three weeks' time.

(S. Graham),
Superintendent, Air Regulations.

Encls.

Noted Toronto
19-3-46

10

5008-B19-19

REGISTERED

OTTAWA, Ontario.
Oct. 30th, 1946.

Brant-Norfolk Aero Club,
Brantford, Ont.

Dear Sirs:-

Enclosed are Engine and Journey and Aircraft Log Books for your aircraft, CF-BSS.

The Certificates of Registration and Airworthiness must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

Toronto, 1 Montgomery Avenue, April 18 1947
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Renewal of Certificates of Registration and Airworthiness	5008-B19-19

5993

TRANSPORT - RECORDS
APR 19 A.M.
5008-B19-19
File

Controller of Civil Aviation,
Department of Transport,
OTTAWA Ontario.

1. Tiger Moth, CF BSS, Serial No. 1847 owned by Brant -Norfolk Aero Club has recently been reconditioned at Cub Aircraft Corporation, Hamilton.

2. Proper entries have been made in the log books of this aircraft that it was airworthy on April 12, 1947.

3. These entries were signed be Messrs. J.F. Gibson and W. Lachman as air engineer's and F.E. McFadden as commercial pilot.

4. Certificate of Registration No. 3396 and Certificate of Airworthiness No. 996 have been renewed until April 11, 1948.

DJH

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/im

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

1 2 6-46

1 Montgomery Avenue, (PLACE) Toronto, May 13th, (DATE) 1948.

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Renewal of Certificates of Registration and Airworthiness - aircraft CF-BSS	5008-B19-19

TRANSPORT-RECORDS
MAY 17 A.M.
File 5008-B19-19

Controller of Civil Aviation,
Department of Transport,
OTTAWA.

A 6835

1. D.H.82C Tiger Moth, aircraft C F - B S S, Serial No. 1847, owned by Brant*Norfolk Aero Club, has recently been reconditioned by that Company at Brantford, Ontario.

2. Proper entries have been made in the Log Book of this aircraft that it was airworthy on May 13th, 1948. These entries have been signed by Messrs. M. Galbraith and W. Lachman as Air Engineers and C. Raney as Test Pilot.

3. Certificate of Registration No. 3396 and Certificate of Airworthiness No. 996 have been renewed valid until May 13th, 1949.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ:alb

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6109

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED	
FULL RATE	
DAY LETTER	
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

Send the following message, subject to the terms on back hereof, which are hereby agreed to

13

COLLECT CAR

TORONTO May 14th, 1949

Pa
BS

BRANT/NORFOLK AERO CLUB 7414 5008-B19-19

BRANTFORD, Ontario.

THIS WIRE CONSTITUTES EXTENSION CERTIFICATE OF AIRWORTHINESS NO. 996 UNTIL JUNE 14th PROVIDED AIRCRAFT MAINTAINED IN AIRWORTHY CONDITION. (CF-BSS)

DISTRICT INSPECTOR AIR REGULATIONS

STC/ke

COPY FOR FILE 5008-B19-19

Confirmation - D.A.S. - Attn: C.A.R. - Headquarters

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.

14

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-B19-19

8157

TOR: 5008-B19-19

Toronto, Ontario.

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

TRANSPORT-RECORDS
MAY 27 P.M.
File 5008-B19-19

Registration Markings C F - B S S

Aircraft Type DH82C Tiger Moth

Owner Brant-Norfolk Aero Club

Place of Inspection Leggat Aircraft, Toronto, Ont.

Date of Inspection May 17th, 1949 ✓

Satisfactory inspection report has been received from Air Engineers J. Leggat and Test Pilot W. Sumner

C. of R. No. 3396 and C. of A. No. 996 were renewed on May 26th, 1949 valid until May 17th, 1950 ✓

Remarks Certificate of Airworthiness endorsed to read:-
"The Weight and Balance Report forms part of this Certificate of Airworthiness and must be carried in the aircraft during flight."

✓ C

Noted
GJ

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

COPY

15

ORIGINAL ON FILE.....

COPY FOR FILE.....

TOR:5008-B19-19

260 Richmond St. W., Toronto,
October 17th, 1949.

Mr. Cecil John Voigt,
14 William Street,
DELHI, Ontario.

Dear Sir:

Receipt is acknowledged of your application for re-registration of D.H.82C aircraft, CF-BSS, Serial No. 1847, which you recently purchased from the Brant-Norfolk Aero Club, together with the following papers:-

(a) Application form in triplicate.
(b) $5.00 fee - receipt no. 101783 enclosed.
(c) Bill of Sale.
(d) Old C. of R. No. 3396 and C. of A. No. 996.
(e) Log Books - returned via C.N. Express.

Pending issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your authority to operate CF-BSS as a commercial aircraft (landplane) on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 996 and valid until January 17th, 1950.

This authority does not include permission for the operation of radio apparatus; nor does it permit you to conduct a commercial air service unless you are in possession of an Air Transport Board Licence and an Operating Certificate or temporary authority relative thereto.

Yours truly,

(D.W. Saunders),
District Inspector, Air Regulations,
Toronto.

8
4-19
/alb

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

renewed valid until April 11/48 - [illegible]

renewed valid until .....May 13th, 1948.....

May 26th, 1949 - Renewed valid until May 17th, 1950 - [illegible]

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

2462A
8-41

16

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3396

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C. Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Can. Ltd., Toronto, Ont.
3. Constructor's serial number	1847
4. Name of owner	Brant-Norfolk Aero Club,
5. Address of owner	Brantford, Ont.
6. Nationality of owner	British
7. Usual station of aircraft	Brantford, Ont.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 25th day of February, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 13th day of March, 1946.

C. P. Harris.
for *Superintendent, Air Regulations.*

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

11

BILL OF SALE

This is to certify that we have this date sold assigned and transferred all right, title, and interest in, Tiger Moth, Regis. CF-BSS, Serial No. 1847 to Mr. Cecil Voigt, 14 William Street, Delhi, Ontario, for the sum of five hundred dollars ($500) and other valuable consideration; receipt of which is hereby acknowledged. We also certify that there is no lien or encumbrance against this machine.

Dated at Brantford, Ont. this 6th day of October 1949.

BRANT-NORFOLK AERO CLUB (1944)

Irene M. Rogers
Witness

W. Summers
Owner

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by DEHAVILLAND AIRCRAFT CANADA

Type D.H. TIGER MOTH 82 C Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'4"	
Length o/a in feet	23'11"	
Height o/a in feet	8'9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1245 lbs	
Total weight authorized (fully loaded) in lbs 1825	Air Speed	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments TEN 2, COMPASSES, 2, ALTIMETERS, 2, AIRSPEED, 2, R.R.M, 2, TURN & BANK
2. Gauges FIVE 2, OIL PRESSURE, 2, OIL TEMPERATURE, 1, GAS
3. Lights THREE, 1, STARBOARD, 1, PORT, 1, TAIL
4. Signals
5. Fire Extinguishers TWO
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	GIPSY MAJOR 1C			
Pusher or Tractor	TRACTOR			
Right or Left Hand	LEFT			
No. of Cylinders	FOUR			
H.P.	130 AT 2100 R.P.M.			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ TRIPLICATE

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ✓ $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Cecil Voigt

Date of Application ..... Oct. 13th 1949

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
CECIL JOHN VOIGT	14 WILLIAM ST. DELHI ONT.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) COMMERCIAL

Usual Station ..... BRANTFORD ONT.

Date and place of manufacture or reconstruction ..... 1941 TORONTO ONT.

Crew required ..... ONE

Accommodation for what number of passengers ..... ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

19 2
6-47

Toronto, Ontario, October 17th, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re-Registration of aircraft, CF-BSS	5008-B19-19

29172

TRANSPORT - RECORDS
OCT 19 P.M.
File 5008-B19-19

Director of Air Services,
Department of Transport,
OTTAWA.

1. Herewith the following papers relating to re-registration of D.H.82C aircraft CF-BSS, Serial No. 1847, recently purchased by Mr. Cecil John Voigt from the Brant-Norfolk Aero Club:-

(a) Application form in duplicate.
(b) $5.00 fee (see page 8896 in cash book, receipt no. 101783).
(c) Bill of Sale.
(d) Old C. of R. No. 3396.
(e) Old C. of A. No. 996.
(f) Weight and Balance.
(g) Copy of letter of temporary authority.

8326(R)
996(A)

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.

To Ottawa

COPY

ORIGINAL ON FILE .....

COPY FOR FILE .....

Delhi, Ont.
Oct. 19th, 1949.

Dear Sir:

Regarding my recent application for re-registration of aircraft CF-BSS I made a mistake. I put down commercial for use of the aircraft where I should have put private. Would you kindly change it for me.

Yours truly,

(Sgd.) Cecil Voigt

8
6-48

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
6-47

TORONTO, October 21, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Tiger Moth CF-BSS	5008-B19-19

CAR

29993

TRANSPORT - RECORDS
OCT 25 A.M.
File 5008-B19-19

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: C.A.R.

1. Herewith please find copy of a letter received from Mr. Cecil Voigt who recently purchased the subject aircraft, which is self-explanatory.

2. For your information and action.

A. A. Brethour
for District Inspector, Air Regulations,
for District Controller of Air Services,
Toronto.

8326 (R)
996 (A)

Issued 22.10.49

/RM

2462A
4-48

20

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8326

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C Tiger Moth,
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Cecil John Voigt,
5. Address of owner	14 William St., Delhi, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario.
8. Purpose	~~Commercial~~ Private (7.11.49)

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 17th day of October 19 49, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 22nd day of October 19 49.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 17th, 1950, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

21

5008-B19-19

OTTAWA, Ontario.
October 22nd, 1949.

Mr. G.J. Voigt,
14 William St.,
Delhi, Ont.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 8326 and Certificate of Airworthiness No. 996 for your D.H. Tiger Moth 82C aircraft, CF-BSS , Serial No. 1847.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until May 17th, 1950.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

RECEIVED
OCT 26 1949
Dept. of Transport.

Yours truly,

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes [ ] No [X]

REGISTERED

AC-5-60

cc. D.I.A.R. Toronto, Ont.

JF/EM

Ottawa, Ontario, October 26, 1949.

5008-B19-19 Tiger Moth, CF-BSS 5008-B19-19

District Controller Air Services,
260 Richmond St., West,
Toronto 2B, Ontario.

Attention: District Inspector Air Regulations

1. Reference your 5008-B19-19 dated October 21, 1949 and copy of attached correspondence from Mr. Cecil Veigh on Tiger Moth CF-BSS.

2. The Certificates of Registration No. 8326 and Airworthiness No. 996 were issued and fowarded to the owner prior to receipt of your letter.

3. Please advise when the Certificates have been amended.

(C. [illegible] Revers),
Superintendent, Air Regulations.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2 V 2 6-47

Toronto, Ontario, November 7th, 1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	D.H.82C aircraft CF-BSS	5008-B19-19

32438

TRANSPORT - RECORDS
NOV 9 P.M.
File 5008-B19-19

Director of Air Services,
Department of Transport,
OTTAWA.

1. Please be advised that the Certificates of Registration No. 8326 and Airworthiness No. 996 have been amended this date as follows:

Certificate of Registration:

Item 8. Private. ✓

Certificate of Airworthiness:

Item 14. D only. ✓

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

Noted

(OTTAWA)

23

DEPARTMENT OF TRANSPORT
Civil Aviation Division

H.Q: 5008-B19-19

8337

TOR: 5008-B19-19

Toronto, Ontario.

TRANSPORT - RECORDS
MAY 29 A.M.
5008-B19-19
File

TO: Director of Air Services,

ATTENTION: Superintendent, Air Regulations.

FROM: District Inspector, Air Regulations.

SUBJECT: Renewal of Certificates of Registration and Airworthiness

Registration Markings C.F.-B.S.S.....

Aircraft Type .....DH82C.....

Owner .....Cecil John Voigt.....

Place of Inspection ..Leggat Aircraft, Toronto, Ont.....

Date of Inspection ...May 16th, 1950.....

Satisfactory inspection report has been received from Air Engineers .....J.C. Leggat and Wm. Sumner..... and Test Pilot ...Wm. Sumner.....

C. of R. No. ..8326..... and C. of A. No. 996.....

were renewed on May 26th, 1950..... valid until .....

.....May 16th, 1951.

Remarks C. of A. Item 25. Landplane amended to read 1237 lbs.

.....Items 26 to 32 inclusive deleted.....

.....

.....

(D.W. Saunders),
District Inspector, Air Regulations,
for (District Controller, Air Services),
Toronto.

NOTED
GSI
noted
DTE

24

TOR:5008-B19-19

260 Richmond St. W., Toronto,
September 11th, 1950.

Mr. Gordon McKay,
413 Horton Street,
London, Ontario.

Dear Sir:

Receipt is hereby acknowledged of the following papers relating to re-registration of D.H.82C aircraft, CF-BSS, Serial No. 1847, which you purchased from Mr. Cecil John Voigt:-

(a) Application form in triplicate.
(b) $5.00 fee.
(c) Bill of Sale.
(d) Old Certificate of Registration No. 8326 and Certificate of Airworthiness No. 996 together with the Weight and Balance.

Pending issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSS as a private aircraft (landplane) on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 996 and valid until December 11th, 1950.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W. Saunders),
District Superintendent, Air Regulations,
Toronto.

/alb
cc:Headquarters

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

May 26th, 1950 - Renewed valid until May 16th, 1951 -

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

25

2462A
4-48

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8326

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C Tiger Moth,
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Cecil John Voigt,
5. Address of owner	14 William St., Delhi, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Brantford, Ontario.
8. Purpose	~~Commercial~~ Private (7-11-49)

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 17th day of October 19 49, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 22nd day of October, 19 49.

H. Patterson

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 17th, 1950, unless endorsed.

August 14, 1950

Bill of Sale

This is to certify that Gordon McKay has bought Tiger Moth D. H. 82.C Reg. CF-B.S.S. from me and that there is no liens or debts against it.

Cecil Voigt

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by de Havilland Aircraft Co.

Type DH 82C Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet		
Length o/a in feet		
Height o/a in feet		

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil

Total weight authorized (fully loaded) in lbs. Air Speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments
2. Gauges
3. Lights
4. Signals
5. Fire Extinguishers
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type				
Pusher or Tractor				
Right or Left Hand				
No. of Cylinders				
H.P.				
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

27

2413
11-48

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Gordon. McKay

Date of Application August 15/1950

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Gordon A. McKAY	413 Horton St London	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station London Ont

Date and place of manufacture or reconstruction Toronto, 1941

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

28 2 6-47

Toronto, Ontario, September 11th, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re-Registration of aircraft C F - B S S	5008-B19-19

18961

TRANSPORT - RECORDS
SEP 12 1950
File 5008-B19-19

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations

1. Herewith the following documents relating to re-registration of D.H.82C aircraft, C F - B S S, Serial No. 1847, purchased by Mr. Gordon McKay from Mr. Cecil John Voigt:-

(a) Application form in duplicate.
(b) $5.00 fee - see receipt no. 101415.
(c) Letter re ownership.
(d) Old Certificate of Registration No. 8326.
(e) Old Certificate of Airworthiness No. 996.
(f) Copy of letter of temporary authority.

To owner

8984 (R.)
996 (A).

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.(6)

/RM

30

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8984

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Gordon A. McKay,
5. Address of owner	413 Horton St., London, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 11th day of September 19 50, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 19th day of September 19 50.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 16th, 1951, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

31

5008-B19-19

OTTAWA, Ontario.
September 19th, 1950.

Mr. G.A. McKay,
413 Horton St.,
London, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 6984 and Certificate of Airworthiness No. 996 for your D.H. 82C aircraft, CF- BSS , Serial No. 1847.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until May 16th, 1951.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

(C.H. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

cc. D.S.A.R. Toronto, Ont.

21-9-50

32

TOR:5008-B19-19

260 Richmond St. W., Toronto,
February 20th, 1951.

Messrs. J.J. Martin, E.H. Pollock & D.R. Stevens,
484 Talbot Street,
LONDON, Ontario.

Dear Sirs:

Pending issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate D.H.82C C F - B S S, as a private aircraft (landplane) on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 996 and valid until May 16th, 1951.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W. Saunders),
District Superintendent, Air Regulations,
Toronto.

/alb
cc:Headquarters
2 cc:D.S.R. - Radio

/RM

33

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8984

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Gordon A. McKay,
5. Address of owner	413 Horton St., London, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 11th day of September 1950, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 19th day of September 1950.

H. L. Watson

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after May 16th, 1951, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RM

24

AIR SERVICES
CIV[illegible]IATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-B19-19

OTTAWA, Ontario.
September 19th, 1950.

Mr. G.A. McKay,
413 Horton St.,
London, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 8984 and Certificate of Airworthiness No. 996 for your D.H. 82C aircraft, CF- BSS , Serial No. 1847.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until May 16th, 1951.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

H L Watson

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

2b

BILL OF SALE

This is to certify that we have this date, sold assigned and transferred all right, title, and interest in

Tiger Moth CF-BSS-

to J. J. Martin, E. H. Pollock & D. R. Stevens

for the sum of One ($1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged. We also certify that there is no lien or encumbrance against this machine.

Dated at ~~XXXXXX~~ London, Ont. this 6 day of Feb. 19 51

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ STEVENS BROS. AIR SERVICES LTD.

Miss J. Duffy
(Witness)

Gordon McKay
(Owner)

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER ..... made by DEHAVILLAND AIRCRAFT OF CANADA.

Type D.H. TIGER MOTH 82C ..... Maker's No. 1847 .....

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	
Length o/a in feet	23'-11"	23'-11"
Height o/a in feet	8'-9"	8'-9"
Cubic Capacity (of Airship or Balloon)	N/A	
Weight equipped, but without load, fuel, or oil	1237 lbs.	
Total weight authorized (fully loaded) in lbs.	1825 Air Speed 100	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 turn & bank, Pioneer 2 compass, Pioneer 2 Altimeter, Kollsman 2 Airspeed Kollsman & US Guage
2. Gauges 2 Tachometer Kollsman, 1 oil press. US Guage, 1 Oil temp. us Guage.
3. Lights Navigation, identification
4. Signals NIL
5. Fire Extinguishers 1 Pyrene hand type, 1-1 qt. pressure extinguisher.
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Safety belts

ENGINES	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	DH Gipsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	Left hand(from cockpit)			
No. of Cylinders	four			
H.P.	125			
Bore	4.646"			
Stroke	5.512"			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

2b

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant .....

Date of Application ..... Feb. 12, 1941

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
JAMES JOHN MARTIN	114 FOSTER AVENUE LONDON, ONT.	CANADIAN
ERNEST HUGH POLLOCK	484 TALBOT STREET, LONDON, ONT.	CANADIAN
DONALD ROBERT STEVENS	189 OAKLAND AVENUE, LONDON, ONT.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
	N/A		

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station LONDON, ONTARIO.

Date and place of manufacture or reconstruction 1941, TORONTO, ONTARIO.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

37

2
2-48

Toronto, Ontario, February 20th, 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re-Registration of aircraft - CF-BSS	5008-B19-19

TRANSPORT - RECORDS
FEB 21 P.M. 1951
File 5008-B19-19

43639

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations.

1. Herewith the following documents relating to re-registration of D.H.82C aircraft, C F - B S S, Serial No. 1847, recently purchased by Messrs. J.J. Martin, E.H. Pollock and D.R. Stevens from Mr. G.A. McKay:-

(a) Application form in duplicate.
(b) $5.00 fee - see receipt no. 141416.
(c) Bill of Sale.
(d) Old Certificate of Registration No. 8984.
(e) Old Certificate of Airworthiness No. 996 together with the Weight and Balance Report.
(f) Copy of letter of temporary authority.

Maurice E. Leach
for (D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

attach.(7)

C of R #9270

41

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 9270

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited Toronto, Ontario
3. Constructor's serial number	1847
4. Name of owner	James John Martin Ernest Hugh Pollock ~~Donald Robert Stevens~~
5. Address of owner	114 Foster Avenue, London, Ont. 484 Talbot Street, London, Ont. ~~189 Oakland Avenue, London, Ont.~~
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 26th day of February, 19 51., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 26th day of February, 19 51.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not Valid after May 16th, 1951 unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

MR 42

5008-B19-19

OTTAWA, Ontario.
February 26th, 1951.

Mr. James J. Martin,
114 Foster Avenue,
London, Ontario.

Dear Sir/

Enclosed are Certificate of Registration No. 9270 and Certificate of Airworthiness No. 996 for your D.H. Tiger Moth 82C aircraft, CF- , Serial No. 1047.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until May 16th, 1951.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

(G.T. Travers),
Superintendent, Air Regulations.

c. c. Toronto

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

Noted Treas. Aw
30-4-51
EO

28/5/51

9

U3

2444
4-50

CANADA

DEPARTMENT OF TRANSPORT

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— BSS SERIAL NO. 1847

1. C. of A. No. 996 Expires May 16/51 C. of R. No. 9270 Expires May 16/51.
AIRCRAFT DATA—Manufacturer DeHavilland A/C of Canada Model D.H.82C
Hours flown—Since New 1089:20 hrs. Since Overhaul N/A
ENGINE DATA—Manufacturer DeHavilland Aircraft Co. Ltd Model Gypsy Major 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89315	1271:30	740:45
(2)			
(3)			
(4)			

Signature of Applicant [signature]

Date

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed [signature] "B" ENGINEER

Date June 2/51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed [signature] C-5083 TEST PILOT

Date June 5/51

4. The following documents are attached:

Certificate of Airworthiness [X] Certificate of Registration [X] Weight and Balance Report (when applicable) [X]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 9270 and C. of A. No. 996, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature] DISTRICT AIRCRAFT INSPECTOR

Date June 7/51

DEPARTMENT OF TRANSPORT AERONAUTICAL INSPECTION CANADA

7. C. of A. and C. of R. renewed, not valid after (Date) June 5th, 1952.

Permissible Gross Weights— Wheels 1,825 pounds.
Skis
Floats

Signed [signature] DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date June 7th, 1951.

Other Action:—

8. H.Q. Action— C.A.R.

C.A.E.

LEAVENS BROS- AIR SERVICES LTD.
LONDON CITY AIRPORT

TYPE OF AIRCRAFT: DH82C - Tiger Moth. Serial No. 1847.

TYPE OF ENGINE: Gypsy Major 1C - Serial No. 89315

TYPE OF PROPELLOR: Grandby Aviation Ltd. Model GG-100B Serial No A1673

TYPE OF WORK: Inspection & Repair for Renewal of Certificate of Air-worthiness.

WORK CARRIED OUT: All inspection panels and fairings removed - aircraft cleaned.

FUSELAGE: All tubing inspected for rust, fatigue and distortion. All control cables checked for fraying and corrosion and general soundness. Covering checked for deterioration and patched where required.

MAINPLANES: All cables checked for fraying and general condition - new aileron cable spliced in rear of stb'd. lower wing. All root attachment bolts replaced new and safetied. New front root attachment pins replaced. Fabric covering inspected for general condition. Spars checked for cracks and deterioration where possible. All flying and landing wires checked for corrosion and condition and a liberal coating of "Protacoat" applied. Strut attachment bolts checked for condition.

UNDERCARRIAGE: All attachment bolts replaced new and safetied. Wheels removed and hubs checked for cracks - port tire replaced with re-tread. All grease points lubricated. Bearings cleaned and re-greased. Tail wheel removed and cleaned-re-greased.

EMPENNAGE: Attachment bolts checked for condition. Horizontal and vertical spars checked for condition where possible. Fin checked for alignment and found to be within limits. All fabric surfaces checked for condition. Control surface hinge points checked for safety.

GENERAL: Engine pressure fire extinguisher re-filled and connected and an aluminum line directed to carburettor intake to convey extinguisher fluid if required. Cockpit hand type extinguisher tested and re-filled. Aircraft placed in rigging position and all rigging angles checked. Rear cockpit tachometer drive cable replaced new and tachometer glass replaced. Compasses swung and deviation cards installed.

LEAVENS·BROS- AIR SERVICES LTD.
LONDON CITY AIRPORT

44

June 4,1951.

I hereby certify that all work listed has been done with certified materials and in accordance with accepted practices, that all Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Louis T. Shanlin A2164 "B"

June 4,1951.

I hereby certify that I have re-checked all engine and flight controls for soundness, safety and freedom of movement and the presence of all locking devices.

Guy LaRocque

June 4,1951.

I hereby certify that I have test flown aircraft bearing Registration Markings CF-BSS and found engine and aircraft controls to function in a normal and airworthy manner.

J.D. Burgess C-5083

46

JUN 9 A.M. 1951
File 5008-B19-19

14462

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W....June 7th, 1951....

Your File 5008-B19-19 | SUBJECT Renewal of Certificates of Registration and Airworthiness CF-BSS | Our File 5008-B19-19

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for D.H.82C aircraft, CF-BSS.

D.W. Saunders

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

A

47

5008-B19-19

260 Richmond St.,W.Toronto.
October 12th 1951.

Messrs. E. Pollock, L. Beecroft and H.F.Elliott,
c/o 366½ Rectory St.,
London, Ontario.

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 820 aircraft CF-BSS Serial No. 1847 which you recently purchased from Messrs. Martin, Pollock and Stevens.

(a) Application form in triplicate.
(b) $5.00 fee - Cash Sales Receipt No. 16817 returned herewith.
(c) Bill of Sale
(d) Old Certificate of Registration No. 9270.
(e) Old Certificate of Airworthiness No. 996 together with the Weight and Balance Report.

Pending issue of the formal Certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSS as a private aircraft (landplane) on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 996 and valid until January 12th, 1952.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto.

/mm
CC: H.Q.
D.S.R.-2
C.R.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

June 7th, 1951 - Renewed valid until June 5th, 1952 - O.V. Saunders

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

48

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 9270

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited Toronto, Ontario
3. Constructor's serial number	1847
4. Name of owner	James John Martin Ernest Hugh Pollock Donald Robert Stevens
5. Address of owner	114 Foster Avenue, London, Ont. 484 Talbot Street, London, Ont. 189 Oakland Avenue, London, Ont.
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 26th day of February, 1951, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 26th day of February, 1951.

H. Patterson

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not Valid after May 16th, 1951 unless endorsed.

TORONTO — LONDON — LEAMINGTON — WINDSOR

LEAVENS BROS. AIR SERVICES LTD.

AVIATION TRAINING SCHOOL CHARTER FLIGHTS REPAIR - REBUILDING
AIRCRAFT SUPPLIES AERIAL PHOTOGRAPHY SALES - SERVICE

ESTABLISHED 1927

HEAD OFFICE — BARKER AIRPORT, TORONTO — CANADA

49

BILL OF SALE

To Whom it May Concern:

This is to certify that I (we) hereby transfer all rights in DH 82C (Tiger Moth) bearing Registration Markings CF-BSS to Mr. E.W. Hoch, James A. Bennett H.J. Elliott for the sum of One Dollar $1.00 and other considerations. It is further certified that there are no liens or encumberances against the subject aircraft.

(Signed) James J. Morton

(Signed) E.W. Hoch

(Signed) Donald B. Dennis

Witness D. Hamilton

Date OCTOBER 1/51

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by DE HAVILLAND A/C OF CANADA

Type TIGER MOTH 82 C Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	N/A
Length o/a in feet	23'-11"	N/A
Height o/a in feet	8'-9"	N/A

Cubic Capacity (of Airship or Balloon) N/A

Weight equipped, but without load, fuel, or oil 1237

Total weight authorized (fully loaded) in lbs. 1825 Air Speed 80 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 AIRSPEED (KOLLSMAN) 2 TURN & BANK (PIONEER) 2 COMPASS (PIONEER) 2 ALTIMETER (KOLLSMAN)
2. Gauges 2 TACHOMETER (KOLLSMAN) 1 OIL TEMP 1 OIL PRESS. 1 OUTSIDE AIR
3. Lights NAVIGATION
4. Signals NIL
5. Fire Extinguishers 1 ENGINE PRESS. - 1 PYRENE HAND TYPE
6. Parachutes NIL
7. Tools NIL
8. Other Equipment SAFETY BELTS.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	GYPSY MAJOR IC			
Pusher or Tractor	TRACTOR			
Right or Left Hand	LEFT (FROM COCKPIT)			
No. of Cylinders	4			
	140			
Bore	4.64			
Stroke	5.512			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

50

2413
7-50

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... $5.00 ✓

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Ernest A. Beecroft
H.A. Elliott

Date of Application .....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
ERNEST HUGH BLOCK	21 COVENTRY AVE LONDON	CANADIAN
LORNE ARNOLD BEECROFT	366½ RECTORY ST. LONDON	CANADIAN
HARRY FREDERICK ELLIOTT	570 WILLIAM ST LONDON	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private) ..... Private

Usual Station ..... London Ont.

Date and place of manufacture or reconstruction ..... Toronto 1941

Crew required ..... One

Accommodation for what number of passengers ..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by DE HAVILLAND A/C OF CANADA.

Type TIGER MOTH 82 C. Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	N/A.
Length o/a in feet	23'-11"	N/A
Height o/a in feet	8'-9"	N/A.

Cubic Capacity (of Airship or Balloon) N/A.

