

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A13EA
FOUND BROTHERS
FBA Centennial "100"

January 1, 1970

TYPE CERTIFICATE DATA SHEET NO. A13EA

This data sheet which is a part of Type Certificate No. A13EA prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Found Brothers Aviation Limited
P.O. Box 160
Grand Bend, Ontario, Canada

I - Model FBA Centennial "100" (Normal Category), Approved 3 December 1968 by the FAA and 19 July 1968 by the Canadian Department of Transport (DOT)

Engine Lycoming IO-540-G1D5.
Fuel 100/130 minimum grade aviation gasoline
Engine limits Maximum for all operations, 290 h.p. at 2,575 r.p.m.
Full throttle at sea level.
At propeller r.p.m.'s below 2,350 engine manifold pressure is not to
exceed 23" hg. See NOTE 2.

Propeller and propeller limits Hartzell variable pitch propeller, HC-92WK-1D/W9350-4.6
Diameter: Nominal 88 inches
Pitch settings at station 30: Low 13.5°; High 29.4°
Constant speed governor, Hartzell F-6-5A.

Airspeed limits (CAS) Vne (Never exceed) 186 m.p.h. (161 knots)
Vp (Maneuvering) 148 m.p.h. (128 knots)
Vno (Maximum) 148 m.p.h. (128 knots)
Vfe (Flaps extended) 109 m.p.h. (95 knots)

C.G. range LANDPLANE AND SKIPLANE

<u>Gross Weight</u>	<u>Fwd. limit</u>	<u>Aft limit</u>
3,500 lb.	Sta. 82 (18.6% MAC)	Sta. 87 (26.4% MAC)

SEAPLANE

3,620 lb.	Sta. 83 (20.2% MAC)	Sta. 87 (26.4% MAC)
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Empty weight C.G. range None

Datum Datum is 65 in. ahead of the center line of the main landing gear pick-