Weight equipped, but without load, fuel, or oil 1237

Total weight authorized (fully loaded) in lbs 1825 Air Speed 80 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 AIRSPEED (KOLLSMAN) 2 TURN & BANK (PIONEER) 2 COMPASS (PIONEER) 2 ALTIMETER (KOLLSMAN)
2. Gauges 2 TACHOMETER 1 OIL TEMP 1 OIL PRESS 1 OUTSIDE AIR
3. Lights NAVIGATION
4. Signals NIL
5. Fire Extinguishers 1 ENGINE PRESS. - 1 PYRENE HAND TYPE
6. Parachutes NIL
7. Tools NIL
8. Other Equipment SAFETY BELTS

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	GYPSY MAJOR 1C			
Pusher or Tractor	TRACTOR			
Right or Left Hand	LEFT (FROM COCKPIT)			
No. of Cylinders	4			
H.P.	140			
Bore	4.64			
Stroke	5.512			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

51

2413
7-50

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ✓ $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect. E. W. Hobbs

Signature of Applicant James A. Bancroft
H. E. Elliott

Date of Application .....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
ERNEST HOOD BIGGS	21 COVENTRY RD LONDON	CANADIAN
LORNE ARNOLD BEECROFT	366½ RECTORY ST. LONDON	CANADIAN
HARRY FREDERICK ELLIOTT	570 WILLIAM ST LONDON	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private) Private

Usual Station London Ont

Date and place of manufacture or reconstruction Toronto 1941

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

52

2
6-47

Toronto, Ontario, October 15th 1951.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re- Registration of aircraft - CF - B S S	5008-B19-19

TRANSPORT - RECORDS
OCT 16 A.M. 1951
File 5008-B19-19

In Reply
Refer to File

36222

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Herewith the following documents relating to re-registration of D.H. Tiger Moth 82C aircraft, CF-BSS, Serial No. 1847 purchased by Messrs. Pollock,Beecroft and H.F.Elliott from Messrs. Martin,Pollock and Stevens.

(a) Application form in duplicate.
(b) $5.00 fee - Official Receipt No. 184623.
(c) Bill of Sale.
(d) Old Certificate of Registration No. 9270.
(e) Old Certificate of Airworthiness No. 996 together with the Weight and Balance Report.
(f) Copy of letter of temporary authority.

(D.W.Saunders)
District Superintendent, Air Regulations,
for (District Controller, Air Services,)
Toronto.

10536(R)
996(A)

56

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10556

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C.
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847.
4. Name of owner	Pollock, Ernest Hugh; Beecroft, Lorne Arnold; Elliott, Harry Frederick.
5. Address of owner	21 Coventry Ave., London, Ont; 366½ Rectory St., London, Ont; 570 William St., London, Ont.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 12th day of October, 1951, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, ~~as amended~~, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 18th day of October, 1951.

Superintendent, Air Regulations.

~~Attention is drawn to the extracts from Air Regulations, 1938, overleaf~~.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

57

/MTF

5008-B19-19

OTTAWA, Ontario.

October 19th, 1951.

Messrs. E. Pollock, L. Beecroft and H.F. Elliott,
c/o 366½ Rectory Street,
London, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. and Certificate of Airworthiness No. for your aircraft, CF- , Serial No. 996 1047 10536 D.H. Tiger Moth 82C

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until June 5th, 1952. Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

(C.T. Travers),
Superintendent, Air Regulations

c.c. Toronto.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

LEAVENS BROS- AIR SERVICES LTD.
LONDON CITY AIRPORT

59

TYPE OF AIRCRAFT: Tiger Moth DH82C Serial # 1847

TYPE OF ENGINE: Gypsy Major 1C Serial # 89315

TYPE OF PROPELLOR: Grandby Aviation Ltd.Model GG-100B Serial A1673

TYPE OF WORK: Inspection and repair for renewal Certificate of Airworthiness.

WORK CARRIED OUT: All inspection panels and fairings removed - aircraft cleaned.

FUSELAGE: All tubing checked for rust, fatigue and general soundness wall condition of tubing tested by means of spring-loaded punch. Contol cable attachment bolts removed and checked for wear, replaced and safetied. All control hinge points lubricated. Fabric covering inspected for tears, ring worm and general condition.

MAINPLANES: All control cables inspected for fraying and corrosion, new port rear aileron cable spliced and installed.Internal condition of wings inspected where possible for rot,glue separation etc. Fabric opened at strut attachment fittings and spars checked for cracks etc Pyralin rings and inspection covers installed at these points. Fabric covering inspected for tears etc. Flying and landing wires checked and all traces of corrosion removed, zinc chromate applied to all bracing wires. Aileron hinge points checked for wear and safety.

EMPENNAGE: Attachment points inspected for security and general soundness. Spars checked for condition. Elevator and rudder hinge points checked for condition and security. Fabric covering inspected for soundness.

UNDERCARRIAGE: All atachment bolts checked for wear and security. Wheels removed, bearings cleaned and regreased. Hubs inspected for cracks. Tires checked for wear, cuts abrasions etc. Brakes checked.

GENERAL: Fire extinguisher checked for operatin and capacity. Cyls. removed and top overhaul carried out. New seats and guides installe #1 head, #2 head replaced with reconditioned head from Leavens Bros Toronto, #3 head intake guide replaced. All valves ground, new ring fitted and installed. Cyls replaced with new gaskets and seals. Engine ground run four hours. Compasses swung, deviation cards corrected.

S-8

August 8,1952.

I hereby certify that all work listed has been done with certified materials and in accordance with accepted practice, that all Manufacturer's Service Bulletins affecting safety have been complied with to date, that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Louis J. Saindon YZH 104 "B"

August 8,1952.

I hereby certify that I have re-checked all engine and flight controls for soundness safety, freedom of movement and the presence of all locking devices.

Jack L. Halstead

I hereby certify that I have test flown aircraft bearing Registration Markings CF-BSS and that it flies in a normal and satisfactory manner.

H. D. Hughes C-5283

August 8,1952.

60

5008-B19-19

260 RichmondSt.,W.Toronto,
August 14th 1952.

Messrs. Lorne A.Boscroft & Ernest H.Pollock,
366½ Rectory St.,
London, Ontario.

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 82C aircraft, CF-BSS, Serial No. 1847 which you recently purchased from Messrs. Pollock, Boscroft and Elliott:-

(a) Application form in triplicate.
(b) $5.00 fee - O.R. #230237
(c) Bill of Sale.
(d) Old Certificate of Registration No. 10536
(e) Old Certificate of Airworthiness No. 996 together with Weight and Balance Report.
(f) Form #2444 in duplicate

Pending issue of the formal certificates of REgistration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSS as a private aircraft (landplane) on day visual flying only under conditions of issue as stated in the Certificate of Airworthiness No. 996 and valid until November 14th 1952. The all-up-weight of this aircraft is not to exceed eighteen hundred and twenty five pounds.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto

/mgs
D.S.R.-2 H°Q.
C.R.

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT
OTTAWA

2444 G 1
REFER TO FILE NUMBER
5008-B19-19

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF-BSS Serial No. 1847

1. C. of A. No. 996 Expires June 5/52 of R. No. 10536 Expires .....
Aircraft Data-Manufacturer. DeHavilland A/C of Canada Model. DH82C
Hours flown-Since New.. 1245:10 Since Overhaul.... N/A
Engine Data-Manufacturer.. Dehavilland Model Gypsy Major 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89315	1427:45	897:00
(2)			
(3)			
(4)			

Signature of Applicant Edward G. Barrett
Date Aug 8/52

---

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed Lewis T. Hawkins
"B" Engineer
Date Aug 8/52

---

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed C-5283
Test Pilot
Date AUG 8 52

---

4. The following documents are attached:
Certificate of Airworthiness 996 Certificate of Registration 10536
Weight and Balance Report (when applicable) X

---

5. When sections 1,2,3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 10536 and C. of A. No. 996, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed
District Aircraft Inspector
Date Aug 14 52

DEPARTMENT OF TRANSPORT ... CIVIL AVIATION ... CANADA

---

7. C. of A. and C. of R. renewed, not valid after (Date) August 8th 1953
Permissible Gross Weights- Wheels - 1825 lbs.
Skis
Floats
Signed Maurice E. Lamb
District Superintendent, Air Regulations
Other Action:- Date August 14th 1952

---

8. H.Q.Action- C.A.R. ..... C.A.E. .....

42

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10536

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C.
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847.
4. Name of owner	Pollock, Ernest Hugh; Beecroft, Lorne Arnold; Elliott, Harry Frederick.
5. Address of owner	21 Coventry Ave., London, Ont; 366½ Rectory St., London, Ont; 570 William St., London, Ont.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 12th day of October, 1951, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, ~~1938~~, as amended, H.R. 18/10/51 and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 18th day of October, 1951.

H. L. Patmore

Superintendent, Air Regulations.

~~Attention is drawn to the extracts from Air Regulations, 1938, overleaf.~~ H.R. 18/10/51

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

63

Bill of Sale

This is to certify that we have this date sold assigned and transferred all right, title, and interest in

Aircraft CE-B 55

To LORNE BEECROFT AND HUGH POLLOCK

For the sum of one (1) Dollar and other valuable considerations, receipt of which is here-by acknowledged. We also certify that there is no lien or encumbrance against this machine.

Dated at London this 2nd Day of August. 1952

Witness B.T. Vickers

Owner H.T. Elliott
G. H. Pollock
Lorne A. Beecroft

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air heavier made by DeHavilland A/C of Canada.

Type DH82C Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	
Length o/a in feet	23'-11"	
Height o/a in feet	8'-9"	
Cubic Capacity (of Airship or Balloon)	N/A	
Weight equipped, but without load, fuel, or oil	1237	

Total weight authorized (fully loaded) in lbs. 1825 Air Speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 airspeed, 2 altimeter, 2 compass, 1 outside air temp.
2. Gauges 2 tachometer, 1 oil temp., 1 oil pressure.
3. Lights nil
4. Signals nil
5. Fire Extinguishers 1 engine pressure, 1 Pyrene hand type
6. Parachutes nil
7. Tools nil
8. Other Equipment safety belts

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	left hand (from cockpit)			
No. of Cylinders	four			
H.P.	130-140			
Bore	4½"			
Stroke	5½"			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

64

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... $5.00 ✓

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect

Signature of Applicant [redacted]

Date of Application Aug 8/46

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
LORNE ARNOLD BEECROFT	366½ RECTORY ST. LONDON ONT.	
ERNEST HUGH POLLOCK	21 COVENTRY AVE LONDON	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station LONDON ONTARIO

Date and place of manufacture or reconstruction DeHavilland A/C Toronto, Oct. 1944

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **heavier** made by **DeHavilland A/C of Canada.**

Type **DH82C** Maker's No. **1847**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	
Length o/a in feet	23'-11"	
Height o/a in feet	8'-9"	
Cubic Capacity (of Airship or Balloon)	N/A	
Weight equipped, but without load, fuel, or oil	1237	
Total weight authorized (fully loaded) in lbs 1825	Air Speed 85	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 airspeed, 2 altimeter, 2 compass, 1 outside air temp.
2. Gauges 2 tachometer, 1 oil temp., 1 oil pressure.
3. Lights nil
4. Signals nil
5. Fire Extinguishers 1 engine pressure, 1 Pyrene hand type
6. Parachutes nil
7. Tools nil
8. Other Equipment safety belts

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	left hand (from cockpit)			
No. of Cylinders	four			
H.P.	130-140			
Bore	4¼"			
Stroke	5½"			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

45

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ Triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... $5.00 ✓

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Lorne A Beecroft - E H Block

Date of Application Aug 8/52

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
LORNE ARNOLD BEECROFT	366½ RECTORY ST. LONDON ONT	CANADIAN
ERNEST HUGH BLOCK	21 COVENTRY AVE LONDON ONT	CANADIAN.

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station LONDON ONTARIO

Date and place of manufacture or reconstruction DeHavilland A/C Toronto, Oct. 1941.

Crew required ONE

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

64 3
5-51

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

Toronto, August 14th 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	CF-BSS Re-registration of D.H.Tiger Moth 82C aircraft	5008-B19-19

TRANSPORT - RECORDS
AUG 15 A.M. 1952
File 5008-B19-19

27456

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H.Tiger Moth 82C aircraft, CF-BSS, Serial No. 1847 purchased by Messrs. Beecroft and ~~Elliott~~ Pollock -

(a) Application form in duplicate.
(b) $5.00 fee - O.R.#230237
(c) Bill of Sale.
(d) Old Certificate of Registration No. 10536
(e) Old Certificate of Airworthiness No. 996 together with Weight and Balance Report.
(f) Form #2444
(g) Copy of letter of temporary authority.

Maurice E Saunders

(D.W.Saunders)
District Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto.

11207(R)
996(A)

70

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11207

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Pollock, Ernest Hugh & Beecroft, Lorne Arnold
5. Address of owner	21 Coventry Avenue, London, Ontario. 366½ Rectory Street, London, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 14th day of August 19 52., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 18th day of August, 1952.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/AD

5008-H19-19

OTTAWA, Ontario.

August 18, 1952.

Messrs. E.H. Pollock &
L. Beecroft,
c/o 366½ Rectory Street,
London, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 11207 and Certificate of Airworthiness No. 996 for your D.H. Tiger Moth 82C aircraft, CF-BSS , Serial No. 1847

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until August 8, 1953.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☐

REGISTERED

AC-5-60 cc.Toronto

72

5008-B19019

260 Richmond St., W. Toronto,
February 20th 1953.

M & M Aero Services,
78 East 18th Street
Hamilton, Ontario.

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 82C aireraft, CF-BSS, Serial No. 1847 which you recently purchased from Messrs. Pollock & Beecroft:-

(a) Application form in triplicate.
(b) $5.00 fee - O.R. #A2307
(c) Bill of Sale - Messrs. E.H.Pollock & L.A.Beecroft to Wm. H. Johnston.
(d) Bill of Sale - William Johnston to you.
(e) Certificate of Registration No. 11207
(f) Certificate of Airworthiness No. 996 together with Weight and Balance Report.

Pending issue of the formal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSS as a private aireraft (landplane) on day visual flying only under the conditions of issue as stated in the Certificate of Airworthiness No. 996 and valid until May 20th 1953.

This authority does not include permission for the operation of radio apparatus.

The all-up weight of this aireraft is not to exceed Eighteen hundred and twenty-five pounds.

Yours truly,

/mgs
H.Q.
D.S.R.-2
C.R.

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto.

73

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11207

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1847
4. Name of owner	Pollock, Ernest Hugh & Beecroft, Lorne Arnold
5. Address of owner	21 Coventry Avenue, London, Ontario. 366½ Rectory Street, London, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	London, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 14th day of August 19 52., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 18th day of August 19 52.

H. L. Patterson

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

74

BILL OF SALE

I do hereby sell to M & M AERO SERVICES of Hamilton Ont. DH 82C CF-BSS for the sum of one dollar and special considerations ($1.00).

Dated at Hamilton this day the 16th of Febuary, 1953.

I declare that there are no liens or encumberance against this aircraft.

PER. William Johnston

Witness

75

BILL OF SALE

To Whom it may concern:

This is to certify that I hereby transfer all rights in DH 82C Aircraft bearing Registration Markings CF-BSS to Mr. Wm. H. Johnston ..... of.... RCAF Station Centralia, Ont. ..... for the sum of One Dollar ($1.00) and other valuable considerations.

I further certify that there are no liens or encumberance against the subject aircraft.

(SIGNED) Lorne R. Beecroft .....

(DATE) Feb. 9/53 .....

(SIGNED) F. H. Wallace .....

(DATE) Feb 9/53 .....

(WITNESS) F. G. Carson ..... (Jack L Stead)

(DATE) Feb. 9 1953 .... (Feb 9 - 1953)

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier made by DeHavilland Aircraft of Canada Limitied

Type: D.H. Tiger Moth 82C Maker's No.: 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 4"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1237	
Total weight authorized (fully loaded) in lbs 1825	Air Speed 85 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments: Compass,Altimeter,Airspeed Indicater,Revolution Indic.
2. Gauges: Oil Temperature,Oil Pressure.
3. Lights: Navigation and Signal.
4. Signals:
5. Fire Extinguishers: Engine CO2 and One hand (Cockpiy)
6. Parachutes:
7. Tools:
8. Other Equipment:

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major IC			
Pusher or Tractor	Left Hand Tractor			
Right or Left Hand	Left			
No. of Cylinders	Six			
H.P.	125/130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date ..... Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

94

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

	X	
Registration		$5.00
Certificate of Airworthiness (See note below)		$5.00

The particulars given below are true in every respect. M & M AERO SERVICES

Signature of Applicant J. S. Murphy (Gen. Manager)

Date of Application February 15, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
M & M AERO SERVICES	Mt. Hope Airport MT.Hope Ont.	Canadian
	78 East 18th St; Hamilton Ont.	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
W.T.Martin			
J.S. Murphy			

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Mt. Hope Airport Mt. Hope Ont.

Date and place of manufacture or reconstruction Toronto Ont. 1941

Crew required One.

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by DeHavilland Aircraft of Canada Limitied

Type D.H. Tiger Moth 82C Maker's No. I847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 4"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	I237	
Total weight authorized (fully loaded) in lbs I825	Air Speed 85 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments Compass,Altimeter,Airspeed Indicater,Revolution Indic.
2. Gauges Oil Temperature,Oil Pressure.
3. Lights Navigation and Signal.
4. Signals
5. Fire Extinguishers Engine CO2 and One hand (Cockpiy)
6. Parachutes
7. Tools
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major IC			
Pusher or Tractor	Left Hand Tractor			
Right or Left Hand	Left			
No. of Cylinders	Six			
H.P.	I25/I30			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

77

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect. M & M AERO SERVICES

Signature of Applicant J. S. Murphy (Gen Manager)

Date of Application Febuary 15, 1953.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
M & M AERO SERVICES	Mt. Hope Airport MT.Hope Ont.	Canadian
	78 East 18th St; Hamilton Ont.	

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
W.T.Martin			Canadian
J.S.Murphy	Gen. Manager		Canadian

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Mt. Hope Airport Mt. Hope Ont.

Date and place of manufacture or reconstruction Toronto Ont. 1941

Crew required One.

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

Molan Inc. Co

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

78

2

9-50

Toronto, Ontario, February 20th 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re-registration of D.H. Tiger Moth aircraft CF-BSS	5008-B19-19

54337

TRANSPORT - RECORDS
FEB 21 A.M. 1953
File 2008 - B19-19

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H. Tiger Moth aircraft, CF-BSS, Serial No. 1847 purchased by M & M Aero Services, Hamilton, Ont.:-

(a) Application form in duplicate.
(b) $5.00 fee - O.R. #A2307
(c) Bill of Sale - E.H.Pollock and L.A.Beecroft to William H. Johnston.
(d) Bill of Sale - William Johnston to M & M Aero Services.
(e) Certificate of Registration No. 11207
(f) Certificate of Airworthiness No. 996 together with Weight and Balance Report.
(g) Copy of letter of temporary authority.

(D.W.Saunders)
District Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto

Attach 7

11679 (R)
996 (A)

82

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11679

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1547.
4. Name of owner	W.T. Martin (Operating under firm name of J.S. Murphy (M & M Aero Services)
5. Address of owner	78 East 15th St., Hamilton, Ontario. Mt. Hope Airport, Mount Hope, Ontario.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Mt. Hope Airport, Mt. Hope, Ontario.
8. Purpose	Private.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 20th day of February, 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 26th day of February, 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

83

5006-B19-19

MM

OTTAWA, Ontario.
February 26th, 1953.

Messrs. W.T. Martin & J.S. Murphy,
(Operating as M & M Aero Services),
78 East 15th Street,
HAMILTON, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 11679 and Certificate of Airworthiness No. 996 for your D.H. Tiger Moth 82C aircraft, CF- BSS , Serial No. 1547.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until August 5, 1953.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

c.c. TORONTO.

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☐

REGISTERED

AC-5-60

87

84.

5008-B19-19

260 Richmond St.,W.
Toronto, Ontario
June 12th 1953.

Mr. John Nesteruk,
R.C.A.F. Station,
GREENWOOD,
Nova Scotia.

Dear Sir;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 820 aircraft, CF-BSS, Serial No. 1847 which you recently purchased from M & M Aero Services:-

(a) Application form in triplicate.
(b) $5.00 fee - C.R.#69289
(c) Bill of Sale.
(d) Certificate of Registration No. 11679
(e) Certificate of Airworthiness No. 996 together with Weight and Balance Report.

Pending issue of the formal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BSS as a private aircraft (landplane) day VFR only, under the conditions of issue as stated in the Certificate of Airworthiness No. 996 and valid until August 8th 1953.

This authority does not permit the operation of radio apparatus.

The all-up weight of this aircraft is not to exceed 1825 lbs.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto

/mgm
D.S.R -2 H.Q. C.R.

D.S.A.R.Moncton

85

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11679

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1847.
4. Name of owner	W.T. Martin (Operating under firm name of J.S. Murphy (M & M Aero Services)
5. Address of owner	78 East 18th St., Hamilton, Ontario, Mt. Hope Airport, Mount Hope, Ontario.
6. Nationality of owner	Canadian.
7. Usual station of aircraft	Mt. Hope Airport, Mt. Hope, Ontario.
8. Purpose	Private.

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 20th day of February, 1953., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 26th day of February 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

78-E 18th. Street
Hamilton, Ont.

Phone 3-8926

Mt. Hope Airport
Mt. Hope, Ont.

86.

M&M AERO SERVICES

TAYLORCRAFT DEALERS

BILL OF SALE

We do hereby sell to John Nestoruk of Greenwood Nova Scotia, Aircraft CF-BSS for the sum of one dollar and certain considerations. We declare this aircraft clear of any liens or encumberances.

Dated at Hamilton, this day, the 10th of June; 1953.

R. H. Burns
Witness

J. Nestoruk
Purchaser

M & M AERO SERVICES

Per: W. T. Martin
Vendor

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier — made by: Dehavilland

Type: DH 82C — Maker's No.: 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet		
Length o/a in feet		
Height o/a in feet		

Cubic Capacity (of Airship or Balloon):

Weight equipped, but without load, fuel, or oil: 1237

Total weight authorized (fully loaded) in lbs: 1825 — Air Speed: 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments: Turn and bank, compass, altimeter and airspeed indicator
2. Gauges: Oil Pressure, temperature, revolution indicator.
3. Lights: Navigation.
4. Signals: None
5. Fire Extinguishers: Engine, cocpit-hand
6. Parachutes: None
7. Tools: None
8. Other Equipment:

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand	Left Hand.			
No. of Cylinders	4			
H.P.				
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on:

Particulars accurate as corrected:

Modifications from type are indicated on annexed sheet:

Registration recommended with the following special conditions:

Date:

Signature:

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

87

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... J. Nestoruk .....

Date of Application ..... June 11? 1953. .....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
John Nestoruk	R.C.A.F. Station Greenwood Nova Scotia Canada	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) .....
Private .....

Usual Station ..... Greenwood Nova Scota .....

Date and place of manufacture or reconstruction ..... Dehavilland Aircraft of Canada 1941 .....

Crew required ..... One .....

Accommodation for what number of passengers ..... One .....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by Dehavilland

Type DH 82C Maker's No. 1847

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet		
Length o/a in feet		
Height o/a in feet		

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 1237

Total weight authorized (fully loaded) in lbs 1825 Air Speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Turn and bank, compass, altimeter and airspeed indicator
2. Gauges Oil Pressure, temperature, revolution indicator.
3. Lights Navigation.
4. Signals None
5. Fire Extinguishers Engine, cocpit-hand
6. Parachutes None
7. Tools None
8. Other Equipment

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand	Left Hand.			
No. of Cylinders	4			
H.P.				
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

88

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... J. Nestoruk .....

Date of Application ..... June 11? 1953. .....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
John Nestoruk	R.C.A.F. Station Greenwood Nova Scotia Canada	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Private .....

Usual Station ..... Greenwood Nova Scota .....

Date and place of manufacture or reconstruction ..... Dehavilland Aircraft of Canada 1941 .....

Crew required ..... One .....

Accommodation for what number of passengers ..... One .....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

89. 2 / 8-52

Toronto, Ontario, June 16, 1953
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19	Re-registration of D.H.Tiger Moth 82C, CF-BSS	5008-B19-19

TRANSPORT - RECORDS
JUN 17 P.M. 1953
File 5008-B19-19

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

19643

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H.Tiger Moth 82C aircraft, CF-BSS, Serial No. 1847 purchased by John Nestoruk from M & M Aero Services:-

(a) Application form in duplicate.
(b) $5.00 fee - O.R.#A2979.
(c) Bill of Sale.
(d) Certificate of Registration No. 11679.
(e) Certificate of Airworthiness No. 996 together with Weight and Balance Report.
(f) Copy of letter of temporary authority.

for D.W. Saunders)
District Superintendent, Air Regulations,
for (District Controller, Air Services)
Toronto.

Attach. 5

12031 (R)
996 (A)

93

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12031

NATIONALITY AND REGISTRATION MARKS CF-BSS

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd. Toronto, Ontario
3. Constructor's serial number	1847
4. Name of owner	John Nestoruk
5. Address of owner	R.C.A.F. Station Greenwood, Nova Scotia
6. Nationality of owner	Canadian
7. Usual station of aircraft	Greenwood, Nova Scotia
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 12th day of June 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BSS and is of Canadian nationality.

Given at Ottawa this 22nd day of June 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

Engines

18. Number installed: One
19. Makes: DeHavilland
20. Types: Gipsy Major 1C
21. International power of the engine or engines at:
    (a) Sea Level 125/130 H.P. at 2100 revolutions per minute. (International number of revolutions)
    (b) Rated Altitude ..... H.P. at ..... revolutions per minute. (International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....
23. Oil: (a) ..... (b) .....
24. Airscrews: Number fitted One Types ..... No .....
    Pitch ..... Diameter (26.5.50) 1137
25. Weight of aircraft empty (including water in the radiators): (a) Landplane ..... 1845 lbs. (b) Seaplane ..... lbs. (c) Skiplane ..... lbs.

Weight of Fuel and Oil

26. Fuel (at 7·2 lbs. per gallon)		137 lbs.
(a) Number of tanks	One	
(b) Capacity of tanks	19 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)		18 lbs.
(a) Number of tanks	One	
(b) Capacity of tanks	2 Imp. gals.	
28. Weight allowed for crew		170 lbs.
29. Weight allowed for equipment, excluding wireless apparatus		lbs.
30. Weight of wireless apparatus		lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full		255 lbs.
32. Maximum total weight authorized		lbs.
Landplane (Acrobatic) 1770 lbs. (Normal)		1825 lbs.
~~Seaplane~~		lbs.
Skiplane		lbs.

DELETED (26.5.50)

Compulsory Conditions

33. Maximum total weight authorized (write in full)
    Landplane (Normal) Eighteen hundred & twenty-five pounds
    ~~Seaplane~~
    Skiplane (Acrobatic) Seventeen hundred & seventy pounds
34. Minimum crew necessary One
35. Inspections and overhauls: *See* Air Regulations.
36. Stowage. *See* Air Regulations.
37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.
38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.
39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2400 r.p.m.
40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated February 25, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, ~~1930~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 13th day of March 1946

Superintendent, Air Regulations.

* If flown acrobatically the maximum weight must not exceed 1770 lbs.

Valid for day flying only

2462
9-89

CANADA
DEPARTMENT OF TRANSPORT
CIVIL AVIATION

PHOTO

(12.10.51) CERTIFICATE OF AIRWORTHINESS No. 996 (26.2.51)

(14.8.52)
POLLOCK, Ernest Hugh
BEBGROFT, Lorne Arnold
ELLIOTT, Harry Frederick
MARTIN and MURPHY (20.2.53)

(Heavier than air)

FIRST PART

(11.9.50) McKAY, W.T. J.S.
(17.10.49) VOIGT

MARTIN, James John
POLLOCK, Ernest Hugh
STEVENS, Donald Robert

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Brant-Norfolk Aero Club NESTORUK (12.6.53)
2. Christian name (Operating under the firm name of M & M Aero Services) John; Gordon A.; John
3. Address 78 East 18th Street, Hamilton, Ontario Mount Hope Airport, Mount Hope, Ont. Brantford, Ontario, R.C.A.F. Station, London, Ont. 713 Hamilton St., London, Ont.
4. Nationality British Greenwood, Nova Scotia
21 Coventry Ave., London, Ont.
2661 Rectory St., London, Ont.
570 William St., London, Ont.
114 Foster Ave., London, Ont.
484 Talbot Street, London, Ont
189 Oakland Ave., London, Ont.

NAME OF CONSTRUCTOR

5. Name DeHavilland Aircraft of Canada Limited

NATIONALITY AND REGISTRATION MARKS

6. CF-BSS

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 82C Constructor's No 1847
8. Place and year of construction of aircraft Toronto, Ontario, 1941.

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes Two
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal & Acrobatic
14. Subdivision [illegible], 4 time (7.11.49)
15. Maximum span (in flying position) 29' 4"
16. Maximum length (in flying position) 23'11"
17. Total height (with and without trolley in case of seaplanes) 8' 9"

/MIM
/ZC
/MM

88.
91 48

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

79
90

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure
Oil Temperature Gauge
Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

(Normal) Safety belt for each occupant
(Acrobatic) Safety harness must be installed

D.—Special equipment:

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT
FORMS PART OF THIS CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT. (26.5.49)

Note: This certificate is subject to Air Regulations, [redacted] and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		February 25, 1947 OK 13/5/49 17.5.50 16.5.51 5.6.52 8.8.53	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

RJC

94

9006-B19-19

OTTAWA, Ontario.

June 23rd, 1953

Mr. John Hesteruk,
R.C.A.F. Station,
Greenwood, N.S.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 12031 and Certificate of Airworthiness No. 996 for your D.H. Tiger Moth aircraft, CF-BSS, Serial No. 1847. 82C

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until August 8th, 1953.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

added 2nt 07
26/6/53

(C.T. Travers),
Superintendent, Air Regulations.

c.c. Moncton

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☐

REGISTERED

AC-5-60

96

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3
5-51

Moncton, N.B., November 3, 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	DH82C Aircraft - CF-BSS	5008-B19-19

TRANSPORT - RECORDS
NOV 6 A.M. 1953
File 5008-B19-19

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

48370

ATTENTION: Chief Aeronautical Engineer.

1. Recently the owner of subject-noted aircraft purchased a new Granby wooden propeller, model GG-100B, Serial No. A-256Z from Leavens Bros., Toronto, Ontario.

2. No release note accompanied the shipment and I advised him to request it from them.

3. The owner has received a letter from Leavens Bros. in lieu of a release note and has forwarded it to this office for perusal and authority to use the propeller in question.

4. This is the first time we have had such a request and have no instructions to give authority.

5. May this office be advised if subject propeller can be used without a release note.

J. Hardman

(J. Hardman),
for District Controller, Air Services,
Moncton, N.B.

95

COPY

LEAVENS BROS.

AIR SERVICES LTD.

Head Office - Barker Airport, Toronto - Canada

October 23rd, 1953.

F/O J. Nestoruk,
R.C.A.F. Station,
Greenwood, N.S.

Dear Sir:-

We have yours of October 20th and would like to explain that all Tiger Propellers have, for the past several years been secured from surplus stocks, and very few of these propellers have records with them which would allow anyone issuing a Release Note to cover.

In this connection, we are quite willing to certify that this propeller supplied to you was new and fully airworthy so far as condition was concerned. I am afraid this is as far as we can go.

If the Department of Transport will not allow you to use this propeller, and you can find a more suitable one, we will be quite willing to have you return it to us for credit provided it is in the same condition as we shipped it.

Sincerely yours,

LEAVENS BROS AIR SERVICES LTD.

(Signed)
C.R. Leavens.
Manager.

CRL/MH

DTJ/AO'D

97

Ottawa, Ontario, November 6, 1953.

5008-B19-19 DH82C Aircraft - CF-BSS 5008-B19-19 (CAE)

District Controller of Air Services,
P.O. Box 42,
Moncton, N.B.

Attention: District Aircraft Inspector

1. Reference your letter of November 3rd, 1953. A certification from Leavens Bros. signed by their "B" engineer, and in accordance with para. 2 of their letter may be accepted in lieu of a formal Release Note.

D.T. Jackson,
for (H.S. Rees),
Chief Aeronautical Engineer.

CANADA

51867

DEPARTMENT OF TRANSPORT

TRANSPORT - L... C... 2448 5-52

NOV 26 A.M. 1953

File 5008-B19-19

98

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF -BSS

SERIAL NO. 1847

1. C. of A. No. 996 Expires Aug 8/53 C. of R. No. 12031 Expires
Aircraft Data—Manufacturer DeHavilland Aircraft Model D.H.Tiger Moth 82A
Hours flown—Since New 1339:40 Since Overhaul
Engine Data—Manufacturer DeHavilland Aircraft Model Gypsy Major IC

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89539	459:25	~~32:40~~
(2)			
(3)			
(4)			

H.Q. COPY

Signature of Applicant J. Nestoruk

Date 10 October 1953

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed R. S. Landry

"M" Licence No. QMM-61

Date 10 October 1953

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed J. Nestoruk

Pilot Lic.# VRP-3184

Date 10 October 1953

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 12031 and C. of A. No. 996, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed J. Hawkins

District Aircraft Inspector

Date November 23 1953

7. C. of A. and C. of R. renewed, not valid after,

Date 9th Oct 1954

Permissible Gross Weights—Wheels
—Skis
—Floats

Signed J. B. Falkiner

District Superintendent, Air Regulations

Date Nov 24th 1953

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

99

R.C.A.F. Station
Uplands, Ont.

9702

TRANSPORT - RECORDS
22 JUN 24 June A.M. 5
File 5008-B.19-19

Dear Sirs;

This is to notify your office that I am no longer owner of Tiger Moth CF-BSS (aircraft is at Greenwood, N.S.).

An application for renewal of C of R will be made by new owner shortly.

Also my new address is now :- R.C.A.F. Station
Uplands, Ont.

Yours truly,
J. Nestoruk F/O

Noted on Ont 27/6/54 D.O.

COPY ON
5502-36213

Noted
GL
JY

2444
7-55

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval 2 issue 2

REGISTRATION – CF – BSS SERIAL No. 1847

1. C. of A. No. 996 Expires 9-10-54 C. of R. No. 12031 Expires
Aircraft Data—Manufacturer D H Aircraft of Canada Ltd. Model D H 82C Tiger Moth
Hours flown—Since New 1353 - 40 Since Overhaul
Engine Data—Manufacturer DeHavilland of Canada Ltd. Model Gipsy Major 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89539	541.00	
(2)			
(3)			
(4)			

Signature of Applicant W. W. Wales.

Date 8 June, 1957

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated 52-3 Signed R. J. Carey
"AM" Licence No. Qrun/62

Serial No. of last Service Bulletin incorporated CR 8 Date 8 June, 1957

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed David McNeil.
Pilot

Date 8 June, 1957

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached:

Certificate of Airworthiness	☑
Certificate of Registration	☑
Weight and Balance Report (when applicable)	☑

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed J. Hardman
District Aircraft Inspector

Date June 14 1957

7. C. of A. and C. of R. renewed, not valid after.

Date June 8, 1958

Permissible Gross Weights—Wheels
—Skis
—Floats

Signed
District Superintendent, ~~Air Regulations~~

Date June 14, 1957.

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus installed:-

A. Transmitters. (Give Frequencies) ..... N.i.l .....

B. Receivers ..... – .....

C. Miscellaneous. (ADF, ILS, etc.) ..... – .....

Radio Licence No. (if A/C previously registered in Canada) .....

PART "D"

I hereby certify 1. (a) That I am the sole owner of the aircraft described herein,
(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at Moncton this 14th day of June 19 57

Witness .....

Designation:- .....

(Signature of Applicant(s))

.....

(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by ☑ (initial) Date:- ..... 19.....

Registration Marks CF-..... allotted ☐ (initial)

Documentation required as listed below has been checked and is satisfactory ☑ (initial)

Fee $5.00 (Registration) received ☑ (initial) Fee $5.00 (Airworthiness) received ☐ (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY ☐ and NIGHT ☑ flying.

Dated at Moncton this 14th day of June 19 57

.....

District Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

- ☑ (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)
- ☑ (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)
- ☐ (III) Fee of $5.00 for Certificate of Airworthiness.
- ☑ (IV) Aircraft Weight and Balance Report. (In duplicate.)
- ☐ (V) Aeroplane Flight Manual, Operation Limitations.
- ☐ (VI) Certificate of Airworthiness for Export or equivalent document.
- ☐ (VII) Customs and Excise Clearance Form B.1.
- ☐ (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).
- ☐ (IX) D.O.T. Approved Release notes, where applicable.
- ☐ (X) Certification of Aircraft Imported Complete. (Form 2443.)
- ☐ (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

Ottawa

101

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

The District Controller of Air Services.
Department of Transport.

(Parts A, B, C & D must be completed by the applicant.)

.....

PART "A"

Application is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particulars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF- B-S.S.	D.H. - Can. Ltd.	D-H-82-C	1847	1941

Aircraft is to be registered as:- STATE ☐ COMMERCIAL ☐ PRIVATE ☑

Proposed base of Operation:- STANLEY AIRPORT .... Certificate of Airworthiness or Flight Permit Number in force. 996 (If applicable)

OWNER OR OWNERS OF THE AIRCRAFT:- W. W. Walsh.....
(All names to be listed)

If Owner/s is a Corporation, particulars of President or Chairman and all Directors are as follows:-

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- A/C Type Approval No.....
C.A.A. Specification No.....

Weight and Balance Report submitted is for:- LAND ☑ SEA ☐ SKI ☐

Type Engine/s installed. Gypsy Major 1C Max. Gross Weight Authorized:- 1825 lbs.

Minimum Flight Crew:- ONE Total Number of Persons to be carried TWO (including crew)

Nav. Lights ☑ Landing Lights ☐

2413
8-56

BATT. OPERATED

2462-A
9-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

102

CATEGORY.-PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 15319

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-BSS	Dehavilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1847

CHANGED

(4) NAME OF OWNER Mr. W. H. Walsh.

(5) ADDRESS OF OWNER 43 Yale St., Halifax, N. S.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

ACTION TAKEN
JUN 25 1957
Original Signed by
M. M. FLEMING
OSC No. 3

SEAL

DATE OF ISSUE June 12, 1953 June 14, 1957 (Surfaced) 105

for SUPERINTENDENT OF AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

GJ/PT

OTTAWA, Ontario, July 10th, 1957.

103/64

5000-B19-19 (ARL)

D.H. 82C Tiger Moth Aircraft, CF-BSS

District Director, Air Services,
P.O. Box 42,
Moncton, N.B.

ATTENTION: District Superintendent, Air Regulations,

1. We acknowledge receipt of Form 2413, dated June 14, 1957, and copy of Certificate of Registration for the above-mentioned aircraft.

2. It is noted that the date of issue of the Certificate of Registration is incorrect, as this aircraft was registered by the previous owner, Mr. John Nestoruk, on June 12, 1953.

3. Will you please, therefore, advise this office as to the date on which the certificate was issued by your office.

Controller, Civil Air Regulations.

2462-A
2-56

105

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

CANADA

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 25319

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-BSS	DeHavilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1847

(4) NAME OF OWNER Mr. H. W. Walsh.

(5) ADDRESS OF OWNER 43 Yale St., Halifax, N. S.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE June 14, 1957.

SEAL

for SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations.

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

106 2

Moncton, N. B., July 12, 1957.

PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-19 (ARL)	D.H. 82C Tiger Moth Aircraft, CF-BSS	5008-B19-19 (ARM)

11477

TRANSPORT - RECORDS
JUL 17 A.M.
File 5008-B19-19

Director General, Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. This will acknowledge your letter of July 10, 1957 bringing to our attention the error contained in Certificate of Registration, No. 15319, issued in respect to D.H. 82C aircraft CF-BSS.

2. A replacement certificate has been issued (Headquarters' copy enclosed) and sent to the registered owner with the request that the certificate in error be returned to this office.

3. Your attention in bringing this error to our notice is appreciated.

for (M. M. Fleming)
for District Director, Air Services

Encl.

Noted

2462-A
2-56

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF REGISTRATION OF AIRCRAFT

107

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 15330

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-BSS	Dellevilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1847

(4) NAME OF OWNER: David Thomas Gill, Walter Graham Langille, Martin E. Todd

(5) ADDRESS OF OWNER: 101 Prince Albert Rd., Dartmouth, N. S. 26 Dahlia St., Dartmouth, N. S. Waverley P. O., Halifax, N. S.

ADDED /

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANOTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

ACTION TAKEN
SEP 13 1957
OSC No. 3

DATE OF ISSUE: September 6, 1957.

SEAL

Original Signed by
M. W. FLEMING
for SUPERINTENDENT AIR REGULATIONS
Controller, Civil Air Regulations

SEE REVERSE SIDE

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF AIRWORTHINESS

2462
12-56

104/102
108

TRANSPORT - RECORDS
JUN 19 A.M.
File 5008-B19-19

SERIAL NO. 96

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
CF- BSS	DeHavilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1347

9069

(4) CATEGORY: Private

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER June 8, 1958

DATE OF ISSUE February 25, 1946

SEAL

Original Signed by
M. M. FLEMING
for SUPERINTENDENT, AIR REGULATIONS
Controller, Civil Air Regulations

SEE REVERSE SIDE

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus installed:-

A. Transmitters. (Give Frequencies).....

B. Receivers.....

C. Miscellaneous. (ADF, ILS, etc.) .....

Radio Licence No. (if A/C previously registered in Canada) .....

PART "D"

I hereby certify 1. (a) That I am the sole owner of the aircraft described herein,

(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at ..Stanley, N.S..... this. 26th. day of .....August..... 1957.....

Witness..... .....

Designation:- ....

(Signature of Applicant(s))

.....

(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by ☑ (initial) Date:- ..... 19.....

Registration Marks CF-..... allotted ☐ (initial)

Documentation required as listed below has been checked and is satisfactory ☑ (initial)

Fee $5.00 (Registration) received ☑ (initial) Fee $5.00 (Airworthiness) received ☐ (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY ☑ and NIGHT ☑ flying.

Dated at.....this ..... day of .....19 .....

.....

District Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

- ☑ (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)
- ☑ (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)
- ☐ (III) Fee of $5.00 for Certificate of Airworthiness.
- ☒ (IV) Aircraft Weight and Balance Report. (In duplicate.)
- ☒ (V) Aeroplane Flight Manual, Operation Limitations.
- ☐ (VI) Certificate of Airworthiness for Export or equivalent document.
- ☐ (VII) Customs and Excise Clearance Form B.1.
- ☐ (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).
- ☒ (IX) D.O.T. Approved Release notes, where applicable.
- ☐ (X) Certification of Aircraft Imported Complete. (Form 2443.)
- ☐ (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

16101

TRANSPORT - H.Q. SEP 9 A.M.

File 5028-B19-19

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

The District Controller of Air Services.
Department of Transport.

(Parts A, B, C & D must be completed by the applicant.)

.....Moncton, N.B.....

PART "A"

Application is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particulars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF-BSS	DeHavelland	T-Moth DH 82C	1847	1946

Aircraft is to be registered as:- STATE [ ] COMMERCIAL [ ] PRIVATE [X]

Proposed base of Operation:- Stanley Airport, N.S. .....Certificate of Airworthiness or Flight Permit Number in force. ....996.....
(If applicable)

OWNER OR OWNERS OF THE AIRCRAFT:-.....
(All names to be listed)

If Owner/s is a Corporation, particulars of President or Chairman and all Directors are as follows:-

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.
GILL David Thomas	Canadain	101 Prince Albert Rd. Dartmouth, N.S.	
LANGILLE Walter Graham	Canadian	26 Daliha St, Dartmouth, N.S.	
TODD MARTIN R ~~MARTIN R. Todd~~	Canadian	Waverly P. O., Halifax, N. S. ~~Waverly Rd., Halifax Co., N.S.~~	

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- approval basis A.P. 1208
A/C Type Approval No....2 Issue 2 DH 82C.....
C.A.A. Specification No.....

Weight and Balance Report submitted is for:- LAND [X] SEA [ ] SKI [ ]

Type Engine/s installed.....Gipsy Major Max. Gross Weight Authorized:- ...1825..... lbs.

Minimum Flight Crew:- .....1..... Total Number of Persons to be carried .....2.....
(including crew)

Nav. Lights [X] Landing Lights [ ]

Battery operated

2413
8-56

CANADA

TRANSPORT - RECORDS
SEP 10 A.M.

2444
7-55

21

17078

DEPARTMENT OF TRANSPORT File 5008-B19-19

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Aircraft Type approval A.P.-1208 2 ISSUE 3

REGISTRATION – CF – BSS

SERIAL No. 1847

1. C. of A. No. 996 Expires JUNE 8/58 C. of R. No. 15330 Expires –
Aircraft Data—Manufacturer DE HAVILLAND A/C OF CAN. LTD Model D.H. TIGER MOTH 82C
Hours flown—Since New 1638:35 Since Overhaul –
Engine Data—Manufacturer DE HAVILLAND A/C OF CAL. LTD Model GIPSY MAJOR 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89539	813	
(2)			
(3)			
(4)			

D. F. Gell
Mortgagee

Signature of Applicant [signature]

Date Aug. 24/58

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated 5-6-5 Signed D. McNeil

"M" Licence No. GMM 133

Serial No. of last Service Bulletin incorporated CR 8 Date Aug. 24, 1958

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed D. McNeil
Pilot

Date Aug. 26/58

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	N.

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 15330 and C. of A. No. 996, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [signature]
District Aircraft Inspector

Date Sept 8 1958

7. C. of A. and C. of R. renewed, not valid after.

Date August 26, 1959

Permissible Gross Weights—Wheels
—Skis
—Floats

Coded for

Signed [signature]
A/Regional ~~District~~ Superintendent, Air Regulations

Date September 8, 1958.

Noted for 10.9.58

Other Action:—

8. H.Q. Action C.A.R.

C.A.E.

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

20

2462
2-56

SERIAL NO. 996

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
BSS	DeHavilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1947

(4) CATEGORY: Normal

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER August 26, 1959

DATE OF ISSUE February 25, 1946

SEAL

Original Signed by
E. SAVARD
SUPERINTENDENT, AIR REGULATIONS
for Minister of Transport

SEE REVERSE SIDE

50454

TRANSPORT - RECORDS
MAR 11 A.M.
2444
6-59
File 5008-B19-19 23

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Issue 3

Aircraft Type approval AP. 1208

REGISTRATION – CF – BSS SERIAL No. 1847

1. C. of A. No. 996 Expires 26-8-59 C. of R. No. 15330 Expires
Aircraft Data—Manufacturer DE HAVILLAND A/C OF CANADA LTD. Model D.H. TIGER MOTH 82C
Hours flown—Since New 1680 : 55 Since Overhaul —
Engine Data—Manufacturer DE HAVILLAND OF CANADA LTD. Model GYPSY MAJOR. 1C.

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	89539	875:20	
(2)			
(3)			
(4)			

Signature of Applicant W Langille

Date FEBRUARY. 18TH 1960

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Serial No. of last A/W/D incorporated 56-5. Signed R Paul XDM 403
"M" Licence No.

Serial No. of last Service Bulletin incorporated CR. 8 Date FEBRUARY 18TH 1960

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Date FEBRUARY 18TH 1960 Signed R Paul. XDM 2912.
Pilot

NOTE: The elapsed time between items 2 and 3 should not exceed 7 days.

4. The following documents are attached: Certificate of Airworthiness [X] Certificate of Registration [X]
Weight and Balance Report [X]

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.
Date March 4 1960 Signed J H Goodman
District Aircraft Inspector

7. C. of A. and C. of R. renewed, not valid after. Date: February 18, 1961

Permissible Gross Weights—Wheels Skis Floats

Amendment or other Action:

Noted & Coded
LSI

Date March 8, 1960 Signed R Savard
Regional ~~District~~ Superintendent, Air Regulations

8. H.Q. Action C.A.R.

C.A.E.

74

Records #3.

P.S. note, folio 4658 on file hereunder, should be placed on file 5008 B 19-19. Will you kindly remove this document from this file and place on correct file, and refer back to SRL.

29.4.60

PART "C"

If the aircraft is equipped with radio apparatus list make and model of each unit of the apparatus installed:-

A. Transmitters. (Give Frequencies).. N.A.

B. Receivers..... N.A.

C. Miscellaneous. (ADF, ILS, etc.) ... N.A.

Radio Licence No. (if A/C previously registered in Canada) . N.A.

PART "D"

I hereby certify 1. ~~(a) That I am the sole owner of the aircraft described herein,~~

(b) That I am authorized by the owner(s) of the aircraft described herein, to make this application. (Delete paragraph not applicable)

2. That the aircraft described herein is not registered in any country other than Canada.

3. That all the statements contained in this application are true and complete to the best of my knowledge and belief.

Dated at 32 Lake Prom. Road Apartment, 8, DARTMOUTH, NOVA SCOTIA this 9th day of April 1960

Witness: Douglas C. Paul

David T. Hill

Designation:-

Don E. Wayland

(Signature of Applicant(s))

(if an officer of a corporation)

FOR DEPARTMENTAL USE ONLY

Application checked for acceptance by Hill (initial) Date: April 26 19 60.

Registration Marks CF BSS allotted Hill (initial)

Documentation required as listed below has been checked and is satisfactory Hill (initial)

Fee $5.00 (Registration) received Hill (initial) Fee $5.00 (Airworthiness) received [ ] (initial)

Registration and issue of Certificate of Airworthiness as applied for is approved.

Aircraft is eligible for DAY [✓] and NIGHT [✓] flying.

Dated at Moncton, N.B. this 26th day of April 19 60

per L. W. Bigelow

Regional Superintendent, Air Regulations

Before the above described aircraft may be registered and certificated as airworthy the following documentation must be submitted for approval of the Department of Transport:-

- [✓] (I) Evidence of Ownership. (Bill of Sale etc.)Affidavits if applicable. (Information Circular 0/36/55 refers.)
- [✓] (II) Fee of $5.00 for Registration. (Payable to the Receiver General of Canada.)
- [ ] (III) Fee of $5.00 for Certificate of Airworthiness.
- [ ] (IV) Aircraft Weight and Balance Report. (In duplicate.)
- [ ] (V) Aeroplane Flight Manual, Operation Limitations.
- [ ] (VI) Certificate of Airworthiness for Export or equivalent document.
- [ ] (VII) Customs and Excise Clearance Form B.1.
- [ ] (VIII) Aircraft Inspection Report ACA 337. (If imported from the United States for "used" aircraft only).
- [ ] (IX) D.O.T. Approved Release notes, where applicable.
- [ ] (X) Certification of Aircraft Imported Complete. (Form 2443.)
- [ ] (XI) Temporary Certificate of Registration and Airworthiness for delivery flight from points outside Canada. (Form 2445.)

4658

TRANSPORT - RECORDS
APR 29 A.M.
5008-B19-19
File B

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

(to be submitted in triplicate)

The District Director, Air Services.
Department of Transport.

(Parts A, B, C & D must be completed by the applicant.)

.....

PART "A"

Application is hereby made for the registration, in accordance with the Air Regulations, of the aircraft, particulars of which are as follows:-

Nationality and Registration Mark	Manufacturer	Manufacturer's Designation of A/C	Aircraft Serial No.	Year of Manufacture
CF-BSS	DEHAVILLAND AIRCRAFT OF CANADA LIMITED	TIGER MOTH	1847	1942

Aircraft is to be registered as:- STATE [ ] COMMERCIAL [ ] PRIVATE [✓]

Proposed base of Operation:- SHEARWATER NAVAL AIR STATION ... **Certificate of Airworthiness or Flight Permit Number in force.** 926 ..... **(If applicable)**

OWNER OR OWNERS OF THE AIRCRAFT:- .....
(All names to be listed)

If Owner/s is a Corporation, particulars of President or Chairman and all Directors are as follows:-

NAME (Print)	NATIONALITY (Citizen of)	ADDRESS	OFFICIAL STATUS President, Chairman, Director etc.
WALTER G. LANGILL G	CANADIAN	24 DAHLIA STREET, DARTMOUTH, NOVA SCOTIA	N-A.
DAVID T. GILL	CANADIAN	BOX 687, WINDSOR, NOVA SCOTIA	N. A.
ROSS E. WAYLAND	CANADIAN	290 QUINPOOL ROAD HALIFAX, NOVA SCOTIA	N.A.

PART "B"

Application is also made for the issuance of a Certificate of Airworthiness in respect of the aircraft described in Part "A", further particulars of which are as follows:-

Airworthiness certification made under:- **A/C Type Approval No.** APPROVAL BASIS AP 1208 - 2 ISSUE 3
C.A.A. Specification No. .....

Weight and Balance Report submitted is for:- LAND [✓] SEA [ ] SKI [ ]

Type Engine/s installed GYPSY MAJOR 1C ... **Max. Gross Weight Authorized:-** 1825 ..... **lbs.**

Minimum Flight Crew:- TWO ..... **Total Number of Persons to be carried** TWO .....
(including crew)

Nav. Lights [✓] **Landing Lights** [ ]

Coded

2413
4-58

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION
CERTIFICATE OF AIRWORTHINESS

2462
9-56

SERIAL NO. 996

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
BSS	DeHavilland Aircraft of Canada Ltd. D.H. Tiger Moth 82C	1847

(4) CATEGORY: Normal

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL. THE WEIGHT AND BALANCE REPORT AND ANY PERTINENT REQUIREMENTS.

(6) NOT VALID AFTER February 18, 1961

DATE OF ISSUE March 8, 1960

SEAL

Original Signed by
E. SAVARD
SUPERINTENDENT, AIR REGULATIONS
For Minister of Transport

SEE REVERSE SIDE

2462-A
2-56

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

CATEGORY.- PRIVATE [X]
COMMERCIAL [ ]
STATE [ ]

NO. 15463

(1) NATIONALITY AND REGISTRATION MARKS	(2) MANUFACTURER. MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NO.
CF-BSS	DeHavilland Aircraft of Canada Ltd. - D.H. Tiger Moth 82C	1847

(4) NAME OF OWNER: Walter Graham Langille
David Thomas Gill
Ross E. Wayland

Noted 13/5/60 LP

(5) ADDRESS OF OWNER: 24 Dahlia St., Dartmouth, N. S.
Box 687, Windsor, N. S.
290 Quinpool Road, Halifax, N. S.

(6) WHEREAS IT HAS BEEN DECLARED THAT THE ABOVE MENTIONED AIRCRAFT IS NOT REGISTERED IN ANY OTHER STATE IT IS HEREBY CERTIFIED THAT IT HAS BEEN DULY ENTERED ON THE REGISTER OF CANADA IN ACCORDANCE WITH THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS.

DATE OF ISSUE: April 26, 1960

SEAL

Original Signed by
C. W. KIPFER
SUPERINTENDENT AIR REGULATIONS
For Minister of Transport

SEE REVERSE SIDE

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

(To be submitted in duplicate)

AIRCRAFT TYPE APPROVAL 2 issue 3

REGISTRATION - CF - BSS

SERIAL NO. 1847

1. C. OF A. NO. 996 EXPIRES Feb. 18,1961

AIRCRAFT DATA - MANUFACTURER ~~DeHavilland~~ of Canada MODEL DH.82C

HOURS FLOWN - SINCE NEW 1734:10 SINCE OVERHAUL ----

ENGINE DATA- MANUFACTURER DeHavilland MODEL Gypsy Major IC

	SERIAL NUMBERS	HOURS RUN SINCE NEW	HOURS SINCE COMPLETE OVERHAUL
(1)	89539	~~895:20~~ 928:35	409:30
(2)	---	----	---
(3)	---		
(4)	---		

SIGNATURE OF APPLICANT H.G. Langille

DATE June 1st, 1961

2. I HEREBY CERTIFY THAT; ALL WORK LISTED IN THE AIRCRAFT LOG HAS BEEN DONE WITH CERTIFIED MATERIAL ACCORDING TO ACCEPTED PRACTICE; ALL AIRWORTHINESS DIRECTIVES (OR APPROVED EQUIVALENT) AND MANUFACTURER'S SERVICE BULLETINS AFFECTING SAFETY HAVE BEEN COMPLIED WITH TO DATE, THE WEIGHT AND BALANCE REPORT IS UP TO DATE, AND THAT COPIES OF ALL AMENDMENTS TO IT SINCE THE LAST RENEWAL OF THE CERTIFICATE OF AIRWORTHINESS HAVE BEEN SUBMITTED TO THE REGIONAL AIRWORTHINESS INSPECTOR; NO UNAPPROVED MODIFICATIONS HAVE BEEN INCORPORATED AND THE AIRCRAFT IS AIRWORTHY.

SERIAL NO. OF LAST A/W/D/ INCORPORATED 56-5 SERIAL NO. OF LAST S/B/ INCORPORATED C(R)8

DATE June 1st, 1961 SIGNED A.L. Paul XDM403

APPROVED INSPECTOR OR A.M.E. LICENCE NO.

3. I HEREBY CERTIFY THAT I HAVE FLOWN THIS AIRCRAFT AND THAT ITS PERFORMANCE, FLYING QUALITIES AND FUNCTIONING OF CONTROLS, POWER PLANT, LANDING GEAR, ETC. ARE EQUIVALENT TO THE STANDARDS OF THE TYPE.

DATE June 1st, 1961 SIGNED H.G. Langille QMP. ~~28XX~~

PILOT

NOTE: THE ELAPSED TIME BETWEEN ITEMS 2 AND 3 SHOULD NOT EXCEED 7 DAYS.

FOR DEPARTMENTAL USE ONLY

4. DETAILS NOTED ON THIS FORM HAVE BEEN CHECKED, AND I AM SATISFIED THAT THE LOGS HAVE BEEN EXAMINED, THE AIRCRAFT HAS BEEN INSPECTED, AND ALL DOCUMENTS FOUND IN ORDER. RENEWAL OF CERTIFICATE IS RECOMMENDED.

DATE 4 July 1961 SIGNED J.G. Hardman

REGIONAL AIRWORTHINESS INSPECTOR

5. CERTIFICATE OF AIRWORTHINESS RENEWED, NOT VALID AFTER. DATE June 1, 1962

PERMISSIBLE GROSS WEIGHTS - WHEELS ____ SKIS ____ FLOATS ____

AMENDMENT OR OTHER ACTION:

Coded RB July 10/61

Noted LR 10.7.61

DATE June 4, 1961. SIGNED D.F. Duncanson

REGIONAL SUPERINTENDENT, AIR REGULATIONS

6. H. Q. ACTION C. O. R.

C. A. E.

2444
11-60

DEPARTMENT OF TRANSPORT
AIR SERVICES

CIVIL AVIATION BRANCH

CERTIFICATE OF AIRWORTHINESS

2462
6-58

18511

SERIAL NO. 996

(1) NATIONALITY AND REGISTRATION MARKS CF-	(2) MANUFACTURER AND MANUFACTURER'S DESIGNATION OF AIRCRAFT	(3) AIRCRAFT SERIAL NUMBER
BSS	DeHavilland Aircraft of Canada Ltd. - D.H. Tiger Moth 82C	1347

(4) CATEGORY: Normal

LANDPLANE [X] SEAPLANE [ ] SKIPLANE [ ]

(5) THIS CERTIFICATE OF AIRWORTHINESS IS ISSUED PURSUANT TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION DATED THE 7TH DECEMBER, 1944 AND THE AIR REGULATIONS IN RESPECT TO THE ABOVE MENTIONED AIRCRAFT WHICH IS CONSIDERED TO BE AIRWORTHY WHEN MAINTAINED AND OPERATED IN ACCORDANCE WITH THE FOREGOING AND EITHER THE AIRCRAFT SPECIFICATION OR TYPE APPROVAL, THE WEIGHT AND BALANCE REPORT AND AIRCRAFT FLIGHT MANUAL.

JUL 7 1961

File 5008-BSS

(6) NOT VALID AFTER June 1, 1962

DATE OF ISSUE July 4, 1961

SEAL

ORIGINAL SIGNED BY
H. L. DEYARMOND

for MINISTER OF TRANSPORT

SEE REVERSE SIDE

FORM ACA-500 (PART C) (5-56)

U. S. DEPARTMENT OF COMMERCE — CIVIL AERONAUTICS ADMINISTRATION

BILL OF SALE

For and in consideration of $ 1150.00 the undersigned owner of the full legal and beneficial title of the aircraft described as follows:

AIRCRAFT MAKE AND MODEL: De Haveland D.H. 82C Tiger Moth

SERIAL NO. 3 REGISTRATION MARK N82F - BSS 62

does this ____ day of _____ 19____, hereby sell, grant, transfer, and deliver all of his right, title and interest in and to such aircraft unto:

(Name and address of purchaser—same as on Parts A and B of this form)

JAMES H. C. PALEN
NORTON ROAD BOX 57
ANCRAM, NEW YORK

and to _____ executors, administrators, and assigns, to have and to hold singularly the said aircraft forever, and certifies that same is not subject to any mortgage or other encumbrance except

TYPE OF ENCUMBRANCE	AMOUNT	DATE
NONE	NONE	3/3/62

IN FAVOR OF

In testimony whereof we have set OUR hand and seal this 3rd day of MARCH 1962

NAME OF SELLER W.G. Langille Ross E. Wayland. David T. Gill

BY (SIGN IN INK) W.G. Langille Ross E. Wayland D.T. Gill
(If executed for co-ownership, all must sign)

TITLE _____
(If signed for a corporation, partnership, owner, or agent)

ACKNOWLEDGMENT

State of New York

County of Columbia

On this 28th day of Feb. 1962 before me personally appeared the above named seller, to me known to be the person described in and who executed the foregoing bill of sale, and acknowledged that he executed the same as his free act and deed, and, if said bill of sale be that of a corporation swore that he was duly authorized to execute the same. Given under my hand and official seal the day and year written above.

NOTARY PUBLIC H.J. Pendorf

(SEAL)

MY COMMISSION EXPIRES 1 Jan. 63

RETAIN THIS COPY

Customs Form 7501
TREASURY DEPARTMENT
8.27, 8.51, 10.31, 10.91, C.R.
July 1960

CONSUMPTION ENTRY
BUREAU OF CUSTOMS

COLLECTOR'S COPY ☐
ACCOUNTING COPY ☐
STATISTICAL COPY ☐

Form approved.
Budget Bureau
No. 48-R217.6.

This Space For Census Use Only		This Space For Customs Use Only	
BLOCK AND FILE NO.	M.O.T.	ENTRY NO. AND DATE	
	MANIFEST NO.		
FOREIGN PORT OF LADING	U.S. PORT OF LADING	Dist. and Port Code: 01 - 05	Port of Entry Name / Term Bond No.

Importer of Record (Name and Address)
James H. C. Palen Box 57, Rhinebeck, New York

For Account of (Name and Address)
James H. C. Palen Box 57, Rhinebeck, New York

Importing Vessel (Name) or Carrier	B/L or AWB No.	Port of Lading	I.T. No. and Date
Tiger Moth Airplane CF-BSS		New Glasgow, Nova Scotia	
Country of Exportation	**Date of Exportation**	**Type and Date of Invoice**	**I.T. From (Port)**
Canada	March 1, 1962	Pro Forma 3/2/62	
U.S. Port of Unlading	**Date of Importation**	**Location of Goods—G.O. No.**	**I.T. Carrier (Delivering)**
Eastport, Maine	March 1, 1962		

MARKS & NUMBERS OF PACKAGES COUNTRY OF ORIGIN OF MERCHANDISE (1)	DESCRIPTION OF MERCHANDISE IN TERMS OF U.S.I.D. ANNO., NUMBER AND KIND OF PACKAGES (2)		ENTERED VALUE IN U.S. DOLLARS (3)	U.S.I.D. ANNO. REPORTING NO. (4)	TARIFF OR I.R.C. RATE (5)	DUTY AND I.R. TAX (6)	
	GROSS WEIGHT IN POUNDS (2a)	NET QUANTITY IN U.S. I.D. ANNO. UNITS (2b)				Dollars	Cents
Canada	Used DeHavilland Tiger Moth Airplane Serial No. 1847						
	1200	1	$1150	0370-0500	12½ %	145	75

PAID
$
MAR 2 1962
Cashier, U. S. Customs
Eastport, Maine

MISSING DOCUMENTS	THIS SPACE FOR CUSTOMS USE ONLY

I declare that I am the ☐ nominal consignee and that the actual owner for customs purposes is as shown above, or ☐ consignee or agent of the consignee. I further declare that the merchandise ☐ was or ☐ was not obtained in pursuance of a purchase or agreement to purchase. I also include in my declaration all the statements in the declaration on the back of this entry.

..... DATE

..... (Signature)

..... (Address)

☐ *Principal.*
☐ *Member of the firm.*
☐ ..... *of the corporation.*
(Title)
☐ *Authorized agent.*

CANADA

DEPARTMENT OF TRANSPORT

YOUR FILE NO.....

OUR FILE NO. 5008-BSS(A[illegible])

P. O. Box 42,
Moncton, N. B.,
July 4, 1961.

Mr. W. C. Langille,
24 Dahlia St.,
DARTMOUTH, N. S.

Dear Sir:-

Enclosed is Certificate of Airworthiness No. 996, issued in favour of your D.H. Tiger Moth 82C aircraft, registration CF-BSS. This certificate has been renewed "Not valid after June 1, 1962."

Yours truly,

D. W. Saunders,
Regional Controller, Civil Aviation.

Encl.

In the Matter of a certain Statutory Declaration

-and-

In the Matter of the sale of a Tiger Moth Aircraft Registration C.F./B.S.S. in the Department of Transport, Canada

-and-

In the Matter of a Statement made herein as to the ownership of the same,

I, Walter Graham Langille, Tatamagouche in the County of Colchester, Province of Nova Scotia, Airdraft Technician, do solemnly declare as follows:

(1) I live at Tatamagouche in the County of Colchester but am at presently employed at the Kelly Lake Airport, in the County of Halifax by the Fairey Aviation Company of Canada.

(2) I am with Ross E. Wayland, David T. Gill the owner of a Tiger Moth Aircraft Registered in the Department of Transport Canada, as [illegible]

(3) The said Aircraft is free from all [illegible] and liens at thedate hereof and myself and the above mentioned have a good title to the same.

And I make this solemn declaration conscientiously believing the same to be true and knowing that it is of the same force and effect as if made under oath under and by virtue of the Canada Evidence Act.

Declared at New Glasgow Nova Scotia this 27th day of February 1962, before me,

A Commissioner of the Supreme Court of Nova Scotia and a Queens Counsel of the

In the Matter of a certain Statutory Declaration

-and-

In the Matter of the sale of a Tiger Moth Aircraft Registration C.F./B.S.S. in the Department of Transport, Canada

-and-

In the Matter of a Statement made herein as to the ownership of the same,

I, Walter Graham Langille, Tatamagouche in the County of Colchester, Province of Nova Scotia, Airdraft Technician, do solemnly declare as follows:

(1) I live at Tatamagouche in the County of Colchester but am at presently employed at the Kelly Lake Airport, in the County of Halifax by the Fairey Aviation Company of Canada.

(2) I am with Ross.E.Wayland, David.T.Gill the owner of a Tiger Moth Aircraft Registered in the Department of Transport Canada, as C.F./B.S.S.

(3) The said aircraft is free from all encumbrances and liens at thedate hereof and myself and the above mentioned have a good title to the same.

And I make this solemn declaration conscientiously believing the same to be true and knowing that it is of the same force and effect as if made under oath under and by virtue of the Canada Evidence Act.

TRANSPORT-RECORDS
MAY 22 A.M.
File 5008-BSS

May 17, 1962

Department of Transport
Canada
Regional Controller,
Civil Aviation
Ottawa, Ontario, Canada

8027

Dear Sir:

Having purchased a D. H. Tiger Moth 82C air-craft registration CF-BSS, our federal aviation bureau requests that you send me a statement that the Canadian registration has been cancelled.

In addition, it should describe make, model and manufacturer and registration number.

Enclosed are copies of transactions, including bill of sales, payment and custom entry to verify the sale of this plane.

Very truly yours,

James H. C. Palen
Box 57
Rhinebeck, N. Y.

JP?ms

Coded LB
22.5.62

Certificates Cancelled
22.5.62

Noted
LB

D

LB/dv

5008-BSS

5008-14

O t t a w a, Ontario,
May 23rd, 1962.

Mr. James H. C. Palen,
Box 57,
Rhinebeck, N. Y.

Dear Sir:

This is to confirm that the registration of D. H. Tiger Moth 82C aircraft, CF-BSS, serial number 1847, was cancelled from the Canadian Civil Aircraft Register, effective May 22, 1962.

Yours truly,

R. W. Goodwin,
Director, Civil Aviation.

c.c. RDAS MONCTON

L. LB.

FILE No. 5008 - BSZ 8-5-67 VOLUME No. 1

VOL. 1

5008 - BSZ

DEPARTMENT OF TRANSPORT

FROM MAY 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BSZ - D.H.82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS

Cancelled

FILE No. 5008 - B S Z

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM MAY 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BSZ - D.H.82c TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG 22 1947	16508.	CAR		CS	SEP 8 - 47
FEB 15 47 22 1947	19092	CAR			SEP 19 47
	19740 - 19741	CAR		SJ	
NOV 1 47	24395	CAR		H	OCT 7 - 47
	—	Car			NOV 12 47
JAN 5 - 1948	31627	CAR		SJ	JAN 6 - 1948
	32838	CAR		SJ	JAN 17 1948
JAN 15 1948 APR 1949	m bale	bar		Hac	APR 19 1949
APR 26 1950	3533	CAR		JGH	APR 27 1950
APR 18 1962	21109	SRL			APR 24 1962
APR 24 1962	—	(SA) Records		GL	APR 24 1962
MAY 11 1962	6760	SRL		LB	MAY 16 1962
MAY 16 1962	—	SAE/A		[illegible]	MAY 17 1962

FILE No. 5008 - B19 - 26 VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM MAY 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE CF - BSZ TIGER MOTH

5008 - B19 - 26 VOL. 1

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
JUN-7 1946	5639	S.A.R.		C.E.T.	JUN-7 1946
		Trans		[illegible]	AUG 12 1946
	A 15513.	AR			AUG 15 1947

AIR SERVICES
CIVIL AVIATION DIVISION

5008-B19-26

1 Montgomery Avenue, Toronto,
May 13th, 1946.

Cape Breton Flying Club, Ltd.,
Box 209,
SYDNEY, N.S.

Dear Sir:

Receipt is acknowledged of your application for registration of Tiger Moth, CF-BSZ, Serial No. 1677, which you recently purchased from the War Assets Corporation, through the Royal Canadian Flying Clubs Association, with the following papers:-

(A) Application form in triplicate.
(B) $10.00 fee.
(C) Letter from the R.C.F.C.A., dated May 2nd, 1946, re ownership.
(D) Report on Overhaul, dated May 7th, 1946.
(E) Aircraft & Engine log books - returned you herewith.

Receipt No. 28220 for the $10.00 fee is attached hereto.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BSZ as a commercial landplane, on day contact flying until June 12th, 1946. The all-up-weight of the aircraft is not to exceed 1,750 pounds.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DG /AC
c. . Headquarters

Tiger Moth Aircraft, CF-BSZ, formerly RCAF No. 8875, received at Weston Aircraft Limited, Oshawa, Ontario for Certificate of Airworthiness on behalf of the owner, Cape Breton Flying Club, Sidney, N.S., and the following work carried out:

Aircraft weighed - 1,249 lbs.
Compass swung
R.C.A.F. markings removed
Civil registration installed
Engine thoroughly checked, serviced and adjusted.
Oil tanks drained and flushed.
Gas strainers and oil strainers cleaned and saftied.
Brakes inspected, checked and adjusted
All control cables, pins and bolts inspected.
Undercarriage dismantled for inspection of pins and bolts.
Rudder straightened at trailing edge.
Left hand aileron straightened at bow.
Right and left hand elevators straightened at inboard bow.

I hereby certify that all work listed has been done using certified materials and according to accepted practice; that all manufacturers' service bulletins affecting safety have been complied with, to date, and that no unapproved modifications have been incorporated and that the airframe is airworthy.

WESTON AIRCRAFT LIMITED,

Frank Kilburn
A-844

All controls checked for soundness, correct action and for presence of all locking devices.

A-1983

This is to certify that I have test flown Tiger Moth Aircraft CF-BSZ, and that it performed in a satisfactory manner.

752.

1946

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

3

PATRON
HIS EXCELLENCY THE RIGHT HON. THE EARL OF ATHLONE, K.G.
GOVERNOR-GENERAL OF CANADA

Honorary President
J. A. WILSON, M.E.I.C. . . . . Ottawa

Honorary Vice-Presidents
AIR MARSHAL L. S. BREADNER, C.B., D.S.C. Ottawa
A. D. MCLEAN . . . . . Ottawa
J. L. APEDAILE, O.B.E., C.A. . . . . Ottawa

President
S. R. BERNARDO . . . . . Brantford

First Vice-President
D. K. YORATH . . . . . Calgary

Treasurer
H. A. YATES . . . . . Ottawa

Secretary-Manager
W. G. WELSTEAD . . . . . Ottawa

Representative in Canada for
Federation Aeronautique Internationale

JOURNAL BUILDING
OTTAWA, *Canada*

DIRECTORS

Maritime Zone	J. W. HUMPHREY	Moncton
St. Lawrence Zone	A. S. DAWES	Montreal
Central Zone	E. G. STORIE	Oshawa
Mid-West Zone	J. R. MORGAN	Winnipeg
Saskatchewan Zone	A. J. E. SUMNER	Saskatoon
Alberta Zone	W. R. MAY	Edmonton
Pacific Zone	W. G. MACKENZIE	Vancouver

May the 2nd, 1946

District Inspector,
Civil Aviation.

District Concerned.

Dear Sir: Cape Breton Flying Club

Please be advised that the undermentioned Tiger Moth Aircraft was purchased by this Association on the War Assets Sales Order shown and has this date been resold to the Cape Breton Flying Club under a clear title of ownership.

R.C.A.F. No.	Makers No.	War Assets Sales Order No.	
8875 ✓	1677	MTL 2717X	14 June '45

This Association has made no application for civil registration.

May this letter serve as a bill of sale for the purpose of application by the Cape Breton Flying Club for their Certificate of Registration.

Yours truly,

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

W.G. Welstead,

Secretary-Manager.

WGW:MD

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier — made by: DeHavilland Aircraft

Type: D.H. 82 C. — Maker's No.: 1677

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	Same
Length o/a in feet	23' 11"	"
Height o/a in feet	8' 10"	"

Cubic Capacity (of Airship or Balloon):

Weight equipped, but without load, fuel, or oil: 1249 lbs.

Total weight authorized (fully loaded) in lbs: 1733 lbs. Air speed: 90 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments: Bank & Turn, Altimeter, R.P.M. Indicator, Airspeed Indicator, Compass.
2. Gauges: Oil Temperature and Pressure
3. Lights: Navigation, Cockpit downward identification,
4. Signals: None
5. Fire Extinguishers: Two
6. Parachutes: None
7. Tools: None
8. Other Equipment: Safety Belt for each passenger.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C Serial No.			
Pusher or Tractor	Tractor			
Right or Left Hand	Clockwise			
No. of Cylinders	4			
H.P.	120			
Bore	4.646"			
Stroke	5.512"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on: April 23/46

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date: May 14/46 Signature: H. Ball

Registration approved and Registration Mark C.F. BSZ allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

This aircraft from RCAF Reg. No. 8875

BSZ

2413
9-39

4

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Cape Breton Flying Club Ltd.

Signature of Applicant.....H. B. Fleming Secy

Date of Application.....May 3rd/42

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
Cape Breton Flying Club Ltd.	Box 209, Sydney, N. S.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
Mr. F. F. Crooks	President	Sydney, N. S.	Canadian
MR. T. J. Morris	Vice President	"	"
Mr. M. B. Vail	Treasurer	"	"

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station.....Sidney, Nova Scotia

Date of manufacture or reconstruction.....1/5/42

Noted CSI

Crew required.....1.

Accommodation for what number of passengers.....1.

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

War Assets Sales Order on
5302-R2

SG/M

YA

5008-B19-26 ✓
~~5008-B19-20~~
~~5008-2~~

Ottawa, Ontario,
May 10th, 1946.

Weston Aircraft, Limited,
P. O. Box 332,
Oshawa, Ontario.

Dear Sirs:

Your letter dated April 30th, 1946, addressed to the District Inspector, Air Regulations, Toronto, has been forwarded to this office for reply.

The duplicate allotment of registration markings CF-BST is sincerely regretted and, in accordance with understanding reached in telephone conversation, it will be quite in order for markings CF-BSZ to be displayed on the Tiger Moth aircraft owned by the Cape Breton Flying Club.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

cc DIAR TORONTO

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

5

2
8-45

TORONTO, May 14th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B19-26	Tiger Moth CF-BSZ	5008-B19-26

A 5639

TRANSPORT-RECORDS
MAY 15 A.M.
File 5008-B19-26

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

1. Attached hereto are the following papers relating to the registration of Tiger Moth, CF-BSZ, Serial No. 1677, recently purchased by the Cape Breton Flying Club, Limited from the War Assets Corporation, through the Royal Canadian Flying Clubs Association:-

(a) Application form in duplicate.
(b) $10.00 fee (See page 156 in Cash Book, Receipt No. 28220).
(c) Letter from the R.C.F.C.A., dated May 7th, 1946, re ownership.
(d) Report on Overhaul, dated May 7th, 1946.
(e) Copy of letter of temporary authority.

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

3567 (R)
1135 (A)

VALID FOR DAY FLYING ONLY.

7

2462
9-39

CANADA
DEPARTMENT OF TRANSPORT
CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1135

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) Cape Breton Flying Club Ltd.,
2. Christian name
3. Address Box 209, Sydney, N.S.
4. Nationality British

NAME OF CONSTRUCTOR

5. Name DeHavilland Aircraft of Canada Ltd.

NATIONALITY AND REGISTRATION MARKS

6. CF-BSZ

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 82C Constructor's No. 1677
8. Place and year of construction of aircraft Toronto, Ontario, 1942

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes One
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal and Acrobatic
14. Subdivision a, b, c, d & e
15. Maximum span (in flying position) 29' 4"
16. Maximum length (in flying position) 23' 11"
17. Total height (with and without trolley in case of seaplanes) 8' 9"

ENGINES

18. Number installed: One

19. Makes: DeHavilland

20. Types:

21. ~~International~~ power of the engine or engines at:

(a) Sea Level 125/130 H.P. at 2100 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews — Number fitted: One ..... Types ..... No .....
Pitch ..... Diameter .....

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	1249 lbs.
	(b) Seaplane	lbs.
	(c) Skiplane	1288 lbs. (12.1.48)

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	137 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 19 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	18 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 2 Imp. gals.	
28. Weight allowed for crew	170 lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full (Skiplane) 212 lbs (12.1.48)	251 lbs.
32. Maximum total weight authorized	lbs.
Landplane (Acrobatic) 1770 lbs. (Normal)	1825 lbs.
* ~~Seaplane~~	lbs.
Skiplane	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane (Normal) Eighteen hundred and twenty-five pounds.
~~Seaplane~~
Skiplane (Acrobatic) Seventeen hundred and seventy pounds.

34. Minimum crew necessary: One

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2400 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated May 13, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, 1938.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 25th day of May, 19 46.

for C. Thavenet
Superintendent, Air Regulations.

* If flown acrobatically the maximum weight must not exceed 1770 lbs.

8

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3567

NATIONALITY AND REGISTRATION MARKS CF-BSZ

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Can.Ltd., Toronto, Ont.
3. Constructor's serial number	1577
4. Name of owner	Cape Breton Flying Club Ltd.,
5. Address of owner	Box 209, Sydney, N.S.
6. Nationality of owner	British
7. Usual station of aircraft	Sydney, N.S.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 15th day of May, 19 46 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BSZ and is of Canadian nationality.

Given at Ottawa this 25th day of May, 19 46.

J. C. Thauvette

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

MIM/ZC/LEM

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.

" (b) " " " mails.

" (c) " " " goods.

" (d) Private purpose aircraft.

" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and

" (f) Record or racing aircraft.

" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		May 15, 1947. Sept. 11/48	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure Gauge
Oil Temperature Gauge
Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

(Normal) Safety belt for each occupant.
(Aerobatic) Safety harness must be installed.

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

Note: This certificate is subject to Air Regulations, 1938, and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

5008-B19-26

REGISTERED

Ottawa, June 4th, 1946.

Cape Breton Flying Club Ltd.,
Box 209,
Sydney, N.S.

Dear Sir:-

Enclosed please find Certificate of Registration No. 3567 and Certificate of Airworthiness No. 1155 for your D.H.82C Tiger Moth aircraft CF- BSZ, Serial No. 1677.

The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. In the meantime, a temporary log should be kept.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

10

5008-B19-26

REGISTERED

Ottawa, June 4th, 1946.

Cape Breton Flying Club Ltd.,
Box 209,
Sydney, N.S.

Dear Sir:-

Enclosed please find Certificate of Registration No. 3567 and Certificate of Airworthiness No. 1155 for your D.H.82C Tiger Moth aircraft CF- BSZ, Serial No. 1677.

The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. In the meantime, a temporary log should be kept.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

Encls.

ORIGINAL ON FILE 5008-B19-23

COPY

FOR FILE 5008-B19-24

25

8
6-44

LEJG

CANADIAN NATIONAL TELEGRAPHS

DAYLETTER COLLECT

910 CONFEDERATION BUILDING
MONTREAL QUEBEC JUNE 11 1946.

TRANSPORT-RECORDS
JUN 12 P.M.
File 5008-B19-24

MR STEVENSON
CAPE BRETON FLYING CLUB
SYDNEY N S

AR147 REWIRE AIRCRAFT BSW BSX BSY BSZ PROVIDED SAME HAVE BEEN SIGNED OUT AIRWORTHY AND SATISFACTORILY TEST FLOWN FOLLOWING REASSEMBLY THE TEMPORARY AUTHORITY FOR OPERATION PREVIOUSLY GIVEN IS HEREBY EXTENDED NOT VALID AFTER JULY TENTH FORTY SIX

J L BLONDEAU
DISTRICT INSPECTOR AIR REGULATIONS

14:50 hrs
AR

12

5008-B19-26

REGISTERED

OTTAWA, Ontario.
Nov.8th , 1946.

Cape Breton Flying Club Ltd.,
Box 209,
Sydney, N.S.

Dear Sirs:-

Enclosed are Engine and Journey and Aircraft Log Books for your aircraft, CF- BSZ.

The Certificates of Registration and Airworthiness must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

(S. Graham),
Superintendent, Air Regulations.

L.P.

COPY

13

ORIGINAL ON FILE 5008-B19-23

COPY FOR FILE 5008-B19-24
B19-25
B19-26

TRANSPORT-RECORDS
AUG 13 A.M.
File 5008-B19-26

CANADIAN NATIONAL
TELEGRAMS

A15513

MONCTON NB AUGUST 11 1947

CAPE BRETON FLYING CLUB

SYDNEY N S

MR 192 REURLET SECOND INSTANT STOP AIRCRAFTS MAY NOT BE FLOWN UNLESS IN POSSESSION OF VALID CERTIFICATE OF AIRWORTHINESS STOP FORWARD CERTIFICATES OF REGISTRATION AND AIR/WORTHINESS WITH ENGINEER'S CONDITION REPORT STOP AIRCRAFTS CF DASH BAKER SUGAR WILLIAM CF DASH BAKER SUGAR XRAY CF DASH BAKER SUGAR YOKE CF DASH BAKER SUGAR ZEBRA GROUNTED UNTIL YOU ARE IN POSSESSION OF THESE VALID CERTIFICATES.

L KNIGHT

FOR DISTRICT INSPECTOR AIR REGULATIONS

CONFIRMATION

8
4-47

COPY

TRANSPORT-RECORDS
AUG 15 A.M.
File 5008-B19-26

C.A.

ORIGINAL ON FILE 5008-B19-23

COPY FOR FILE 5008-B19-24, 5008-B19-25, 5008-B19-26

A15783

CANADIAN NATIONAL TELEGRAPHS

MONCTON N B AUGUST 13 1947

To Cape Breton Flying Club,
Sydney, N.S.

MR 195 THIS WIRE TEMPORARY AUTHORITY OPERATE FOLLOWING TIGER MOTH AIRCRAFT CF DASH BAKER SUGAR WILLIAM CF DASH BAKER SUGAR XRAY CF DASH BAKER SUGAR YOKE CF DASH BAKER SUGAR ZEBRA COMMERCIALLY NOT VALID AFTER SEPT 12 1947 SUBJECT SAME BEING MAINTAINED IN AN AIR-WORTHY CONDITION.

L KNIGHT
FOR DISTRICT INSPECTOR AIR REGULATIONS

8
4-47

L.P.

COPY

14

A16508

ORIGINAL ON FILE 5302-C7

COPY FOR FILE 5008-B19-23 5008-B19-26
B19-24 5802-
B19-25 5802-

DEPARTMENT OF TRANSPORT

Room 422, Dom. Govt. Bldg.,
Moncton, N.B. August 18, 1947.

Cape Breton Flying Club
Tiger Moth Aircraft - Lapsed C's. of A.

TRANSPORT-RECORDS
AUG 21 P.M.
File 5008-B19-2C

Controller of Civil Aviation,
Department of Transport,
Hunter Building,
OTTAWA, Ontario.

Attention: Superintendent, Air Regulations

1. Further to our telephone conversation of the 10th. instant, we wish to advise that information was received in this office on August 2nd. to the effect that Certificates of Airworthiness of Tiger Moths CF-BSW, CF-BSX, CF-BSY and CF-BSZ, had lapsed as from April 26, 1947, that the aircraft were still flying, and that the Cape Breton Flying Club were instructing R.C.A.F. Air Cadets on same.

2. Colonel F.T. Crooks, President of the Cape Breton Flying Club, when pressed for a reason for this laxity, stated that everybody had "just forgotten".

3. It is considered that this is a serious offence for any operator, especially a member of the Royal Canadian Flying Clubs Association, and it is recommended that the Limited Commercial Pilot's Certificate of Mr. F.T. Cooke, and the Air Engineer's Certificate of Mr. U.B. MacGillivray, be suspended for ninety days.

4. These certificates have been extended temporarily for a period of one month, during which period it is intended to carry out a complete inspection of the aircraft.

8
4-47

L. Knight,
for District Inspector, Air Regulations.

LK/H

CTT/M

~~5000-07~~
~~5000-3130~~
~~5000-37940~~
~~5000-810-01~~
~~5000-819-26~~
~~5000-819-25~~
~~5000-819-29~~

15

Ottawa, Ontario,
September 5th, 1947.

REGISTERED

The Secretary,
Cape Breton Flying Club,
Sydney, Nova Scotia.

Dear Sir:

We have been advised that the Cape Breton Flying Club operated Tiger Moth aircraft CF-BSW, CF-BSX, CF-BSY and CF-BSZ for a period of over three months while the certificates of airworthiness were not in good standing and that no satisfactory reason was given for the failure to comply with the Regulations. This Department is seriously concerned not only by the breach of regulations but by the evidence of laxity on the part of your management and engineering staff in attending to the annual inspection and renewal of these certificates.

It is, therefore, necessary to warn the Club that the Aeronautics Act provides for the imposition of penalties in the event of failure to observe the Air Regulations, 1938 and the safety requirements of this Department and that, in future, strict compliance will be required.

Yours very truly,

(S. Graham),
Superintendent, Air Regulations.

MONCTON

CTT/M

16

Ottawa, Ontario, September 5th, 1947.

Cape Breton Flying Club.

~~5302-C7~~
~~5802-1432~~
~~5802-17962~~
~~5008-B19-24~~
5008-B19-26 ✓
~~5008-B19-25~~
~~5008-B19-23~~

District Inspector, Air Regulations,
P. O. Box 42,
Moncton, New Brunswick.

1. Copy of a letter addressed to the Secretary, Cape Breton Flying Club, is drawn to your attention. It is considered that the prolonged operation of the Cape Breton Flying Club Tiger Moth aircraft while the certificates of airworthiness were invalid is a reflection not only on the Club but in a lesser degree upon the supervision exercised by the District Office over the Club's operation. This fact has been noted and I am directed to draw it to your attention.

(S. Graham),
Superintendent, Air Regulations.

Enc.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

17 2
6-46

Room 422, Dominion Govt. Bldg.,
Moncton, N. B. (PLACE) Sept. 8, 1947. (DATE)

YOUR FILE	SUBJECT	OUR FILE
	Inspection trip to Sydney, N. S. Tiger Moth 82C - CF-BSZ, Cape Breton Flying Club.	5008 B-19-26

District Inspector, Air Regulations,
Room 422, Dominion Government Bldg.,
Moncton, N. B.

1. On Sunday, August 31, 1947, I grounded subject aircraft for the following reasons:

(1) Loose tipping and missing rivet in propeller tips.
(2) Loose rivets in Pitot head attachment.
(3) Compass to be swung (no cards installed).
(4) Hand pyrene fire extinguisher empty.
(5) Rear cockpit seat broken in two places.
(6) Suspect leak in gas tank.

2. The following also noted:

(1) Aircraft dirty.
(2) Crash pads not installed in cockpits.
(3) Cracked engine cowlings.
(4) Ringworm in fuselage and right lower wing.

3. The aircraft was made serviceable Sept 2, 1947. Attached please find copies of worksheet and flight test report. Originals placed in log-book.

4. I recommend that the ringworm be removed from above mentioned surfaces. Please note: Skis for this aircraft and Certificate of Airworthiness not endorsed for skis.

J. Hardman,
Resident Inspector, A.I.D.

JH/1

COPY

18

ORIGINAL ON FILE.....

COPY FOR FILE.....

6. You will note from the attached inspection reports that the general condition of the Cape Breton Flying Club Aircraft is poor.

7. We are forwarding the above information to further strengthen our recommendation contained in our letter of August 18, 1947, that the certificates of Flying Instructor F.T. Cooke and Air Engineer U.G. MacGillivary be suspended for ninety days, and that the Club Management be severely reprimanded for permitting these conditions to exist.

Lt Knight,
for District Inspector, Air Regulations.

ENCLS.
LK/H

8
4-47

L.P.

A19092 19

COPY

TRANSPORT-RECORDS
SEP 13 A.M.
File 5302-6/9-2 6

ORIGINAL ON FILE ..... 5302-67 .....

COPY FOR FILE .....

DEPARTMENT OF TRANSPORT

Room 422, Dom. Govt. Bldg.,
Moncton, N.B., September 10, 1947.

Cape Breton Flying Club, Sydney, N.S.

Controller of Civil Aviation,
Hunter Building,
Ottawa, Ontario.

1. Further to our letter of August 18, 1947, and with particular attention to paragraphs three and four thereof, we wish to submit the following general report on the operations of the subject noted club.

2. Resident Inspector, A.I.D., proceeded to Sydney on August 30, remaining until September 3; Inspector Butler proceeded to Sydney on September 3, remaining until September 5, during which period a thorough inspection of the subject Flying Club's aircraft was carried out, and copies of reports thereon are attached hereto.

3. Fairchild Cornel Aircraft, CF-CVL, has been flown by members of the club without a valid Certificate of Airworthiness. (see copy of letter attached addressed to D.I.A.R., Montreal).

4. The Tiger Moth Aircraft have been flown at Sydney for the under-mentioned times, since the lapse of Certificates of Airworthiness of April 26, 1947, and prior to reinstatement on August 13, 1947:

CF-BSX	60 hrs.	
CF-BSY	46 "	55 mins.
CF-BSW	3 "	25 mins.
CF-BSZ	10 "	45 "

5. The Club Engineer was notified on February 4, 1947, by Assistant Inspector, A.I.D., J.O. Noury , to carry out certain work, which had not been done at the inspection above mentioned.

8
4-47

COPY

20

ORIGINAL ON FILE 5008 - B 19 - 24 A19740

COPY FOR FILE 5008 - B 19 - 26

CANADIAN NATIONAL TELEGRAPHS

Post office Box 42. Moncton N.B.
Sept. 17/1947

TRANSPORT-RECORDS
SEP 18 A.M.
File 5008-B-19-26

Cape Breton Flying Club,
Sydney N. S

Mr 262 This wire your temporary authority to operate Tiger Moth Aircraft CF dash Baker Sugar Xray and dash Baker Sugar Zebra commercially not valid after October 12/47 VFR day flying only and subject to same being maintained in an airworthy condition.

L. Knight
for District Inspector Air Regulations.

CONFIRMATION

8
4-47

2.1

COPY

ORIGINAL ON FILE 5008 - B 19 - 25

COPY FOR FILE 5008 - B 19 - 26

CANADIAN NATIONAL TELEGRAPHS

September 14/1947.
Post Office Box 42, Moncton N. B

TRANSPORT-RECORDS
SEP 18 A.M.
File 5008-B-19-26

Cape Breton Flying Club,
Sudney N. S.

MR 263 This wire your temporary to operate Tiger Moth Aircraft CF dash Baker Sugar Yoke and CF dash Baker Sugar Zebra commercially not valid after October 12/47 VFR day flying only and subject to same being maintained in an airworthy condition.

A19741

L. Knight
for District Inspector Air Regulations.

CONFIRMATION

noted

8
4-47

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

22 2 6-46

Room 422, Dom. Govt. Bldg.,
Moncton, N.B. (PLACE) September 15, 1947. (DATE)

YOUR FILE	SUBJECT	OUR FILE
CAR	D.H. 82C Tiger Moth Aircraft CF-BSZ Cape Breton Flying Club, Ltd., Sydney, N.S.	5008-B 19-26

A19619

TRANSPORT-RECORDS
SEP17 A.M.
File 5008-B 19-26

Controller of Civil Aviation,
Hunter Building,
OTTAWA, Ontario.

1. Please be advised that Certificate of Registration No. 3567 and Certificate of Airworthiness No. 1135 for the subject noted aircraft, have been renewed to read "not valid after September 11, 1948", in view of the satisfactory condition of the aircraft.

2. Submitted for your information and record, please.

L. Knight,
for District Inspector, Air Regulations

noted
esd

LK/H

2W

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

v1 2 6-46

P.O. Box 42,
Moncton, N.B. October 30, 1947.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Tiger Moth CF-BSZ Cape Breton Flying Club, Sydney, N.S.	5008-B 19-26

A24395

TRANSPORT-RECORDS
NOV 1 AM
FILE 5008-B19-26

Controller of Civil Aviation,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. Attached hereto please find reports of Air Engineer U. G. MacGillivray and Instructor F.T. Cooke, covering repairs and test flight to the subject aircraft following an accident which happened on September 5, 1947.

2. The accident above mentioned was the result of a hard landing on local solo practice by Pilot C. R. Muggah; said report also being attached hereto.

L. Knight

L. Knight, per J.H.
for District Inspector, Air Regulations.

Encls.
LK/H

ENTERED
IN ACCIDENT
RECORDS
...A.J.....

N

Cape Breton Flying Club

P. O. BOX 209

Sydney, Nova Scotia

Oct 27 /47

Department of Transport
Civil Aviation Branch
OCT 29 1947
File No. 5008-B19-26
MONCTON, N. B.

Mr Leslie Knight,
Dist. Inspector Air Regs.
Federal Bldg Moncton N.B.

Dear Sir,

I hereby submit my report, of test flight on a/c CF-BSZ.

Engine.	Functioning prpperly
" Contrpls.	Functioning Properly
Airspeed Inst.	O.K.
Altimetre "	"
Oil Temp "	60-65
" Press "	40- 45
Compass "	Correct Heading.
Bank&Turn"	Functioning Properly

Rudder Elevator & Aileron Controls moving freely and in proper seaquence. The a/c was Rolled looped and Spun to my satisfaction.

Hopeing this report will meet with your satisfaction ,

Iremain yours truly,

Frank T. Cooke. C.F.I.

Cape Breton Flying Club

P. O. BOX 209

Sydney, Nova Scotia

Department of Transport
Civil Aviation Branch
OCT 29 1947
File No. 5008-B 19-26
MONCTON, N. B.

Sept. 6th., 1947

Repairs and replacements to aircraft CF-BSZ following inspection after hard landing.

New port compression leg assembly installed.
R.C.A.F. tag no. 1332
Pt. No. DHC 1642
Sig. by W. Fossyth, Sqd.

New tire port, Dunlop 700x7½ Ser. No. CN 456784
New tube port, Dunlop 700x7½

New aileron lever installed from spare parts. No tag no.
Aileron tip repaired as per maintenance manual.

Undercarriage , wing roots at fuselage, centre section, and port wing spars, examined and found satisfactory.

U. G. Mac Gillivray

U. G. Mac Gillivray Lisence # 2233

24

Cape Breton Flying Club

P. O. BOX 209

Sydney, Nova Scotia

Department of Transport
Civil Aviation Branch
OCT 29 1947
File No. 5008-B-19-26
MONCTON, N. B.

Sept 5th., 1947

Aircraft CF-BSZ had hard landing, causing the following damage.

Bending the port compression leg assembly 4" from fork end.
Blowing out port tire and tube.
Port aileron lever bent.
Fabric scraped off aileron tip.(Port)

U. G. Mac Gillivray

U. G. Mac Gillivray Lisence #2233

Cape Breton Flying Club

2 3

P. O. BOX 209

Sydney, Nova Scotia

Oct. I4/47

Department of Transport
Civil Aviation Branch
OCT 17 1947
File No. 5008-B 19-26
MONCTON, N. B.

Mr Leslie Knight,

Dist Inspector Air Regs,

Federal Bldg. Moncton N.B.

Dear Sir,

I hereby submit my report on flying accident that happened to CF-BSZ on Friday Sept.5/47.

Said aircraft was damaged, the result of a hard landing on local solo practice. In the process of makeing a spot landing I noticed that i was overshooting, to correct I sideslipped, on the recovery I levelled off too high, the air-craft dropped so rapidly I was unable to recover with full use of the throttle.

The damage sustained by the aircraft was submitted to you some time ago by Mr McGillvary our club engineer. Hoping this report will meet with your approval

I remain,

Yours Truly,

C. B. Murphy

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6102

CANADIAN NATIONAL TELEGRAPHS

W M ARMSTRONG, GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED
FULL RATE MESSAGE
DAY LETTER
NIGHT MESSAGE
NIGHT LETTER
EVENING & SUNDAY

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS
			DAY LETTER COLLECT

Send the following message, subject to the terms on back hereof, which are hereby agreed to

TRANSPORT-RECORDS
JAN 5 A.M.
Copies 5008-B19-26

Moncton, N.B., Jan. 2, 1948.

Mr. F. T. Cooke,
Cape Breton Flying Club,
SYDNEY, N.S.

A31627

ANN 4 THIS TELEGRAM YOUR TEMPORARY AUTHORITY OPERATE AS SKIPLANE D.H.82 AIRCRAFT CF DASH BAKER SUGAR ZEBRA NORMAL GROSS WEIGHT ONE EIGHT TWO FIVE POUNDS AEROBATIC GROSS WEIGHT ONE SEVEN SEVEN ZERO POUNDS NOT VALID AFTER JANUARY 31 1948 FORWARD FORMAL CERTIFICATES FOR AMENDMENT.

Miss Jones
To note & F.A.
HHP 6-1-47

R W GOODWIN
DISTRICT INSPECTOR AIR REGULATIONS

Noted
2/1

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

P.O. Box 42,
Moncton, N.B., January 12, 1948.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 19-26	Certificate of Airworthiness No. 1135 D.H. 82C CF-BSZ	5008-B 19-26

A32838

TRANSPORT-RECORDS
JAN 15 A.M.
File 5008-B19-26

Controller of Civil Aviation,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. The above referenced Certificate of Airworthiness has been amended as follows:

Item 25: Weight of aircraft empty
Skiplane.....1288 lbs. ✓
dated 12/1/48.

Item 31: Maximum commercial load (passengers,goods) authorized when the fuel and oil tanks are full ✓
Skiplane.....212 lbs.
dated 12/1/48.

Item 32: Maximum total weight authorized ✓
Skiplane: (Acrobatic).....1770 lbs.
(Normal).....1825 lbs.
dated 12/1/48.

Item 33: Maximum total weight authorized (write in full) ✓
Skiplane: (Normal) Eighteen hundred and twenty-five pounds. (Acrobatic) Seventeen hundred and seventy pounds. dated 12/1/48.

Mrs Jones
to note & P.A.
HLP 16-1-48

2. The above aircraft has been equipped with Elliott 10½ Skis and DeHavilland Pedestals in accordance with installation drawing DHC-1438, Issue IV.

R. W. Goodwin,
A/District Inspector, Air Regulations.

RWG/H

Noted
CDS

/BSK

pa
30

April 20th, 1950.

Lapsed Certificate 5008-319-26

District Controller of Air Services.
P. O. Box 42,
Moncton Airport,
MONCTON, N.B.

Attention: District Superintendent, Air Regulations.

1. Aircraft CF- BSK Type D.H.Tiger Moth 82C Serial No. 1677
Registration No. 3567 according to our records, lapsed during the year 1948.

2. The last known address of the owner is

Cape Breton Flying Club Limited,
Sydney,
N. S.

3. Please investigate the disposal of this aircraft and the owner's intention re:

(a) is the aircraft to be used again,
(b) if not, the Certificates should be forwarded for cancellation,
(c) if the Certificates are not available, a statement from the owner as to their loss.

4. This information is necessary to complete the records of this aircraft.

(C. W. Travers),
Superintendent, Air Regulations.

AC-5-96
11-49

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3/ 2 11-48

P.O. Box 42,
Moncton, N.B., April 24, 1950.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Lapsed Certificate D.H. 82C Aircraft - CF-BSZ	5008-B 19-26

3533

TRANSPORT - RECORDS
APR 26 P.M.
File 5008-B19-26

Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

Attention: Controller of Civil Aviation

1. Reference to your letter of April 20th. regarding lapsed certificate for Moth aircraft, CF-BSZ.

2. This aircraft is presently in storage at Sydney, Nova Scotia, in a damaged condition, and as the Cape Breton Flying Club is no longer in operation, it is difficult to state just what the future status of this aircraft will be.

3. However, as the machine is repairable, it is not recommended that any action be taken toward cancellation of the certificate at present.

noted JCF

J.C. Folkins
(J. C. Folkins)
for District Controller, Air Services,
Moncton, N. B.

32

ORIGINAL ON FILE: 5003-10-6

COPY FOR FILE: 5002-23007 5832-16961
-18009 -26234
-18453 -23628
-23567 5250-616

5008-319-25

27539

DEPARTMENT OF JUSTICE, Canada.

Ottawa, August 16th, 1961.

BY HAND.

161279
Re: Prosecution of Clouett et al,
Sydney, Nova Scotia.

Dear Sir:

I enclose copy of a letter, dated August 6th, from the agent of the Minister of Justice.

I should be glad to have your comments thereon, with particular reference to the last paragraph of the agent's letter.

Yours truly,

W.H. Jackett,
Asst. Deputy Minister.

The Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Encl.

FOR ACTION
SEE ORIGINAL
SGD.....
OFFICE SERVICES

9

MEMORANDUM

CLASSIFICATION

TO / A: A.D.M.A., Ottawa, Ontario.

Original on 5008-BRO

TRANSPORT-RECORDS
5008 - BSZ
16 AM
5008 - BRO

YOUR FILE No. / Votre dossier: 2409

OUR FILE No. / Notre dossier: 5008-1 (ARM)

FROM / De: R.D.A.S., Moncton, N. B.

DATE: April 12, 1962.

SUBJECT / Sujet: Civil Aircraft Register - Aircraft CF-BRO and CF-BSZ.

1. It has been noted on reviewing the latest edition of the Aircraft Register that the subject aircraft which have been withdrawn from use are still listed.

2. Forwarded for your information.

for: J. A. Lenahan,
Regional Director, Air Services.

CONTROL
5008 - BSZ

CGSB—6GP22a PP&S Cat. No. 3593

LM/hmd

R.D.A.S. - MONCTON

5008-1(ARM)

~~5008-BRO~~
-BSZ

D.C.A.

April 24, 1962.

Civil Aircraft Register - Aircraft CF-BRO and BSZ

1. Reference is made to your letter of April 12th, 1962, concerning the Aircraft Register which still lists both the above aircraft.

2. The reason they are listed is that we have never received an official request for cancellation of the registrations. If your office is in receipt of information regarding cancellation; kindly advise and we will take action to cancel the registrations from the Aircraft Register.

for Director, Civil Aviation

MEMORANDUM

CLASSIFICATION

TO A.D.M.A.
Ottawa

5008-BRO

MAY 10 P.M. 5008-BSZ
5008-BRO

YOUR FILE No. Votre dossier 6260

OUR FILE No. Notre dossier 5008-1 (ARM)

FROM De R.D.A.S.
Moncton

DATE 8 May 1962

FOLD

SUBJECT Sujet Civil Aircraft Register - Aircraft CF-BRO and BSZ

1. This refers to your letter of 24 April 1962 regarding deletion of the subject noted aircraft from the aircraft register.

2. Both of these aircraft were destroyed and withdrawn from use prior to the fire that destroyed all of the records of this Regional office in 1951. Therefore, we have nothing on file with regard to either aircraft.

3. Also it is not possible to contact the owners listed in the aircraft register since both organizations have now been disbanded. However, Mr. Hardman, the Regional Airworthiness Inspector, is certain both aircraft have been destroyed and withdrawn from use.

Coded RS
15.5.62

for J. A. Lenahan,
Regional Director, Air Services.

5008-BSZ

CGSB 6GP22a PP&S Cat. No. 3593

Certs. cancelled
15.5.62

FILE No. 5008 - BTF 18-10-68 VOLUME No. 1

VOL. 1

5008 - BTF

DEPARTMENT OF TRANSPORT

FROM MARCH 1946
TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BTF - D.H.82C TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT RECORDS	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO RECORDS
	24421	SRL			OCT 24 1968
OCT 25	Cancellation	(G.2) Records			
OCT 24 1968 OCT 25 1968		SAE/A REPRO 3			DEC 23

IMPORTANT — Do not fail to NOTIFY RECORDS whenever a File is passed direct to another section.

68-6001 (1)

FILE No. 5008 - ~~6-20-6~~ BTF

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM MARCH 1946

TO

SUBJECT AIRCRAFT - INSPECTION & REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION & OPERATION

FILE TITLE CF - BTF - D.H.82C TIGER MOTH

CROSS REFERENCES

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

5008 - ~~6-20-6~~ BTF VOL 1

(1) SERVICES DATE LEFT OFFICE	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
AUG 22 1952	18524	CAR		LJ	~~AUG 25 1952~~
JUN 10 1953	17732	CAR		LJ	JUN 16 1953
JUN 16 1953	—	CAE			JUN 16 1953
JUN 16 1953		RJL			JUN 17 1953
JUN 17 1953		CAJ			JUN 18 1953
JUL 17 1953	26170	CAR		LJ	JUL 20 1953
JUL 20 1953	—	CAE			JUL 20 1953
AUG 14 1953	31841	CAR		LJ	AUG 24 1953
AUG 24 1953		[redacted]			AUG 24 1953
AUG 24 1953		RFL			AUG 24 1953
AUG 24 1953		CAJ			AUG 25 1953
MAR 4 1954	16137	CAR		LJ	MAR 9 1954
MAR 9 1954	—	CAE			MAR 10 1954
MAR 10 1954	—	RJL			MAR 11 1954
MAR 11 1954	—	CAJ			MAR 12 1954
APR 6 1954	394	CAR		LJ	APR 9 1954
APR 9 1954	—	CAE			APR 9 1954
APR 9 1954	—	RFL			APR 9 1954
APR 9 1954	—	CAJ			APR 12 1954
FEB 18 1955	24757	CAR		LJ	FEB 21 1955
MAY 10 1956	Reg Miss Jones	ARL			MAY 11 1956

FILE No. 5008 - B20 - 6

VOLUME No. 1

DEPARTMENT OF TRANSPORT

FROM March 1946

TO

CROSS REFERENCES

SUBJECT AIRCRAFT - INSPECTION AND REGISTRATION

SUB-SUBJECT REGISTRATION, INSPECTION AND OPERATION

FILE TITLE OF - BTF TIGER MOTH

THIS COVER MUST NOT BE FOLDED UNDER FILE WHEN IN USE.

(1) DATE LEFT OFFICE SERVICES	(2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO")	(3) REFER FILE TO	(4) ENTER DATE TO BRING FORWARD WHEN REQUIRED	(5) USER'S INITIAL TO SHOW ACTION COMPLETED	(6) DATE RETURNED TO OFFICE SERVICES
MAR 20 1946	4296	S.A.R	10/4/46		
	Memo				
	8346	S.A.R			
JUN-7 1947	(June 7) B.F. Type 10	S.A.R			JUN 11
JUL 19 1941	14334	S.A.R			JUL 23 1941
		CAI			
APR 5 1947	3339	CAR			JUL 3-1941
APR 12 48	1752	CAR			APR 13 48
JUN 10 1949	10435	CAR			JUN 21 1949
		CAE			JUN 21 1949
JUN 1 1949	10557	CAR			JUN 21 1949
JUN 21 1949		C.A.I.			JUN 21 1949
JUN 21 1949		C.A.R.			JUN 22 1949
JUN 22 1949		Instructions	5/7/49		JUN 24 1949
JUL 1 - 1949	B.F. 5/7/49	Transfer			5 - 1949
JUN 29 1950	13659.	CAR			JUL 4 - 1950
		CAE			JUL 4 - 1950
AUG 7 1951	25328	CAR			AUG 8 - 1951
AUG 8 - 1951		CAE			AUG 8 1951
MAY 17 1952	8198	CAR			MAY 20 1952
MAY 23 1952	9691	CAR			MAY 29 1952
MAY 23 1952	9712	CAR			MAY 29 1952
AY 29 1952		CAE			MAY 29 1952
		C.A.I.			MAY 30 1952
MAY 30 1952		R.F.L.			AUG 13 1952
AUG 7 1952	25340	CAR			AUG 13 1952
UG 13 1952		CAE			AUG 14 1952
G 14 1952		R.F.L.			AUG 14 1952
AUG 14 1952		C.A.I.			

IMPORTANT - DO NOT FAIL TO NOTIFY OFFICE SERVICES WHENEVER A FILE IS PASSED DIRECT TO ANOTHER BRANCH

AIR SERVICES
CIVIL AVIATION DIVISION

ORIGINAL ON FILE

COPY

FOR FILE

8/9-45

TOR:5008-B20-6

1 Montgomery Avenue, Toronto,
March 18th, 1946.

Moncton Flying Club,
MONCTON, N.B.

Gentlemen:

Receipt is acknowledged of your application for registration of Tiger Moth, CF-BTF, Serial No. 1143, R.C.A.F. No.5840, which you recently purchased from the War Assets Corporation through the Royal Canadian Flying Clubs Association, with the following papers:-

(a) Application form in triplicate.
(b) $10.00 fee (Receipt No. 28091 sent to Mr. B.G. Elkin of Weston Aircraft Ltd.)
(c) Copy of letter from the Royal Canadian Flying Clubs Association, dated December 31st, 1945, re ownership.
(d) Aircraft and engine log books.

The Aircraft and Engine log books are being forwarded to the Weston Aircraft Limited, Oshawa.

Pending the issue of the formal Certificates of Registration and Airworthiness, this letter will be your authority to operate the aeroplane as a commercial aircraft, (landplane) until April 17th, 1946.

Yours truly,

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

DGJ/AC

c.c. Headquarters
Weston Aircraft Ltd.

COPY

2

ROYAL CANADIAN FLYING CLUBS ASSOCIATION

Journal Building
Ottawa, Ont.

December 31, 1945.

District Inspector,
Civil Aviation,
Department of Transport,

District Concerned.

Dear Sir: Moncton Flying Club

Please be advised that the following two Tiger Moth Aircraft were purchased by this Association from War Assets Corporation on the sales orders and dates shown. They have this date been resold to the Moncton Flying Club under a clear title of ownership.

R.C.A.F. No.	Makers No.	War Assets Sales Order No.
3964	DHC 1625	MTL 2717X 14 June '45
✓5840	DHC 1143	MTL 2717X 14 June '45.

This Association has not applied for Civilian Registration. May this letter serve as a bill of sale in the Moncton Club's application for Certificates of Registration.

Yours truly,

ROYAL CANADIAN FLYING CLUBS ASSN.

W.G. Welstead, Secretary-Manager.

I hereby certify that this is a True Copy of the original letter received from the Royal Canadian Flying Clubs Association

B. Gordon Elkin,
Weston Aircraft Limited.

Tiger Moth Aircraft, CF-BTF, formerly RCAF No. 5840, received at Weston Aircraft Limited, Oshawa, Ontario, for Certificate of Airworthiness on behalf of the owner, Moncton Flying Club, Moncton, N.B., and the following work was carried out:

Aircraft weighed - 1278 with battery, less gas and oil.
Compass swung.
RCAF markings removed
Civil registration CF-BTF installed on both sides of fuselage and on upper and lower wing surfaces.
Undercarriage dismantled for inspection of pins and bolts and reassembled.
All control cables, pins and bolts removed, inspected and replaced.
Brakes inspected, checked and adjusted.
Gas strainers cleaned and saftied.
Oil strainers cleaned.
Oil tank drained, flushed and refilled with Intava #80 oil
Winter cowls and cover on oil tank fitted.
Intake Manifold replaced.
Engine thoroughly checked, serviced and adjusted.

I hereby certify that all work listed has been done using certified materials and according to accepted practice; that all manufacturers' service bulletins affecting safety have been complied with, to date, and that no unapproved modifications have been incorporated and that the airframe is airworthy.

WESTON AIRCRAFT LIMITED,

Frank Hilburn.
A-844 March 18/46

All controls checked for soundness, correct action and for presence of all locking devices.

B Gordon Blewett
A-1549

This is to certify that I have test flown Tiger Moth Aircraft CF-BTF, and that it performed in a satisfactory manner.

W F Reed
C-1522

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier made by: DeHavilland Aircraft

Type: DH 82 C Maker's No.: 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	Same
Length o/a in feet	23' 11"	"
Height o/a in feet	8' 10"	"

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil: 1276 lbs, with battery, less gas and oil

Total weight authorized (fully loaded) in lbs. Air speed miles per hour

EQUIPMENT—(Give number and type).

1. Instruments: Bank & Turn, Altimeter, R.P.M. Indicator, Airspeed, indicator, Compass
2. Gauges: Oil Temperature & Pressure
3. Lights: Navigation, Cockpit downward identification
4. Signals: None
5. Fire Extinguishers: Two
6. Parachutes: None
7. Tools: None
8. Other Equipment: Safety Belt for each passenger

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C Serial No.			
Pusher or Tractor	Tractor			
Right or Left Hand	Clockwise			
No. of Cylinders	4			
H.P.	120			
Bore	4.646"			
Stroke	5.512"			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. BTF allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

This aircraft from RCAF Reg, No. 5840

4

2413
9-39

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect. Moncton Flying Club President

Signature of Applicant.....Agnes Bourgeois
Earle Urquhart Asst. Sec-Treas.

Date of Application March 5, 1946.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
J. W. Humphrey,	Director, Manager	Moncton, N.B.	Canadian.
A. J. Bourgeois,	Director, President	Moncton, N.B.	Canadian.
C. E. Keating,	Director, Vice-Pres.	Moncton, N.B.	Canadian.
L. E. Keating,	Director,	Moncton, N.B.	Canadian.
C. R. Baxter,	Director,	Moncton, N.B.	Canadian.
W. V. Creaghan,	Director,	Moncton, N.B.	Canadian
T. H. O'Brien,	Director,	Moncton, N.B.	Canadian.
Roger Mills,	Director, Sec-Treas.	Moncton, N.B.	Canadian.

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Commercial

Usual Station.....Moncton

Date of manufacture or reconstruction.....23/9/41

Crew required.....1

Accommodation for what number of passengers.....1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, not required for a private aircraft, is $5.00, which certificate is re-issued on change of ownership without further fee.

War Assets Sales Order on 5302-RV

5

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

TORONTO, March 19th, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B20-6	Tiger Moth - CF-BTF	5008-B20-6

TRANSPORT-RECORDS
MAR 20 A.M. 1946
File 5008-B20-6

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

A42796

1. Attached hereto are the following papers relating to registration of Tiger Moth, CF-BTF, Serial No. 1143, recently purchased by the Moncton Flying Club from the War Assets Corporation, through the Royal Canadian Flying Clubs Association:-

(a) Application form in duplicate.
(b) $10.00 fee (See page 150 in Cash Book, Receipt No. 28091)
(c) Report on Overhaul.
(d) Copy of letter from the R.C.F.C.A., dated December 31st, 1945, re ownership.
(e) Copy of letter of temporary authority.

2. We have no staff available here to inspect the aeroplane and, therefore, the back of the application form has not been completed.

Miss J.
ok to issue & send to DIAR Montreal to hand to club after satisfactory inspection
DGJ/AC

D.G. Joy,
District Inspector, Air Regulations,
Toronto.

3462(R)
1049(A)

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 5462

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ont.
3. Constructor's serial number	1143
4. Name of owner	Moncton Flying Club,
5. Address of owner	Moncton, N.B.
6. Nationality of owner	British
7. Usual station of aircraft	Moncton, N.B.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 18th day of March, 1946, in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 12th day of April, 1946.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

9

Ottawa, April 12, 1946

D.H. 82C Tiger Moth, CF-BTF 5008-B20-6

REGISTERED

District Inspector, Air Regulations,
910 Confederation Bldg.,
Montreal, P.Q.

1. Enclosed please find Certificate of Registration No. 3462 and Certificate of Airworthiness No. 1049, for the above-mentioned aircraft, owned by Moncton, Flying Club, Moncton, N.B.

2. The certificates should be forwarded to the owners when you are satisfied that the aircraft is in an airworthy condition.

3. The Engine and Journey and Aircraft Log Books will be forwarded as soon as they have been received from the King's Printer. In the meantime, a temporary log should be kept.

(S. Graham),
Superintendent, Air Regulations.

Mr. Ted Jones
17-4-46
Sales

Encls.

2

10

COPY

ORIGINAL
ON FILE 5008-B20-5
LEJG

FOR FILE 5008-B20-6

CANADIAN NATIONAL TELEGRAPHS

STRAIGHT WIRE

TORONTO, April 17th, 1946.

Controller of Civil Aviation,
Department of Transport,
OTTAWA, Ontario.

T.243: J.W. HUMPHREY MANAGER MONCTON FLYING CLUB HAS WIRED FOR EXTENSION OF AUTHORITY TO OPERATE CF-BTE AND BTF PENDING ISSUE OF FORMAL CERTIFICATES STOP PLEASE REPLY BY WIRE TO HUMPHREY

CIVIL AVIATION

CONFIRMATION
DGJ/KC

ORIGINAL ON FILE

5008-B205

LEJG

COPY

TRANSPORT-RECORDS
FOR FILE JUN 5 A.M. 5008-B20-6

8
6-44

CANADIAN NATIONAL TELEGRAPHS

DAYLETTER COLLECT

A 8346

910 CONFEDERATION BUILDING
MONTREAL 2 QUEBEC MAY 15 1946

J W HUMPHREY
MONCTON FLYING CLUB
MONCTON NB

AR 86 REWIRE TEMPORARY AUTHORITY NOT VALID AFTER JUNE EIGHT TH FORTY SIX HEREBY GRANTED FOR OPERATION OF TIGER MOTH BAKER TARE EASY AND BAKER TARE FOX SUBJECT TO AIRCRAFT BEING IN AIRWORTHY CONDITION

J L BLONDEAU

DISTRICT INSPECTOR AIR REGULATIONS

15.10 hrs.

dg

Perm. Cert
issued
12/4/46

12

THE MONCTON FLYING CLUB

7/7/46.
#7699 Sgt. St. Amant J.G.
#5 Equipment Depot,
Moncton, N.B.

TO WHO IT MAY CONCERN

On Sunday the 7th of July 1946, at 2.42 hrs. p.m. I was coming for a landing. The right wheel touched the ground swinging the aircraft to the right and bounced it in the air about 10 or 12 feet. The aircraft swung again to the left and stalled.

Resulting in crash no injury to myself.

The damage - left wing damage very badly, the right wing damaged slightly. The prop is broken and cowling is damaged and the motor damaged too.

(Sgd.) J.G. St. Amant #5 Equipment
Moncton, N.B.

13

THE MONCTON FLYING CLUB

July 8, 1946.

Engineer's report on crash of Tiger Moth CF-BTF on July 7, 1946 at 2:42 p.m. at Moncton Airport. Aircraft property of The Moncton Flying Club.

Engine

Propeller broken.
4 Engine Bearer Arms sheared.
Rocker Box No. 1 Cylinder bent.
Exhaust Pipe washed out.
Throttle Rod and Magneto Rod bent.
Distributor Cap on Right Magneto broken.

Airframe

Right Engine Mount bent and broken.
Left and Right bottom Longerons bent at wing root fitting.
Floor boards cracked across.
Left Wing (Lower) Front Spar broken.
Right Lower Wing Tip bent.
All Engine Cowlings bent.

I hereby certify that Tiger Moth CF-BTF was damaged as listed above.

(Sgd.) T.J. Gallant A - 1487.

14

July 8th, 1946.

Owner's report on crash of Tiger Moth CF-BTF, property of the Moncton Flying Club, on July 7, 1946 at 2:42 P.M. at Moncton Airport, N.B.

Aircraft flown solo by Sgt. J.G. St. Amant, Student Pilot with 18:25 Dual and 1:20 solo flying time.

Accident occured on Runway 020, wind on Runway at 20 m.p.h. General flying conditions favorable and good visibility.

Pilot made good approach but levelled off too low on landing. Wheels hit and Aircraft bounced about 10 feet. As it bounced it yawed to the right and right wing dropped slightly. Aircraft hit ground again with drift and rocked to the left dropping left wing. As it bounces again, the Pilot apparently had the stick well back as the nose was well up. While in this position the Pilot applied throttle without corrective action with control column and rudder, thereby further stalling the Aircraft. The left wing drops further and Aircraft nose dives to ground hitting nose and left wing. In this position the plane was 180 degrees to original landing path.

No injuries sustained by Pilot.

(Sgd.) Earl W. Unquart ?

The Moncton Flying Club

COPY

15

THE MONCTON FLYING CLUB

July 8th, 1946.

Mr. J.L. Blondeau,
District Inspector, Air Regulations,
910 Confederation Building,
Montreal, Que.

Dear Sir:

I am enclosing Engineer's report and Owner's report on the crash of Tiger Moth CF-BTF at Moncton Airport on July 7, 1946.

Yours very truly,

(Sgd.) Earl W. Unquart ?
for J.W. Humphrey, Manager,
Moncton Flying Club,
P.O. Box 341,
Moncton, N.B.

NWH/EWU

16

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-45

910 Confederation Building,
Montreal 2, Que., July 17, 1946.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Tiger Moth CF-BTF	5008-B20-6

A14334

TRANSPORT-RECORDS
JUL 19 A.M.
File 580 8-B20 6

Controller of Civil Aviation,
Department of Transport,
Ottawa, Ontario.

1. The following papers regarding an accident sustained by the subject aircraft at Moncton on July 7, 1946, are enclosed herewith:

(a) Copy of letter from J.W. Humphrey, Manager, Moncton Flying Club.

(b) Further copy of letter from Moncton Flying Club.

(c) Copy of report by Engineer T.J. Gallant.

(d) Copy of report by Sgt. J.G. Amant.

2. Submitted for your information and record, please.

J. L. Blondeau

J.L. Blondeau,
District Inspector, Air Regulations

JLB:dg
Encl.

ENTERED
IN ACCIDENT
RECORDS
27-8-46
H.

mailed
22-7-46

47

5008-B20-6

REGISTERED

OTTAWA, Ontario.
Nov. 5th, 1946.

Moncton Flying Club,
Moncton, N.B.

Dear Sirs:-

Enclosed are Engine and Journey and Aircraft Log Books for your aircraft, CF-BTF.

The Certificates of Registration and Airworthiness must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

Yours truly,

19S

(S. Graham),
Superintendent, Air Regulations.

2m

18

Room 422 Dom. Govt. Bldg...
Moncton, N.B. April 8/47

TRANSPORT - RECORDS
APR 14 A.M.
File 5008-B20-6

The Moncton Flying Club,
Moncton, N.B.

Dear Sirs:

3339

This will serve as your temporary authority to operate Tiger Moth D.H. 82 CF-BTF pending renewals of the formal certificates of Registration and Airworthiness, not valid after May 8th, 1947.

Yours truly,

M. C. Butler,
for District Inspector of Air Regulations.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

19 2 6-46

Room 420, Dominion Public Building,
Moncton, N. B. (PLACE) April 10, 1948. (DATE)

YOUR FILE	SUBJECT	OUR FILE
	DH82C - CF-BTF Moncton Flying Club, Moncton, N. B.	5008-B20-6

A 1752

TRANSPORT-RECORDS
APR 12 A.M.
File 5008-B20-6

Controller of Civil Aviation,
Department of Transport,
#3, Temporary Building,
OTTAWA, Ontario.

1. Please be advised that Certificate of Registration No. 3462 and Certificate of Airworthiness No. 1049, issued in favour of the subject noted aircraft, were renewed, not valid after April 9, 1949, in view of the satisfactory condition of the aircraft.

2. Proper log book entries were made signed by Mr. L.W. Routledge, holder of Air Engineer's Certificate #2333, under date of April 7, 1948, and the aircraft was test flown by Mr. R. Metzler, Private Pilot Certificate #6137, under date of April 7, 1948.

R.W. Goodwin,
A/District Inspector, Air Regulations.

RWG/1

Mrs Jones
to note & P.A.
RWG 12-4-48

noted
RJ

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
11-48

P.O. Box 42,
Moncton, N.B., June 8,1949.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	D.H. 82C Tiger Moth - CF-BTF	5008-B 20-6

TRANSPORT-RECORDS
JUN 10 P M
File 5008-B 20-6

A
Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario. 10435

Attention: Controller of Civil Aviation

1. Please be advised that Certificate of Registration No. 3462 and Certificate of Airworthiness No. 1049, issued in favour of the subject noted aircraft, have been renewed to read "not valid after June 4, 1950".

2. Proper log book entries have been made signed by L.W. Routledge, holder of Air Engineer Dertificate No. A-2333, and the aircraft was test flown by N.R. Carruthers, holder of Public Transport Pilot Certificate No. 1287, under date of June 4, 1949.

3. Weight and Balance Report has been attached to the Certificate of Airworthiness, and the certificate endorsed on page three as follows:-

> "Weight and Balance Report forms part of the Certificate of Airworthiness and must be carried in the aircraft during flight. 8.6.49"

4. Certificate of Airworthiness No. 1049 has also been amended on page two as follows:

Item 25: Weight of aircraft empty:
(a) Landplane.....1230 lbs. 8.6.49

Item 31: Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full
.....270 lbs. 8.6.49

for District Controller, Air Services,
Moncton, N. B.

2462A
8-41

CANADA

DEPARTMENT OF TRANSPORT

CIVIL AVIATION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 3462

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. 82C Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ont.
3. Constructor's serial number	1143
4. Name of owner	Moncton Flying Club,
5. Address of owner	Moncton, N.B.
6. Nationality of owner	British
7. Usual station of aircraft	Moncton, N.B.
8. Purpose	Commercial

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 18th day of March, 1946 in accordance with the Convention for the regulation of aerial navigation, dated 13th October, 1919, Annex A, and with Air Regulations, 1938, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 12th day of April, 1946.

G. Graham

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate for which there shall be payable a fee of $5.

2. In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

Renewed - not valid after March 17/1948. H. Knight

Moncton, N. B. - April 9, 1948 Renewed not valid after April 9, 1949.

Renewed not valid after June 4, 1950

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister of Transport.

21

P. O. Box 42,
Moncton, N. B.,
June 8, 1949

Mr. Herbert Ralph Metzler,
103 Park Street,
MONCTON, N.B.

Dear Sir:

Receipt is acknowledged of your application for registration of D.H. 82C Aircraft, CF-BTF recently purchased by you from the Moncton Flying Club.

With the following papers:

(1) Application forms, in triplicate.
(2) Bill of Sale - Moncton Flying Club to yourself.
(3) Certificate of Registration No. 3462.
(4) Certificate of Airworthiness No. 1049.
(5) Engineer's Condition Report and Test Flight Report.

Receipt No: 35359 covering re-registration fee attached.

Pending the issue of the formal certificates of Registration and Airworthiness, this letter will be your authority to operate CF-BTF as a private aircraft on day visual flying, until August 7, 1949. The all-up weight of the aircraft is not to exceed 1825 lbs. as landplane, ~~----------as seaplane,~~ ~~----------~~ as skiplane.

Yours truly,

R. W. Goodwin,
District Inspector, Air Regulations,
Moncton, N. B.

c.c.: H.Q.
RWG/JH

The Moncton Flying Club

Moncton, N. B.

June 4, 1949

BILL OF SALE

TO WHOM IT MAY CONCERN:

This is to certify that I hereby transfer all rights and privileges to Tiger Moth aircraft bearing registration CF - BTF for the sum of one dollar ($1.00) and other valuable considerations to -

Mr. Ralph Metzler, 103 Park Street, Moncton, N.B.

receipt of which is hereby acknowledged.

I also certify that there is no lien or encumbrance against this aircraft.

Signed _____
G. H. Ducklow, President
MONCTON FLYING CLUB

Witness: _____

Member Royal Canadian Flying Clubs Association

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier than air made by DeHavilland Aircraft of Canada Ltd

Type D.H. Tiger Moth 82C Maker's No. 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	------
Length o/a in feet	23' 11"	------
Height o/a in feet	8' 9"	------
Cubic Capacity (of Airship or Balloon)	---------	
Weight equipped, but without load, fuel, or oil	1230 lbs.	
Total weight authorized (fully loaded) in lbs 1825 lbs. Air speed 85 miles per hour		

EQUIPMENT—(Give number and type).

1. Instruments Magnetic compass, Pioneer (2), Altimeter, Pioneer (2), Turn and Bank Pioneer (2) Airspeed Indicator (Pioneer (2)
2. Gauges R.P.M. Indicator Kelsman (2) Oil Temperature & Pressure Gauges Front Cockpit only
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers Engine extinguisher 1 Pryene, Hand extinguisher 1 Pryene
6. Parachutes Nil
7. Tools Nil
8. Other Equipment ~~Nil~~ Two Safety Belts

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type Gypsy Major 1-C	87216			
Pusher or Tractor	Tractor			
Right or Left Hand	Left Hand			
No. of Cylinders	Four (4)			
H.P.	125/130			
Bore	4.646 in.			
Stroke	5.512 in.			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on June 4, 1949, for renewal of Certificate of Airworthiness by L.W. Routledge, Air Engineer's Certificate No. A-2333.

Particulars accurate as corrected Accurate

Modifications from type are indicated on annexed sheet None

Registration recommended with the following special conditions

Recommended

Date June 8, 1949.

Signature [signature]

Registration approved and Registration Mark C.F. - BTF allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Ralph Metzler

Date of Application ..... June 4/49

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
METZLER, HERBERT RALPH	103 Park Street, Moncton, N.B.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Private

Usual Station ..... Moncton, N.B.

Date and place of manufacture or reconstruction ..... Toronto, Ont. 1941

Crew required ..... ONE

Accommodation for what number of passengers ..... one

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

JUN 13 1949

2

11-48

P.O. Box 42,
Moncton, N.B., June 9, 1949
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B 20-6	D.H. 82C Tiger Moth - CF-BTF Application for C. of R. and C. of A.	5008-B 20-6

10557

REGISTERED

TRANSPORT-RECORDS
JUN 11
File 5008-B20-6

Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

Attention: Controller of Civil Aviation

1. Enclosed herewith are the following documents with reference to the subject-noted aircraft:-

(1) Application form, in duplicate, for registration as a private aircraft in the name of Herbert Ralph Metzler, 103 Park Street, Moncton, N.B.

(2) Bill of Sale - Moncton Flying Club to Mr. Ralph Metzler.

(3) Certificate of Registration No. 3462.

(4) Certificate of Airworthiness No. 1049.

(5) Copy of temporary authority to operate.

2. Official Receipt No. 35359 has been issued to cover the re-registration fee of $5.00, and will be forwarded to your Headquarters on BlotterCash Book No. 8727.

3. This application appears to be in order, and is recommended to Headquarters for approval.

for District Controller, Air Services,
Moncton, N.B.

Encl.

8017 (R)
1049 (A) To owner

2462A
4-48

25

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8017

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	Herbert Ralph Metzler,
5. Address of owner	102 Park Street, Moncton, N.B.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Moncton, N.B.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 8th day of June 19 49, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 16th day of June 19 49.

Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after June 4th, 1950, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/RH

24

5008-B20-6

REGISTERED

Ottawa, Ontario,

June 20th, 1949.

Mr. H.R. Metzler,
102 Park Street,
Moncton, N.B.

Dear Sir/s-

Enclosed are Certificate of Registration No. 8017 and Certificate of Airworthiness No. 1049 for your aircraft, CF- BTE Serial No. 1143. D.H. 82C

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until ....June 4th, 1950.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

NOTED

(S. Graham),
Superintendent, Air Regulations JUN 5 1949

P.S. Propeller Log Book(s) enclosed. Yes ☐ No ☒

Revenue Audit
Dept. of Transport

AC-5 - 60

cc. D.C.A.S.,
Attn: D.I.A.R. Moncton, N.B.

21-6-49

TRANSPORT - RECORDS
28 P M
File 5008. B20-6

FORM No. 2444

13659

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

Registration - CF- BTF Serial No. 1143

1. C. of A. No. 1049 Expires June 4/50 C. of R. No. 8017 Expires June 4/50
Aircraft Data - Manufacturer DH Aircraft Co LTD Model DH Tiger Moth 82C
Hours flown - Since New 1668.35 Since Overhaul —
Engine Data - Manufacturer DH Aircraft Co LTD Model Gypsy Major I-C

Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1) 87216	1945.20	624.20
(2)		
(3)		
(4)		

Signature of Applicant L.W. Rowledge for H.R. Nicholls
Date June 22/50

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed L.W. Rowledge
A.Y.C. "B" Engineer
Date June 22/50

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed S.T. Thompson
Test Pilot
Date June 22/50

4. The following documents are attached:
Certificate of Airworthiness ☑
Certificate of Registration ☑
Weight and Balance Report (when applicable) ☑

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificat is recommended.

Signed J. Hardman
District Aircraft Inspector
Date June 27 1950

7. C. of A. and C. of R. renewed, not valid after.

(Date)- June 22, 1951. ✓
Permissible Gross Weights - Wheels Normal 1825-16s
- ~~Skis~~
- ~~Floats~~

Noted BTF NOTED lsj

Signed J.B. Tolbert
for ~~District~~ Superintendent, Air Regulations
Date June 26 1950

Other Action:-

8. H.Q. Action C.A.R.

C.A.E.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

2
11-48

P.O. Box 42,
Moncton, N. B. (PLACE) August 6, 1951 (DATE)

YOUR FILE | SUBJECT: Renewal of Certificates of Registration and Airworthiness - D.H. Tiger Moth 82C CF-BTF | OUR FILE: 5008-B20-6

25427

TRANSPORT - RECORDS
AUG 7 P.M. 1951
File 5008-B20-6

Refer to File Number Please

Director of Air Services,
No. 3 Temporary Building,
OTTAWA, Ontario.

1. In the absence of instruction concerning the amendment of Certificate of Registration to conform with the Air Regulations dated May 24, 1951, Part II, Section I, Para. 2.1.8, this office has renewed Certificate of Registration No. 8017 for a further 12-month period.

(W. M. Johnson),
for District Superintendent, Air Regulations,
Moncton, N. B.

CANADA

25378

DEPARTMENT OF TRANSPORT

TRANSPORT — AIR SERVICE 2444 4-50

AUG 7 A.M. 1951

File 5008-BJO-6

Application for Renewal of Certificate of Airworthiness

REGISTRATION—CF— BTF SERIAL No. 1143

1. C. of A. No. 1049 Expires June 22/51 C. of R. No. 8017 Expires June 22/51

AIRCRAFT DATA—Manufacturer De Havilland Aircraft Ltd. Model DH 82C

Hours flown—Since New 1780:55 Since Overhaul 732:25

ENGINE DATA—Manufacturer De Havilland Aircraft Ltd. Model Gypsy Major 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	87216	2056:30	735.30
(2)			
(3)			
(4)			

Signature of Applicant Ralph Metzler

Date July 27/51

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed L. W. Routledge QNM 39
AIRCRAFT ENGINEER Licence No.

Date July 27/51

3. I hereby certify that I have flown this aircraft and that its performance, flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed J. H. Thompson
TEST PILOT

Date July 27/51

4. The following documents are attached:

Certificate of Airworthiness ☒ Certificate of Registration ☒ Weight and Balance Report (when applicable) ☒

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. .....
and C. of A. No. ..... or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed [illegible]
DISTRICT AIRCRAFT INSPECTOR

Date August 6 1951

7. C. of A. and C. of R. renewed, not valid after (Date) July 27/52

Permissible Gross Weights— Wheels 1825 lb.
Skis
Floats

Signed [illegible]
DISTRICT SUPERINTENDENT, AIR REGULATIONS

Date Aug 16/51

Other Action:— —

8. H.Q. Action— C.A.R.

C.A.E.

29

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

3
5-51

Toronto, Ontario, May 15th, 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
	Tiger Moth Aircraft CF - BTF	5008-G20-6

08198

TRANSPORT - RECORDS
MAY 16 P.M 1952
File 5008-B20-6

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: C. A. R.

1. Application for re-registration of Tiger Moth aircraft CF - BTF has been made to this office by Mr. M. Servos of Hamilton, Ontario, who has purchased the aircraft from F/O R. Metzler of Chatham, New Brunswick.

2. A Statutory Declaration regarding the loss of the Certificates of Airworthiness and Registration are on hand in this office, and it is requested that we be advised as to the expiry date of the Certificate of Airworthiness, in order to complete documentation, and the issue of temporary authority, pending Headquarters action on re-registration and replacement of the lost documents.

3. It is further requested that a photostatic copy of the Weight and Balance Report be sent to this office for the district file.

Maurice E. Lough

District Superintendent, Air Regulations,
(for) District Controller, Air Services,
Toronto, Ontario.

JF/DJC

30

Ottawa, Ontario, May 19, 1952.

5008-G20-6 D.H, Aircraft, CF-BTF 5008-B20-6

District Controller of Air Services,
260 Richmond Street West,
Toronto, Ontario.

Attention: District Superintendent, Air Regulations

1. Your letter 5008-B20-6 dated May 15, 1952 requesting information on D.H. Tiger Moth 82C aircraft CF-BTF owned by H.R. Metzler is acknowledged.

2. Our records disclose that the Certificate of Airworthiness No. 1049 is valid until July 27, 1952 (reference Form No. 2444 dated August 6, 1952 from D.S.A.R. Moncton, N.B.)

3. On the subject of the Weight and Balance Report we have no record of receiving a copy for our file. Our records denote that it was entered as part of the Certificate of Airworthiness on June 8, 1949 at Moncton, N.B. It is our understanding that all files were destroyed in the fire at Moncton Airport and therefore no copy would be available.

4. Unless the owner can locate the lost documents referred to in your letter, he will be obliged to prepare a new Weight and Balance Report.

(C.T. Travers),
Superintendent, Air Regulations.

VR

31

TRANSPORT - RECORDS
MAY 22 P.M. 1952
File 5008-B20-6

09691

5008-B20-6

260 Richmond Street West,
Toronto, Ontario,
May 21st, 1952.

Mr. Morley Servos,
R.R. No. 4,
HAMILTON, Ontario.

Dear Sir:-

On the subject of your Weight and Balance Report there is no record in this office of such an item. However, Headquarters' records indicate that it was entered as part of the Certificate of Airworthiness on June 8th, 1949, at Moncton, New Brunswick. It is our understanding that all files were destroyed in a fire at Moncton airport and, therefore, no copy is available. Unless you are able to locate the aforementioned documents, you will be obliged to prepare a new Weight and Balance Report, in triplicate, and submit to this office as soon as possible.

Yours very truly,

(for) District Superintendent,
Air Regulations, Toronto.

CAB/fs

CC: H.Q.

32

5008-B20-6

260 Richmond St., W. Toronto,
May 21st 1952.

Mr. Morley Servos,
R.R.#4, Hamilton,
Ontario.

Dear Sir;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 82C aircraft, CF-HFF, Serial No. 1143, which you recently purchased from Mr. H.R.Metzler:-

(a) Application form in triplicate.
(b) $5.00 fee - Cash Sales Slip No. 58444.
(c) Statutory Declaration re loss of Certificates of Registration and Airworthiness.
(d) Bill of Sale in triplicate.

Pending issue of the formal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-HFF as a private aircraft (landplane) on day visual flying only and valid until July 27th 1952.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto.

/mm
C.R.
D.S.R.-2
H.Q.
D.S.A.R. Moncton

33

/RM

2462A
4-48

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 8017

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	Herbert Ralph Metzler,
5. Address of owner	102 Park Street, Moncton, N.B.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Moncton, N.B.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 8th day of June 1949, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with Air Regulations, 1938, as amended, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 18th day of June 1949.

H. Station
Superintendent, Air Regulations.

Attention is drawn to the extracts from Air Regulations, 1938, overleaf.

Not valid after June 4th, 1950, unless endorsed.

NOTICE

Attention is drawn to the following extracts from Air Regulations, 1938:—

"6. (1) Upon every registration in Canada the Minister shall assign to the registered aircraft a registration mark and shall grant a certificate of registration for which there shall be payable a fee of $5.

(2) In the event of any change in the ownership of an aircraft registered in Canada, then

(*a*) The registration and certificate thereof shall lapse as from the date of such change of ownership, and

(*b*) The registered owner shall forthwith notify the Minister."

"7. (1) When a registered aircraft has been destroyed or permanently withdrawn from use, the registered owner shall forthwith notify the Minister accordingly, and the registration and certificate thereof shall lapse as from the date of such notification.

(2) Certificates of registration shall not remain valid unless endorsed by the Minister at intervals not exceeding twelve calendar months."

ENDORSEMENTS

Renewed not valid after June 22, 1951 J.C. Falkiner

Renewed not valid after July 27, 1952 D.M. Johnson

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

34.

The Moncton Flying Club

Moncton, N. B..

BILL OF SALE

This is to certify that I have this date sold, assigned and transferred all right, title and interest in Tiger Moth DH 82 aircraft, registration CF - BXF to Mr. Morley Servos for the sum of One ($1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged. I also certify that there is no lien or encumbrance against this machine.

DATED AT London, Ontario.

this 23rd. day of April 1952

WITNESS Gus E Wall SIGNATURE Ralph Metzler

Member Royal Canadian Flying Clubs Association

25

The Moncton Flying Club

Moncton, N. B..

BILL OF SALE

This is to certify that I have this date sold, assigned and transferred all right, title and interest in Tiger Moth DH 82 aircraft, registration CF - BTF to Mr. Morley Servos for the sum of One ($1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged. I also certify that there is no lien or encumbrance against this machine.

DATED AT London, Ontario.

this 23rd. day of April 1952

WITNESS Lyus E Walker SIGNATURE Ralph Metzler

CANADA

PROVINCE OF NEW BRUNSWICK

COUNTY OF NORTHUMBERLAND

I, RALPH METZLER, Pilot Officer, R.C.A.F., presently of the R.C.A.F. Station, Chatham, N.B., make oath and say:

1. That I have knowledge of the matters herein deposed to.

2. That the certificate of airworthiness and the certificate of registration of Aircraft CF - BTF were lost. That I have made diligent search to recover the above mentioned certificates without success.

3. That the record of registry of these certificates were located at Moncton Air Port and were burned and destroyed in the fire that destroyed the offices of the Moncton Air Port.

DATED at the Town of Chatham this 7th day of May, A.D. 1952.

Sworn to at the Town of Chatham)
in the County of Northumberland,) ..... Ralph Metzler .....
this 7th day of May, A.D. 1952,)
Before Me:)

Herman S. Murray
.....
Notary Public in and for the
Province of New Brunswick.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air heavier made by DeHavilland A/C (Can)

Type DH 82C (Tiger Moth) Maker's No.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	
Length o/a in feet	23'-11"	
Height o/a in feet	8'-9"	

Cubic Capacity (of Airship or Balloon) N/A

Weight equipped, but without load, fuel, or oil 1278 lbs

Total weight authorized (fully loaded) in lbs 1825 lbs Air Speed 90 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Airspeed-2, Turn&Bank-2, Altimeter-2, Compass-2
2. Gauges Tachometer-2, Oil Press.-1, Oil Temp.-1,
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One Pyrene, hand type.
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Safety belts

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	Left (Viewed from cockpit)			
No. of Cylinders	Four			
H.P.	125/130			
Bore	4.6 "			
Stroke	5.5 "			

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

37

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Morley Services

Date of Application ..... April 23/52.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
MORLEY SERVOS	RR#4 HAMILTON	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
	N/A		

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... PRIVATE .....

Usual Station ..... HAMILTON, ONTARIO.

Date and place of manufacture or reconstruction ..... DeHavilland A/c (Can).

Crew required ..... ONE

Accommodation for what number of passengers ..... ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air heavier made by DeHavilland A/C (Can.)

Type DH 82C (Tiger Moth) Maker's No.

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'-4"	
Length o/a in feet	23'-11"	
Height o/a in feet	8'-9"	

Cubic Capacity (of Airship or Balloon) N/A

Weight equipped, but without load, fuel, or oil 1278 lbs

Total weight authorized (fully loaded) in lbs. 1825 lbs Air Speed 90 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Airspeed-2;Turn&Bank-2,Altimeter-2,Compass-2
2. Gauges Tachometer-2,Oil Press.-1,Oil Temp.-1,
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One Pyrene,hand type.
6. Parachutes Nil
7. Tools Nil
8. Other Equipment Safety belts

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	Left (Viewed from cockpit)			
No. of Cylinders	Four			
H.P.	125/130			
Bore	4.6 "			
Stroke	5.5 "			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

38 : :

2413
1-48

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... Morley Servos

Date of Application ..... April 23/52.

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
MORLEY SERVOS	RR #4 HAMILTON	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality
	N/A		

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... PRIVATE

Usual Station ..... HAMILTON, ONTARIO.

Date and place of manufacture or reconstruction ..... DeHavilland A/c (Can).

Crew required ..... ONE

Accommodation for what number of passengers ..... ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

09712

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

MAY 22 P.M. 1952
5-51

File 5008-B20-6

Toronto, May 21st 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B20-6	Re-registration of aircraft CF-B T F	5008-B20-6

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: C.AR.

1. Herewith the following documents relating to re-registration of D.H. Tiger Moth 82C aircraft, CF-BTF, Serial No. 1143, purchased by Morley Servos from H.R.Metzler:-

(a) Application form in duplicate.
(b) $5.00 fee - Cash Sales Slip No. 58444
(c) Statutory Declaration re loss of Certificates of Registration and Airworthiness.
(d) Bill of Sale in duplicate.
(e) Old Certificate of Registration No. 8017
(f) Old Certificate of Airworthiness No. 1049 together with Weight and Balance Report.
(g) Copy of letter of temporary authority.

(D.W.Saunders)
District Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto

10957(R)
1040

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10957

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario
3. Constructor's serial number	1143
4. Name of owner	Morley Servos
5. Address of owner	R.R. #4, Hamilton, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of May 19 52, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 27th day of May 19 52.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/AD 44

5008-B20-6

OTTAWA, Ontario.

May 29, 1952.

Mr. Morley Serves,
R.R. #4
Hamilton, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 10087 and Certificate of Airworthiness No. 1049 for your D.H. Tiger Moth 82C aircraft, CF-BTF , Serial No. 1145

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 27, 1952.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

(C.T. Travers),
Superintendent, Air Regulations

P.S. Propeller Log Book (s) enclosed, Yes ☐ No ☒

REGISTERED

AC-5-60

CC. Toronto

Added 29/5/52

45

5008-B20-6

260 Richmond St., W. Toronto,
August 5th 1952.

Messrs. W.J. Bidnall & Frank Stringer,
STONEY CREEK, Ontario.

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth 82C aircraft, CF-BTF, Serial No. 1143, which you recently purchased from Mr. Morley Servos:-

(a) Application form in triplicate.
(b) $5.00 fee - O.R. 238127
(c) Bill of Sale -
(d) Old Certificate of Registration No. 10957
(e) Old Certificate of Airworthiness No. 1049 together with Weight and Balance Report,
(f) Form #2444 in duplicate.

Pending issue of theformal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BTF as a private aircraft (landplane) on day visual flying only under the conditions of issue as stated in the old Certificate of Airworthiness No. 1049 and valid untilNovember 5th 1952.

This authority does not include permission for the operation of radio apparatus.

Yours truly,

(D.W. Saunders)
District Superintendent, Air Regulations,
Toronto.

/mgm
D.S.R.-2
C.R.
H.Q.

FORM No. 2444

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

46.

Registration - CF- BTF **Serial No.**

1. C. of A. No. _____ Expires _____ C. of R. No. _____ Expires _____
Aircraft Data - Manufacturer DE HAVILLAND Model 82C
Hours flown - Since New 1829:35 Since Overhaul —
Engine Data - Manufacturer DE HAVILLAND Model GIPSY MAJOR 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	87216	2075:30	759:30
(2)			
(3)			
(4)			

Signature of Applicant Frank Stringer / Wm J Bedwell
Date July 31-52

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed Wm. Wallis
Engineer Licence No. 12M-131
Date July 31-52

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed J. F. Williams C-5796
Pilot
Date July 31/52

4. The following documents are attached:

Certificate of Airworthiness	☐
Certificate of Registration	☐
Weight and Balance Report (when applicable)	☐

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. and C. of A. No. , or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed L. Emery
District Aircraft Inspector
Date Aug 5/52

7. C. of A. and C. of R. renewed, not valid after.

Permissible Gross Weights (Date)- July 31, 1953
- Wheels - 1825 lbs. (normal)
- Skis
- Floats

Signed VB
District Superintendent, Air Regulations
Date August 5th 1952.

Other Actions:-

8. H.Q. Action C.A.R.

C.A.E.

47.

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 10957

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario
3. Constructor's serial number	1143
4. Name of owner	Morley Servos
5. Address of owner	R.R. #4, Hamilton, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ontario.
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 21st day of May 19.52., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 27th day of May 19.52.

H. Patterson
for Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

48.

Venus Home Portraits

"Artistic Child Studies In Your Home"

445 Wentworth North - Telephone 3-7300

HAMILTON, ONTARIO

July 21, 1952

To whom it may concern:

I hereby transfer all rights and ownership of Tiger Moth CF-BTF to W.J. Bidwall and Frank Stringer in return for the sum of one dollar and other valuable considerations.

I also certify that their are no repair bills, liens or other encumbrances against this machine.

J.D.Williams — Witness J.D.Williams

M. Servos — M. Servos

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by De Haviland

Type D.H. Tiger Moth 82C Maker's No. 10957

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 1230

Total weight authorized (fully loaded) in lbs 1825 Air speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Airspeed, altimeter, T and B
2. Gauges Gas, Oil temp and pressure
3. Lights Navigation
4. Signals None
5. Fire Extinguishers 1 hand operated
6. Parachutes None
7. Tools None
8. Other Equipment None

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand	left			
No. of Cylinders	4			
H.P.	125/130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

49

2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in duplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant W. J. Bidnall Frank Stringer

Date of Application July 21, 1952

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
W.J. Bidnall	Stoney Creek, Ontario	Canadian
Frank Stringer	Stoney Creek, Ontario	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Hamilton

Date and place of manufacture or reconstruction Toronto 1941

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by De Haviland

Type D.H. Tiger Moth 82C Maker's No. 10957

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil 1230

Total weight authorized (fully loaded) in lbs. 1825 Air speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments Airspeed, altimeter, T and S
2. Gauges Gas, Oil temp and pressure
3. Lights Navigation
4. Signals None
5. Fire Extinguishers 1 hand
6. Parachutes None
7. Tools None
8. Other Equipment None

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand	Left			
No. of Cylinders	4			
H.P.	120/130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date

Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

50 2413

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

(To be sent in ~~duplicate~~ triplicate)

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Wm J Bidnall Frank Stringer

Date of Application July 21, 1952

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
W.J. Bidnall	Stoney Creek, Ontario	Canada
Frank Stringer	Stoney Creek, Ontario	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private)

Private

Usual Station Hamilton

Date and place of manufacture or reconstruction Toronto 1941

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness, is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT

INTRA-DEPARTMENTAL CORRESPONDENCE

51 3 5-51

Toronto, Ontario, August 5th 1952.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B20-6	Re-registration of D.H.Tiger Moth 82C aircraft CF- B T F	5008-B20-6

25340

TRANSPORT - RECORDS
AUG 7 P.M. 1952
File 5008-B20-6

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H.Tiger Moth 82C aircraft, CF-BTF, Serial No. 1143 purchased by Messrs. W.J.Bidnall and Frank Stringer from Mr. Morley Servos:-

(a) Application form in duplicate.
(b) $5.00 fee - O.R. 230127
(c) Bill of Sale.
(d) Old Certificate of Registration No. 10957
(e) Old Certificate of Airworthiness No. 1049 together with Weight and Balance Report.
(f) Form #2444
(g) Copy of letter of temporary authority.

(D.W.Saunders)
Distrit Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto.

11174 (R)
1049 (A)

/SK

55

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11174

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	BIDWALL W. J. and STRINGER Frank
5. Address of owner	Stoney Creek, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 5th day of August, 19 52, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 8th day of August, 19 52.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/SRK

5008-B20-6

OTTAWA, Ontario,
11th August, 1952.

Messrs. W.J. Bidnall and Frank Stringer,
STONEY CREEK,
Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 11174 D.H. Tiger Moth 82C
Certificate of Airworthiness No. 1143. for your
aircraft, CF- , Serial No.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

July 31st, 1953 Certificate of Airworthiness is valid until

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

cc: TORONTO

(C.T. Travers),
Superintendent, Air Regulations.

P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☐

REGISTERED

AC-5-60

EXCLUSIVE CONNECTION WITH WESTERN UNION CABLE SERVICE

FORM 6107

CANADIAN NATIONAL TELEGRAPHS

J. R. WHITE GENERAL MANAGER
TORONTO

CLASS OF SERVICE DESIRED

FULL RATE	
DAY LETTER	X
NIGHT MESSAGE	
NIGHT LETTER	

PLACE X OPPOSITE SERVICE DESIRED

CHECK	RECEIVERS NO.	TIME FILED	CHARGE TO DEPT. OR ADDRESS

Send the following message, subject to the terms on back hereof, which are hereby agreed to

FILE: 50[illegible]

260 RICHMOND ST. W. TORONTO AUGUST 1, 1952

COLLECT

W J BIRNALL IMPERIAL OIL STATION
STONEY CREEK ONTARIO

28524

TRANSPORT - RECORDS
AUG 22 P.M. 1952
File 5008-B20-6

PENDING ISSUE OF FORMAL CERTIFICATES REGISTRATION AND AIRWORTHINESS THIS WIRE CONSTITUTES YOUR TEMPORARY AUTHORITY TO OPERATE TIGER MOTH GY DASH BRAVO TANGO FOXTROT DAY VFR UNDER CONDITIONS OF ISSUE AS STATED IN C OF A NUMBER ONE ZERO FOUR NINE AND VALID UNTIL SEPTEMBER ONE FIFTY TWO STOP THE ALL UP WEIGHT MUST NOT EXCEED 1825 POUNDS STOP THIS AUTHORITY DOES NOT INCLUDE OPERATION RADIO APPARATUS.

DISTRICT SUPERINTENDENT AIR REGULATIONS

Note - Received in Records 5/8/52 and inadvertently passed to and retained in, AME until this date. 22/8/52 Rtd Records

TEL/fs
VCC: H.Q.
TELEGRAM FILE

IS YOUR MESSAGE COMPLETE? EXTRA WORDS COST ONLY A FEW CENTS.

58.

5008-B20-6

260 Richmond St.,W.
Toronto, Ontario
June 5th 1953.

Mr. George E. Garbutt,
7 Morden Avenue,
Hamilton Beach, Ontario

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth aircraft, CF-BTF, Serial No. 1143 which you recently purchased from Messrs. Bidnall and Stringer:-

(a) Application form in triplicate.
(b) $5.00 fee - C.R.#69276
(c) Bill of Sale.
(d) Certificate of Registration No. 11174
(e) Certificate of Airworthiness No. 1049 together with Weight and Balance Report.

Pending issue of the formal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF BTF as a private aircraft, day VFR, under the conditions of issue as stated in the Certificateof Airworthiness No. 1049 and valid until July 31, 1953.

This authority doesnot include permission for the operation of radio apparatus.

The all-up weight of this aircraft is not to exceed 1825 lbs (Normal).

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto

/mgm
D.S.R -2
H.Q.
C.R.

59

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11174

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	BIDNALL W. J. and STRINGER Frank
5. Address of owner	Stoney Creek, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 5th day of August, 19 52., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 8th day of August, 19 52.

H. Station

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

60

Venus Home Portraits

"Artistic Child Studies In Your Home"

445 Wentworth North - Telephone 3-7300

HAMILTON, ONTARIO

June 4, 1953

To whom it may concern:

We hereby transfer ownership of Tiger Moth CF-BTF from Frank Stringer and Bill Bidnall, Stoney Creek, to George Ernest Garbutt, 7 Morden Ave, Hamilton Beach, Ontario

It is further certified that there are no liens, repair bills or other encumbrances on this machine.

Irene W. Bidnall (witness) — Wm J. Bidnall (signed: Wm. Bidnall)

Irene Hunter (witness) — Frank A Stringer (signed: Frank Stringer)

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier — made by: de Haviland

Type: D.H. Tiger Moth — Maker's No.: 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29$ 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1230	
Total weight authorized (fully loaded) in lbs. 1825	Air Speed 85 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments: Altimeter, oil pressure, oil temp
2. Gauges: Gas,
3. Lights: None
4. Signals: None
5. Fire Extinguishers: 1 hand operated
6. Parachutes: none
7. Tools: None
8. Other Equipment: Safety straps

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy			
Pusher or Tractor	Tractor			
Right or Left Hand	Left			
No. of Cylinders	4			
H.P.	130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

61

2413
7-50

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant George Ernest Garbutt

Date of Application June 4, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
George Ernest Garbutt	7 Morden Ave, Hamilton Beach	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private)

Private

Usual Station Hamilton

Date and place of manufacture or reconstruction Toronto 1941

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by de Haviland

Type D.H. Tiger Moth Maker's No. 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29ft 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1230	
Total weight authorized (fully loaded) in lbs 1825	Air Speed 85 miles per hour	

EQUIPMENT—(Give number and type).

1. Instruments Altimeter, oil pressure, oil temp
2. Gauges Gas,
3. Lights None
4. Signals None
5. Fire Extinguishers 1 hand operated
6. Parachutes none
7. Tools None
8. Other Equipment Safety straps

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy			
Pusher or Tractor	Tractor			
Right or Left Hand	Left			
No. of Cylinders	4			
H.P.	130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date .....

Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....

Superintendent, Air Regulations

42.

2413
7-50

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant George Ernest Garbutt

Date of Application June 4, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
George Ernest Garbutt	7 Morden Ave, Hamilton Beach	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State. Commercial, Passenger, Freight or Private)

Private

Usual Station Hamilton

Date and place of manufacture or reconstruction Toronto 1941

Crew required 1

Accommodation for what number of passengers 1

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

63 2 8-52

Toronto, Ontario, June 9th 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B20-6	Re-registration of D.H. Tiger Moth aircraftCF-BTF	5008-B20-6

TRANSPORT - RECORDS
JUN 10 P.M. 1953
File 5008-B20-6

17732

Director of Air Services,
Department of Transport,
Ottawa, Ontario

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H.Tiger Moth aircraft, CF-BTF, Serial No. 1143, purchased by Mr. George E. Garbutt:-

(a) Application form in duplicate.
(b) $5.00 fee - O.R.#A2927 not attd.
(c) Bill of Sale
(d) Certificate of Registration No. 11174
(e) Certificate of Airworthiness No. 1049 together with Weight and Balance Report.
(f) Copy of letter of temporary authority.

(D.W.Saunders)
District Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto

Attach 6

11988(R)
1049(A)

47

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11988

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	George Ernest Garbutt
5. Address of owner	7 Morden Avenue, Hamilton Beach, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 5th day of June, 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 12th day of June, 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

/VA

68

5008-B20-6

OTTAWA, Ontario.
June 16th, 1953.

Mr. George Ernest Garbutt,
7 Morden Avenue,
Hamilton Beach, Ontario.

Dear Sir/~~Madam~~-

Enclosed are Certificate of Registration No. 11988 and Certificate of Airworthiness No. 1049 for your D.H. Tiger Moth 82C aircraft, CF-~~DHT~~ , Serial No. 1143.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 31st, 1953.

Your attention is drawn to Information Circular T/8/39.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

added Dept 19/6/53

(C.T. Travers),
Superintendent, Air Regulations.

cc: Toronto
P.S. Propeller Log Book (s) enclosed. Yes ☐ No ☒

REGISTERED

AC-5-60

47

TRANSPORT - RECORDS
JUL 17 A.M. 1953
File 5008-B20-6

26170

DEPARTMENT OF TRANSPORT

TORONTO, 260 Richmond St. W. July 13, 1953

Your File 5008-B20-6

SUBJECT Renewal of Certificates of Registration and Airworthiness
D.H. Tiger Moth 82C CF-BTF

Our File 5008-B20-6

Director of Air Services,
Department of Transport,
Ottawa, Ontario.

Attention: Superintendent, Air Regulations.

1. Attached herewith is your copy of Form No. 2444 in respect to the Renewal of the Certificates of Registration and Airworthiness for D.H. Tiger Moth 82C CF-BTF

(D.W. Saunders),
District Superintendent, Air Regulations,
for (District Controller, Air Services),
Toronto.

Attach.

2444
8-52

69

CANADA

DEPARTMENT OF TRANSPORT

APPLICATION FOR RENEWAL OF CERTIFICATE OF AIRWORTHINESS

REGISTRATION – CF – BTF SERIAL No. 1193

1. C. of A. No. 1099 Expires JULY 31-53 C. of R. No. 11988 Expires JULY 31-53
Aircraft Data—Manufacturer DE HAVILLAND Model 82 C.
Hours flown—Since New 1856:15 Since Overhaul -
Engine Data—Manufacturer DE HAVILLAND Model GIPSY MINOR 1C

	Serial Numbers	Hours Run Since New	Hours Since Overhaul
(1)	87216	2102.90	783:40
(2)			
(3)			
(4)			

Signature of Applicant George Garbett
Date July 6-53

2. I hereby certify that all work listed in the aircraft log book has been done with certified material according to accepted practice; that all Airworthiness Directives (or approved equivalent) and Manufacturer's Service Bulletins affecting safety have been complied with to date; that no unapproved modifications have been incorporated and that the aircraft is airworthy.

Signed John W Rees
"M" Licence No. 1/2M-131
Date July 6-53

3. I hereby certify that I have flown this aircraft and that its performance flying qualities and functioning of controls, power plant, landing gear, etc., are equivalent to the standards of the type.

Signed George Garbett Pilot YZP3624
Date July 8/53

4. The following documents are attached:

Certificate of Airworthiness	X
Certificate of Registration	X
Weight and Balance Report (when applicable)	X

5. When sections 1, 2, 3 and 4 have been properly completed, this form constitutes a certificate for the operation of this aircraft under the conditions, and to the expiration date, of C. of R. No. 11988 and C. of A. No. 1099, or for a period of 30 days, whichever is the earlier, pending the return to the owner of the formal documents.

FOR DEPARTMENTAL USE ONLY

6. Details noted on this form have been checked, and I am satisfied that the log books have been examined, the aircraft has been inspected, and all documents found in order. Renewal of certificate is recommended.

Signed
District Aircraft Inspector
Date July 10/53

DEPARTMENT OF TRANSPORT A.I. CANADA

7. C. of A. and C. of R. renewed, not valid after.

Date July 31, 1954

Permissible Gross Weights—Wheels 1825 Lbs.
—Skis
—Floats

Signed A R Linder
for District Superintendent, Air Regulations
Date July 13, 1953

Other Action:—

8. H.Q. Action C.A.R.
C.A.E.

7/

5008-B20-6

260 Richmond St.,W.
Toronto, Ontario
August 6th 1953.

Messrs. W.T.Martin & J.S Murphy,
78 East 18th Street
HAMILTON, Ontario

Dear Sirs;

Receipt is hereby acknowledged of the following documents relating to re-registration of D.H. Tiger Moth aircraft CF-BTF, Serial No. 1143 which you recently purchased from Mr. George E.Garbutt:-

(a) Application form in triplicate.
(b) $5.00 fee - O.R.#A292901
(c) Bill of Sale.
(d) Certificate of Registration No. 11988
(e) Certificate of Airworthiness No. 1049 together with Weight and Balance Report.

Pending issue of the formal certificates of Registration and Airworthiness, this letter will constitute your temporary authority to operate CF-BTF as a private aircraft (landplane) on day visual flying only, under the conditions of issue as stated in the Certificate of Airworthiness No. 1049 and valid until November 6th 1953.

This authority does not include permission for the operation of radio apparatus.

The all-up weight of this aircraft is not to exceed 1825 lbs.

Yours truly,

(D.W.Saunders)
District Superintendent, Air Regulations,
Toronto

/mgm
D.S.R.-2
H.Q.
C.R.

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 11988

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	George Ernest Garbutt
5. Address of owner	7 Morden Avenue, Hamilton Beach, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Hamilton
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 5th day of June, 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 12th day of June, 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

78 - E 18th. Street,
Hamilton, Ont.

Phone 3-8926

Mt. Hope Airport
Mt. Hope, Ont.

73

M&M AERO SERVICES

TAYLORCRAFT DEALERS

BILL OF SALE

I. We do hereby sell to M.M...AERO.....
of..SERVICES.....of...HAMILTON....ONT..
aircraft, Reg. CF-BTF. for the sum of one dollar ($I.00) and certain considerations. We declare this aircraft clear of any liens or encumbrances.

Dated at Hamilton, this day, the ..27th.. of
...July....., 1953.

Witness

Purchaser

M & M AERO SERVICES Per

Seller

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier — made by: Dehavilland Aircraft Ltd.

Type: D.H. Tiger Moth 82C — Maker's No.: II43

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'4"	
Length o/a in feet	23'II"	
Height o/a in feet	8'9"	

Cubic Capacity (of Airship or Balloon):

Weight equipped, but without load, fuel, or oil: I230

Total weight authorized (fully loaded) in lbs: I825 — Air Speed: 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments: Air speed, turn and bank, altimeter and compass
2. Gauges: Oil pressure, temperature, tachometer.
3. Lights: None
4. Signals: None
5. Fire Extinguishers: Cockpit and Engine CO2
6. Parachutes: None
7. Tools: None
8. Other Equipment: None

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand				
No. of Cylinders	4			
H.P.	I25/I30			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on .....

Particulars accurate as corrected .....

Modifications from type are indicated on annexed sheet .....

Registration recommended with the following special conditions .....

.....

.....

Date ..... Signature .....

Registration approved and Registration Mark C.F. ..... allotted.

Registration { approved or / not approved for reasons annexed.

.....
Superintendent, Air Regulations

74

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... W.T. Martin J.S. Murphy

Date of Application ..... July 27, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
W.T. Martin & J.S. Murphy (operating under the firm name of M & M Aero Services.	78 East 18th St; Hamilton	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Private

Usual Station ..... Mt. Hope Airport, Mt. Hope Ontario

Date and place of manufacture or reconstruction ..... Toronto Ontario, 1941

Crew required ..... One

Accommodation for what number of passengers ..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air **Heavier** made by **Dehavilland Aircraft Ltd.**

Type **D.H. Tiger Moth 82C** Maker's No. **II43**

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29'4"	
Length o/a in feet	23'II"	
Height o/a in feet	8'9"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil **I230**

Total weight authorized (fully loaded) in lbs **I825** Air Speed **85** miles per hour

EQUIPMENT—(Give number and type).

1. Instruments **Air speed, turn and bank, altimeter and compass**
2. Gauges **Oil pressure, temperature, tachometer.**
3. Lights **None**
4. Signals **None**
5. Fire Extinguishers **Cockpit and Engine CO2**
6. Parachutes **None**
7. Tools **None**
8. Other Equipment **None**

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major			
Pusher or Tractor	Tractor			
Right or Left Hand				
No. of Cylinders	4			
H.P.	I25/I30			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on

Particulars accurate as corrected

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions

Date Signature

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

75

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant W.T. Martin J.S. Murphy

Date of Application July 27, 1953

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
W.T. Martin & J.S. Murphy (operating under the firm name of M & M Aero Services.	78 East 18th St: Hamilton	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) Private

Usual Station Mt. Hope Airport, Mt. Hope Ontario

Date and place of manufacture or reconstruction Toronto Ontario, 1941

Crew required One

Accommodation for what number of passengers One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DEPARTMENT OF TRANSPORT
INTRA-DEPARTMENTAL CORRESPONDENCE

2
8-52

Toronto, Ontario, August 13th 1953.
PLACE DATE

YOUR FILE	SUBJECT	OUR FILE
5008-B20-6	Re-registration of D.H. Tiger Moth aircraft CF-BTF	5008-B20-6

31841

TRANSPORT - RECORDS
AUG 14 A.M 1953
File 5008-B20-6

Director of Air Services,
Department of Transport,
OTTAWA, Ontario.

Attention: C.A.R.

1. Herewith the following documents relating to re-registration of D.H. Tiger Moth aircraft, CF-BTF, Serial No. 1143 purchased by Messrs. W.T.Martin & J.S.Murphy:-

(a) Application form in duplicate.
(b) $5.00 fee - O.R.#A29290 Not Cancel
(c) Bill of Sale
(d) Certificate of Registration No. 11988
(e) Certificate of Airworthiness No. 1049 together with Weight and Balance Report.
(f) Copy of letter of temporary authority.

D.W.Saunders

(D.W.Saunders)
District Superintendent, Air Regulations,
for(District Controller, Air Services)
Toronto

Attach 6

12244 (R) (A)
1049

80

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12244

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd. Toronto, Ontario
3. Constructor's serial number	1143
4. Name of owner	W.T. Martin and J.S. Murphy (Operating under the firm name of M & M Aero Services)
5. Address of owner	78 East 18th Street Hamilton, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Mt. Hope Airport Mt. Hope, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 6th day of August 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 19th day of August 1953.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

AIR SERVICES BJC
CIVIL AVIATION DIVISION

CANADA
DEPARTMENT OF TRANSPORT

81

REFER TO FILE NUMBER
5006-320-4

REGISTERED

OTTAWA, Ontario.
August 21st, 1953

Messrs. W.T. Martin & J.S. Murphy,
78 East 18th Street,
Hamilton, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 12244 and Certificate of Airworthiness No. 1029 for your D. Tiger aircraft, CF-DTP Serial No. 1123.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 31st, 1954.

Your attention is drawn to Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

(C.T. Travers),
Superintendent, Air Regulations.

c.c. Toronto

P.S. Propeller Log Book (s) enclosed. Yes No.

AC-5-60

47

82

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 1224

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd. Toronto, Ontario
3. Constructor's serial number	1143
4. Name of owner	W.T. Martin and J.S. Murphy (Operating under the firm name of M & M Aero Services)
5. Address of owner	78 East 18th Street Hamilton, Ontario
6. Nationality of owner	Canadian
7. Usual station of aircraft	Mt. Hope Airport Mt. Hope, Ontario
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 6th day of August 1953, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 19th day of August 1953.

J. Baribeau

for Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

78-E-18TH STREET
HAMILTON, ONT.

PHONE 3-8926

MT. HOPE AIRPORT
MT. HOPE, ONT.

M & M AERO SERVICES

Taylorcraft Dealers

AIRCRAFT SALES AIRCRAFT BROKERS

BILL OF SALE

We do hereby sell to Harry Swanson of Nipigon Ontario, Tiger Moth aircraft CF-BTF for the sum of one dollar and certain considerations. We declare this aircraft clear of any liens or encumbrances.

Dated at Hamilton, this day, the 9th of February, 1954.

Charles Rader
Witness

Harry Swanson
Purchaser

M & M AERO SERVICES Per: J. A. Murphy
W. T. Martin
Vendor

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by DE HAVILLAND A/C LTD.

Type DH 82C Maker's No. 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	L.P. 1278	
Total weight authorized (fully loaded) in lbs 1825	Air Speed 85	miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 ASI 2 ALTIMETER 2 TURN & BANK 2 R.P.M.
2. Gauges 1 OIL TEMP 1 OIL PRESSURE
3. Lights NIL
4. Signals NIL
5. Fire Extinguishers 1 PYRENE
6. Parachutes NIL
7. Tools NIL
8. Other Equipment 2 SAFETY HARNESS

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Mk 3A			
Pusher or Tractor	TRACTOR			
Right or Left Hand	LEFT			
No. of Cylinders	FOUR			
H.P.	130			
Bore	4.6"			
Stroke	4.5"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 6 July 1953. AME. J DAVIES YZM-131

Particulars accurate as corrected Yes C of A No 1049 Valid to 31 July 1954

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions For Day Flying only under Visual Flight Rules. Eligible as Landplane only W&B refers.

Date 26 February 1954 Signature F Wilson Bone

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

84

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant Harry Swanson

Date of Application Feb. 9/54

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
HARRY SWANSON	Box 99, NIPIGON ONT.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) PRIVATE

Usual Station NIPIGON

Date and place of manufacture or reconstruction TORONTO 27/3/44

Crew required ONE (PILOT ONLY)

Accommodation for what number of passengers ONE

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air HEAVIER made by DE HAVILLAND A.T. LTD

Type DH 82C Maker's No. 1143

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	

Cubic Capacity (of Airship or Balloon)

Weight equipped, but without load, fuel, or oil L.P. 1278

Total weight authorized (fully loaded) in lbs 1825 Air Speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 ASI 2 ALTIMETERS 2 TURN & BANK 2 RPM
2. Gauges 1 OIL TEMP 1 OIL PRESSURE
3. Lights NIL
4. Signals NIL
5. Fire Extinguishers 1 PYRENE
6. Parachutes NIL
7. Tools NIL
8. Other Equipment 2 SAFETY HARNESS

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gipsy Mjr.			
Pusher or Tractor	TRACTOR			
Right or Left Hand	LEFT			
No. of Cylinders	FOUR			
H.P.	130			
Bore	4.6"			
Stroke	4.5"			

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 6 July 1953. AME. J Davies. YZM-131

Particulars accurate as corrected Y13 C of A No. 1049 Valid to 31 July. 1954

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions For Day Flying only under Visual Flight Rules. Elegible as Landplane only W&B refers.

Date 26 February 1954 Signature Fredw Bone

Registration approved and Registration Mark C.F. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

2413
7-51

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in duplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration.....$5.00

Certificate of Airworthiness.....$5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant.....Harry Swanson.....

Date of Application.....Feb. 9/54.....

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
HARRY SWANSON	BOX 99, NIPIGON ONT.	CANADIAN

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private).....PRIVATE.....

Usual Station.....NIPIGON.....

Date and place of manufacture or reconstruction.....TORONTO 27/3/44.....

Crew required.....ONE (PILOT ONLY).....

Accommodation for what number of passengers.....ONE.....

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

16

Air Services
Civil Aviation Division

Canada
DEPARTMENT OF TRANSPORT

Refer to File Number
5008-B20-6

501 Power Building,
Winnipeg, Manitoba.
March 1st, 1954.

Mr. Harry Swanson,
P.O. Box 99,
NIPIGON, Ontario.

Dear Sir:

Re: D.H. Tiger Moth CF - BTF.

Receipt is acknowledged of your application for registration of the above noted aircraft, together with the documents, etc., checked below:

(a)	Application form in triplicate.	(X)
(b)	Fee of $5.00 for Registration	(X)
(c)	Fee of $5.00 for Certificate of Airworthiness	( )
(d)	Bill of Sale	(X)
(e)	Customs Receipt	( )
(f)	Certificate of Airworthiness for Export	( )
(g)	Certificate of Registration and Certificate of Airworthiness in the name of the former owner.	(X)

Attached hereto is Official Receipt No. 88713 covering the fee of $5.00.

Pending receipt of the formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for Private purposes, under the same terms and conditions as contained in the formal Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

If registered commercially, this aircraft may not be flown for hire or reward unless the operator is in possession of a Licence issued by the Air Transport Board and an Operating Certificate issued by this Department.

This authority is valid until March 30th, 1954.

Yours truly,
ORIGINAL SIGNED BY
F. W. BONE
District Superintendent, Air Regulations.
F. W. Bone,
District Superintendent, Air Regulations.

FWB:MFB
c.c. HQ.
P.S. Also enclosed please find Journey and Aircraft Log Book and Engine Log Book.

87

16137

TRANSPORT - RECORDS
MAR 4 A.M.
File 5008-B20-6

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

501 Power Building,
Winnipeg, Manitoba, March 1st, 1954.

Your File	Subject	Our File
5008-B20-6	D.H. Tiger Moth CF - BTF	5008-B20-6

Director of Air Services,
Department of Transport,
Ottawa, Canada.

Attention: Superintendent, Air Regulations

1. Enclosed please find the papers and documents checked below, which were submitted in connection with the registration of the above noted aircraft:

1. Application (in duplicate) for registration of an Aircraft, submitted by Mr. Harry Swanson, Nipigon, Ont. (X)
2. Bill of Sale FROM: Messrs. W.T. Martin & J.S. Murphy, Hamilton, Ont. TO: Mr. H. Swanson, Box 99, Nipigon, Ont. (X)
3. Certificate of Registration No. 12244 for cancellation (X)
4. Certificate of Airworthiness No. 1049 for re-issue in the name of the new owner. (X)
5. Customs Receipt No. dated ( )
6. Certificate of Airworthiness for Export No. ( )
7. Form 2444 - Application for Renewal of Certificate of Airworthiness ( )
8. Form 2443 - Certification of Aircraft Imported Complete ( )
9. Copy of letter of temporary authority dated March 1st, 1954, (X)

2. Fee in the amount of $5.00 has been received and Receipt No. 88713 issued.

3. This application appears to be in order and, if approved, it is recommended that formal Certificates of Registration and Airworthiness might issue.

12717 (R)
1049 A

FWB:MFR
Encs.

Fredk W Bone
District Controller of Air Services.

91

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12717

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	Harry Swanson
5. Address of owner	P.O. Box, 99, Nipigon, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Nipigon
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of March 19 54, in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 8th day of March 19 54.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

BJC

92

SERVICES
CIVIL AVIATION DIVISION

CANADA

DEPARTMENT OF TRANSPORT

REFER TO FILE NUMBER
5008-320-6

REGISTERED

OTTAWA, Ontario.
March 8th, 1954.

Mr. Harry Swanson,
P.O. Box 99,
Nipigon, Ontario.

Dear Sir/s:-

Enclosed are Certificate of Registration No. 12717 and Certificate of Airworthiness No. 1049 for your D.H. Tiger Moth 82C aircraft, CF BTF Serial No. 1143.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 31st, 1954.

Your attention is drawn to Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

(C.T. Travers),
Superintendent, Air Regulations.

cc Winnipeg

P.S. Propeller Log Book (s) enclosed. Yes No.

AC-5-60

93

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12717

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Limited, Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	Harry Swanson
5. Address of owner	P.O. Box, 99, Nipigon, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Nipigon
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of March 1954 in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 8th day of March 1954

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air Heavier made by DeHavilland Aircraft (Can)

Type DH 82 C Maker's No. 5840

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1278	

Total weight authorized (fully loaded) in lbs 1825 Air Speed 85 miles per hour

EQUIPMENT—(Give number and type).

1. Instruments 2 ASI, 2 T+B, 2 Altimeter, 2 Compass
2. Gauges, 1 Oil Temperature, 1 Oil Pressure
3. Lights Nil
4. Signals Nil
5. Fire Extinguishers One Pyrene
6. Parachutes Nil
7. Tools Standard Tool kit
8. Other Equipment 2 Safety Harness.

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major 10			
Pusher or Tractor	Tractor			
Right or Left Hand	left			
No. of Cylinders	four			
H.P.	130			
Bore				
Stroke				

REGISTRATION

(Not to be filled in by Applicant)

Aircraft inspected on 6 July 1953 Mt Hope Ont. D A I. Torgnto.

Particulars accurate as corrected Yes C of A No 1049 valid to 31 July 1954

Modifications from type are indicated on annexed sheet

Registration recommended with the following special conditions For Day Flying only under Visual Flight Rules Eligible - as Land plane only.

Date 29th March 1954 Signature Fredw Bone

Registration approved and Registration Mark C.F. BTF. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

94

2413
8-52

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... X X $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... J. E. Nelson

Date of Application ..... March 16, 1954

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
John Eric Nelson	102 Rupert St Port Arthur, Ont.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Private

Usual Station ..... Fort William Airport

Date and place of manufacture or reconstruction ..... March 18, 1946

Crew required ..... Pilot only

Accommodation for what number of passengers ..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

DESCRIPTION OF AIRCRAFT

Heavier than, or Lighter than Air: Heavier — made by: DeHavilland Aircra.. (Can.)

Type: DH82 C — Maker's No.: 5840

	In Flight	Reduced or Folded for Storage
Span or breadth o/a in feet	29' 4"	
Length o/a in feet	23' 11"	
Height o/a in feet	8' 9"	
Cubic Capacity (of Airship or Balloon)		
Weight equipped, but without load, fuel, or oil	1278	
Total weight authorized (fully loaded) in lbs: 1825 — Air Speed: 85 miles per hour		

EQUIPMENT—(Give number and type).

1. Instruments: 2 A.S.I., 2 Turn & Bank, 2 Altimeter, 2 Compass
2. Gauges: 1 Oil Temperature, 1 Oil Pressure
3. Lights: Nil
4. Signals: Nil
5. Fire Extinguishers: One Pyrene
6. Parachutes: Nil
7. Tools: Standard Tool Kit
8. Other Equipment: 2 Safety Harness

ENGINES—	Engine No. 1	Engine No. 2	Engine No. 3	Engine No. 4
Name of Type	Gypsy Major 1C			
Pusher or Tractor	Tractor			
Right or Left Hand	Left			
No. of Cylinders	Four			
H.P.	130			
Bore				
Stroke				

REGISTRATION
(Not to be filled in by Applicant)

Aircraft inspected on: 6 July 1953 Mt Hope Ont. DAI Toronto.

Particulars accurate as corrected: Yes C of A No 1044 valid to 31 July 1954

Modifications from type are indicated on annexed sheet:

Registration recommended with the following special conditions: For day Flying only under Visual Flight Rules Eligible as Land plane only.

Date: 29th March 1954 — Signature: Fredw Bone

Registration approved and Registration Mark C.F.: BTF. allotted.

Registration { approved or / not approved for reasons annexed.

Superintendent, Air Regulations

95

2413
8-52

CANADA

APPLICATION FOR REGISTRATION OF AN AIRCRAFT

AIR REGULATIONS

To be sent in ~~duplicate~~ triplicate

The Controller of Civil Aviation,
Department of Transport,
Ottawa.

Application is hereby made for the registration under the Air Regulations (including Certificate of Airworthiness if required) of the aircraft described below.

Fees are enclosed as checked below:—

Registration ..... XX $5.00

Certificate of Airworthiness $5.00
(See note below)

The particulars given below are true in every respect.

Signature of Applicant ..... J. E. Nelson

Date of Application ..... March 16, 1954

OWNER, OR OWNERS OF AIRCRAFT

Name in full (IN BLOCK CAPITALS)	Permanent Address	Nationality
JOHN ERIC NELSON	102 Rupert St. Port Arthur, Ont.	Canadian

IF OWNER IS A COMPANY, NAMES OF DIRECTORS, ETC.

Name in full (IN BLOCK CAPITALS)	State whether President, Chairman or Director	Address	Nationality

Purpose for which aircraft is to be used (State, Commercial, Passenger, Freight or Private) ..... Private

Usual Station ..... Fort William Airport

Date and place of manufacture or reconstruction ..... March 18, 1946

Crew required ..... Pilot Only

Accommodation for what number of passengers ..... One

NOTE.—The fee for original registration is $5.00. In the case of change of ownership, the fee for re-registration is $5.00. The fee for certificate of airworthiness is $5.00, which certificate is re-issued on change of ownership without further fee.

9.6

BILL OF SALE

I, Harry Swanson of Nipigon, Ontario, do hereby certify that I have sold to Mr. Y. W. Nelson of Port Arthur, Ontario, one DH82C (TigerMoth) aircraft bearing registration markings CF - BTF, serial Number 1143, for the sum of ($1) one dollar and other valuable considerations. I declare the aircraft to be free of any lien and encumbrance.

Dated at Nipigon this day, the first March 1954.

Toivo Kiviste
WITNESS

Harry Swanson
Harry Swanson,
SIGNATURE

97

BILL OF SALE

I, Y. W. Nelson of Port Arthur, Ontario, do hereby certify that I have sold to John Eric Nelson of Port Arthur, Ontario, one DH82C (Tiger Moth) aircraft bearing registration markings CF - BTF, serial number 1143, for the sume of ($1) one dollar and other valuable consideration. I declare the aircraft to be free of any lien and encumbrance.

Dated at Port Arthur this day, the 16th day of March, 1954.

Y. W. Nelson
Y.W. Nelson,
SIGNATURE

Niilo Kyro
WITNESS

98

Air Services
Civil Aviation Division

Canada
DEPARTMENT OF TRANSPORT

Refer to File Number
5008-B20-6

501 Power Building,
Winnipeg, Manitoba.
April 1st, 1954.

Mr. John E. Nelson,
102 Rupert Street,
PORT ARTHUR, Ontario.

Dear Sir:

Re: D.H.82C, CF - BTF.

Receipt is acknowledged of your application for registration of the above noted aircraft, together with the documents, etc., checked below:

(a)	Application form in triplicate.	(X)
(b)	Fee of $5.00 for Registration	(X)
(c)	Fee of $5.00 for Certificate of Airworthiness	( )
(d)	Bill of Sale	(X)
(e)	Customs Receipt	( )
(f)	Certificate of Airworthiness for Export	( )
(g)	Certificate of Registration and Certificate of Airworthiness in the name of the former owner.	(X)

Attached hereto is Official Receipt No. 88965 covering the fee of $5.00.

Pending receipt of the formal Certificates of Registration and Airworthiness in your name, this letter constitutes your temporary authority to operate the above noted aircraft for Private purposes, under the same terms and conditions as contained in the formal Certificate of Airworthiness.

This authority does not include permission for the operation of radio apparatus if installed.

If registered commercially, this aircraft may not be flown for hire or reward unless the operator is in possession of a Licence issued by the Air Transport Board and an Operating Certificate issued by this Department.

This authority is valid until April 30th, 1954.

Yours truly,

ORIGINAL SIGNED BY
F. W. BONE
District Superintendent, Air Regulations

F. W. Bone,
District Superintendent, Air Regulations.

FWB:MFR
ENC.
c.c. HQ.

394

TRANSPORT - RECORDS
APR 6 A.M.
5008-B20-6
File

99

DEPARTMENT OF TRANSPORT

Intra-Departmental Correspondence

501 Power Building,
Winnipeg, Manitoba, April 1st, 1954.

Your File	Subject	Our File
5008-B20-6	D.H.82C, CF - BTF.	5008-B20-6

Director of Air Services,
Department of Transport,
Ottawa, Canada.

Attention: Superintendent, Air Regulations

1. Enclosed please find the papers and documents checked below, which were submitted in connection with the registration of the above noted aircraft:

1. Application (in duplicate) for registration of an Aircraft, Ont. submitted by Mr. John E. Nelson, 102 Rupert St., Port Arthur, (X)
2. Bills of Sale FROM: Mr. H. Swanson, Nipigon, Ont. - TO: Mr. Y.W. Nelson, Port Arthur, Ont. FROM: Y.W. Nelson - TO: J.E. Nelson, Port Arthur (X)
3. Certificate of Registration No. 12717 for cancellation (X)
4. Certificate of Airworthiness No. 1049 for re-issue in the name of the new owner. (X)
5. Customs Receipt No. dated ( )
6. Certificate of Airworthiness for Export No. ( )
7. Form 2444 - Application for Renewal of Certificate of Airworthiness ( )
8. Form 2443 - Certification of Aircraft Imported Complete ( )
9. Copy of letter of temporary authority dated April 1, 1954, (X)

2. Fee in the amount of $5.00 has been received and Receipt No. 88965 issued.

12791(R)
1049(A)

3. This application appears to be in order and, if approved, it is recommended that formal Certificates of Registration and Airworthiness might issue.

Fred W. Bone

FWB:MFR
Encs.

District Controller of Air Services.

104

AIR SERVICES
CIVIL AVIATION DIVISION

CANADA

DEPARTMENT OF TRANSPORT

JM

REFER TO FILE NUMBER
5008-320-6

REGISTERED

OTTAWA, Ontario.
April 9th, 1954.

Mr. John E. Nelson,
102 Rupert Street,
Fort Arthur, Ontario.

Dear Sir/~~Sir~~

Enclosed are Certificate of Registration No. 12791 and Certificate of Airworthiness No. 1049 for your D.H. Tiger Moth 626 aircraft, CF- ~~DEF~~ Serial No. 1143.

The Certificates must be carried with the Journey and Aircraft Log Book on board the aircraft on all flights.

The Certificate of Airworthiness is valid until July 31/1954.

Your attention is drawn to Engineering and Inspection Manual, page 510, Part I, Chap. V, Para. 5.6.

It is important that you notify this Department of any change of address, in order that delivery of circulars and other matter may be assured.

Yours truly,

C.T. Travers.

(C.T. Travers),
Superintendent, Air Regulations.

cc: Winnipeg

P.S. Propeller Log Book (s) enclosed. Yes No. X

AC-5-60

103

2462A

CANADA

DEPARTMENT OF TRANSPORT
AIR SERVICES BRANCH
CIVIL AVIATION DIVISION

CERTIFICATE OF REGISTRATION OF AIRCRAFT

No. 12791

NATIONALITY AND REGISTRATION MARKS CF-BTF

1. Type and description	D.H. Tiger Moth 82C
2. Name and address of constructor	DeHavilland Aircraft of Canada Ltd., Toronto, Ontario.
3. Constructor's serial number	1143
4. Name of owner	John E. Nelson
5. Address of owner	102 Rupert Street, Port Arthur, Ontario.
6. Nationality of owner	Canadian
7. Usual station of aircraft	Fort William Airport
8. Purpose	Private

WHEREAS it has been declared that the above-mentioned aircraft is not registered in any other State, it is hereby certified that the said aircraft has been duly entered on the register of Canada on the 1st day of April, 1954., in accordance with the Convention on International Civil Aviation dated December 7, 1944 and with The Air Regulations, and has been allocated the nationality and registration marks CF-BTF and is of Canadian nationality.

Given at Ottawa this 7th day of April, 1954.

Superintendent, Air Regulations.

No entries or endorsements may be made in this Certificate except in the manner or by the persons authorized for that purpose by the Minister.

ENGINES

18. Number installed: One

19. Makes: DeHavilland

20. Types: Gipsy Major 1C

21. International power of the engine or engines at

(a) Sea Level 125/130 H.P. at 2100 revolutions per minute.
(International number of revolutions)

(b) Rated Altitude ..... H.P. at ..... revolutions per minute.
(International number of revolutions)

Hourly consumption at mean sea level at above-mentioned power per engine.

22. Fuel: (a) ..... (b) .....

23. Oil: (a) ..... (b) .....

24. Airscrews { Number fitted: One Types: No:
Pitch: Diameter: 1230 (8.6.49)

25. Weight of aircraft empty (including water in the radiators):	(a) Landplane	~~1278~~ lbs.
	(b) Seaplane	lbs.
	(c) Skiplane	lbs.

WEIGHT OF FUEL AND OIL

26. Fuel (at 7·2 lbs. per gallon)	137 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 19 Imp. gals.	
27. Oil (at 9·0 lbs. per gallon)	18 lbs.
(a) Number of tanks: One	
(b) Capacity of tanks: 2 Imp. gals.	
28. Weight allowed for crew	170 lbs.
29. Weight allowed for equipment, excluding wireless apparatus	lbs.
30. Weight of wireless apparatus	lbs.
31. Maximum commercial load (passengers, goods) authorized when the fuel and oil tanks are full	270 (8.6.49) ~~225~~ lbs.
32. Maximum total weight authorized	lbs.
Landplane: (Acrobatic) 1770 lbs. (Normal)	1825 lbs.
~~Seaplane~~	lbs.
Skiplane	lbs.

COMPULSORY CONDITIONS

33. Maximum total weight authorized (write in full)
Landplane: (Normal) Eighteen hundred and twenty-five pounds.
~~Seaplane~~:
Skiplane: (Acrobatic) Seventeen hundred and seventy pounds.

34. Minimum crew necessary: One

35. Inspections and overhauls: *See* Air Regulations.

36. Stowage. *See* Air Regulations.

37. Distribution of the load: The aircraft must always be so loaded that the centre of gravity position must fall within the limits of ..... inches and ..... inches behind the prescribed datum.

38. The number of passengers carried must not, in any circumstances, exceed the number for which seating accommodation is provided.

39. Except in emergency the speed of the engine must not exceed 2100 r.p.m. for a total of more than one minute in each flight or, if the flight exceeds one hour, in each hour of flight; it must never exceed 2400 r.p.m.

40. The indicated air speed must never exceed (a) ..... m.p.h. and (b) ..... m.p.h. with flaps extended.

The Minister of Transport having regard to the reports furnished to him issues the present Certificate of Airworthiness dated March 18, 1946, in respect of the above-mentioned aircraft, in accordance with the Convention for the Regulation of Aerial Navigation, dated 13th October, 1919, Annex B, and with Air Regulations, ~~1930~~.

This Certificate is only valid, subject to the above compulsory conditions being fulfilled and until the date shown on page 4 hereof.

Given at Ottawa this 12th day of April, 19 46.

Superintendent, Air Regulations.

1 If flown acrobatically the maximum weight must not exceed 1770 lbs.

VALID FOR DAY FLYING ONLY

2462
9-39

CANADA
DEPARTMENT OF TRANSPORT
CIVIL AVIATION

PHOTO

CERTIFICATE OF AIRWORTHINESS No. 1049

(Heavier than air)

FIRST PART

Full Name, Address and Nationality of Owner or of Owning Company

1. Surname of owner (or name of Company) NELSON
2. Christian name George E.
3. Address 102 Rupert Street, Port Arthur, Ontario.
4. Nationality British

NAME OF CONSTRUCTOR

5. Name DeHavilland Aircraft of Canada Ltd.

NATIONALITY AND REGISTRATION MARKS

6. CF-BTF

DESCRIPTION OF AIRCRAFT

7. Type D.H. Tiger Moth Series 820 Constructor's No. 1143
8. Place and year of construction of aircraft Toronto, Ontario. 1941

CLASS OF AIRCRAFT

9. Land and/or marine Land
10. Number of planes Two
11. Number of engines One
12. Maximum number of persons to be carried (including crew) Two

CLASSIFICATION OF AIRCRAFT

13. Category Normal & Acrobatic
14. Subdivision
15. Maximum span (in flying position) 29' 4"
16. Maximum length (in flying position) 23' 11"
17. Total height (with and without trolley in case of seaplanes) 8' 9"

MIM/ZC/LEM

CLASSIFICATION OF AIRCRAFT BY EMPLOYMENT

Certificates of Airworthiness issued by the Department of Transport, will be valid in one or more of the following categories and subdivisions. (See Sections 13 and 14, Page 1.)

Normal Category

Subdivision (a) Public transport for passengers.
" (b) " " " mails.
" (c) " " " goods.
" (d) Private purpose aircraft.
" (e) Aerial work, other than (a), (b) and (c).

Acrobatic Category

Subdivision (a), (b), (c), (d) and (e) as for normal, and
" (f) Record or racing aircraft.
" (g) Research or experimental aircraft.

Aircraft in normal category are precluded from evolutions causing abrupt changes in attitude and are limited in air speed to 50 per cent in excess of steady horizontal speed at normal r.p.m. Acrobatic category aircraft are not so restricted.

Operators and pilots should take note of the classification given in the certificate, especially of alternative empty weights in various subdivisions and operate the aircraft accordingly.

June 20, 1939.

PERIODIC OVERHAULS

Date and Place of Overhaul	Result of Overhaul (1)	Certificate Valid until	Signature of Inspector
		March 18, 1947. 6/4/49 4.6.50. 22.6.51 27.7.52 31.7.53 July 31, 1954	

(1) The periods of and reasons for suspensions and withdrawals of certificates of airworthiness will in particular be indicated in this column.

All modifications affecting airworthiness should be noted.

No entries or endorsements may be made on this Certificate except in the manner and by the persons authorized for that purpose by the Minister of Transport.

SECOND PART

PRECAUTIONS TO BE TAKEN FOR SAFETY IN NAVIGATION

A.—Description and position of instruments and material with which the aircraft must be equipped and which must be in perfect working order:

Compass
Altimeter
Airspeed Indicator
Oil Pressure Gauge
Oil Temperature Gauge
Revolution Indicator

B.—Equipment essential for preventing or dealing with fire whilst in flight:

Fire Extinguisher

C.—Equipment essential for rendering first aid in case of accident:

D.—Special equipment:

(Normal) Safety belt for each occupant.
(Aerobatic) Safety harness must be installed.

Certificates of Airworthiness for landplanes are valid only for flights over land or within gliding distance of land in the event of engine failure or, in the case of multi-motored landplanes, the failure of any one engine.

For the purposes of this certificate infants in arms under three years of age are not counted as passengers.

WEIGHT AND BALANCE REPORT
FORMS PART OF THIS CERTIFICATE
OF AIRWORTHINESS AND MUST BE
CARRIED IN THE AIRCRAFT DURING
FLIGHT. (8.6.49)

Note: This certificate is subject to Air Regulations, [redacted], and will be voided by any unauthorized change in the design or equipment of the aircraft, or by any breach of the conditions herein expressed.

TO BE USED FOR RE-REGISTRATION AND ANY AMENDMENTS TO CERTIFICATES OF AIRWORTHINESS.

DEPARTMENT OF TRANSPORT
AIR SERVICES
CIVIL AVIATION DIVISION

AC-5-132

ORIGINAL - HQ FILE NO. 105 B20-6

DUPLICATE - DIST. FILE NO. B20-6

TO: Director of Air Services, Ottawa, Ont. Attn: S.A.R.

TRANSPORT - RECORDS
FEB 18 A.M.
File 5008-B20-6

AIRCRAFT LICENSING RECORDS

24757

1. Registration mark CF- BTF 2. Old C of R No. .....

3. New C of R No. ..... Date .....

4. C of A No. 1049 Category: Normal ☐ Exp. ☐ Rest. ☐ Acro ☐

5. Landplane Seaplane ☐ Skiplane ☐

6. Classification Changes
   State ☐ to Commercial ☐ to Private ☐
   Commercial ☐ to State ☐ to Private ☐
   Private ☐ to Commercial ☐ to State ☐

Valid for Day ☐ Night ☐

7. Surname of owner ..... Citizen of .....

Christian name ....

8. Address of owner .....

.....

Change of address to .....

9. Aircraft based at .....

10. Type	Weight empty	Max. gross weight
Land		
Sea		
Ski		

11. Minimum crew		Maximum passengers		Pass with freight

12 Wt. and balance report ☐ Date Copy attached ☐

Wt. and balance amendment ☐ Date Copy attached ☐

Amendment not otherwise covered: Aircraft Type Approval No. 2, Issue 2, inserted in C. of A. which was endorsed accordingly.

13. C of A valid from December 17, 1954, to December 16, 1955.

Temporary authority from February 2, 1955, to March 3, 1955.

Date February 16, 1955.

for District Superintendent Air Regulations

106

AC-5-46

ACCIDENT MEMORANDUM

Date:

File No. 5002-498
5008-B20-6
5802-17857

SUBJECT

Accident: Pilot - **I.D. Tetlock**
Aircraft & Reg.-**DH82C - CF-BTF**
Date -**December 14th, 1955**

Injuries - Fatal, Serious, Minor, Nil
Damage - Destroyed, Substantial, Minor
Nil

MEMORANDUM TO: A.R.L. (Airmen Licensing) ....
A.R.L. (Aircraft Licensing) .X..
C.T. ....
C.A.I. ....

1. May action be taken as indicated below with regard to the subject accident:-

(a) Airman Licensing

Cancellation of -

(i) Pilot Licence ....

(ii) Aircraft Maintenance Engineer Licence ....

(iii) Flight Engineer Licence ....

(iv) Flight Navigator Licence ....

(v) Glider Licence ....

(vi) Other ....

(b) Aircraft Licensing

(i) Cancellation of C. of A. and C. of R. ..X.

(ii) Return of C. of A..X.C. of R..X..... Aircraft Log Book.X.Engine Log Book...X..... and Propeller Log Book.....to the D.S.A.R. for transmission to the owners.

(iii) Return as in (ii) above, but with the request that they be kept as required by the Air Regulations, Paragraph 824....X.....

(iv) Return of Pilot Licence .... and Pilot's Log Book..... to the D.S.A.R. for Transmission to the owner..... or.....

(v) Other

(c) C.T.

(i) Cancellation of Radio Operator's Certificate (if applicable)....

(ii) Cancellation of Aircraft Station Licence ....

(d) C.A.I.

(i) Deletion of pilot's name from the Information Circular distribution list ....

Comments:

W.V. Gordon

(W.V. Gordon)
Inspector, Air Regulations.

NOTE: When applicable, individual forms will be submitted for each crew member.

See attachments .....

GJ/SEK

107.

Ottawa, Ontario, May 11th, 1956.

D.H.82C Tiger Moth Aircraft, CF-BTF ~~5002-496~~ 5008-B20-6.

REGISTERED

District Controller of Air Services,
608 Power Building,
WINNIPEG, Manitoba.

Attention: District Superintendent, Air Regulations.

1. Enclosed are the Engine and Journey and Aircraft Log Books covering the above-mentioned aircraft, which was destroyed in an accident on December 14th, 1955.

2. The attention of the owners should be drawn to Paragraph 824(a) of Division II of Part VIII of the Air Regulations.

ORIGINAL SIGNED BY
F. W. BONE

Encls. Superintendent, Air Regulations.

92

MEMORANDUM • GOVERNMENT OF CANADA

24121

TO: ADMA - Ottawa.

FROM: Winnipeg Regional Office.

SUBJECT: Write-off - aircraft

TRANSPORT - RECEIVED
OCT 23 AM
5008-BTF
5008-BMM

YOUR FILE No: 5008-14

OUR FILE No: 5008-BMM, BTF, CTK, CVA and SAG (ARW)

DATE: October 18, 1963.

1 Please be advised that the following aircraft are beyond any economical repair and are considered a write-off:

CF- B M M - Cessna T-50
CF- BTF - D.H.82C
CF- CTK - D.H.82C
CF- SAG - D.H.82C

2 Perusal of the Civil Aircraft Register indicates that CF- C V A is still registered to Superior Airways Limited. Please refer to your letter dated October 29, 1956, which deleted the markings from the register.

3 Would Headquarters kindly delete the above markings from the register.

COPY FOR
5008-BTF
-CTK
-CVA
-SAG

for Regional Director, Air Services.

Certs. cancelled
24.10.63

Coded & Noted
24.10.63

CGSB Standard 6--GP--22; PP&S Cat. No. 3593

25X

DATE: 3-4-85

FILMED by: A.M.

CANCELLED AIRCRAFT REGISTRY FILES

SERIES 5008

TRANSPORT CANADA

REGIONAL OFFICES

ROLL #

195

END
OF
ROLL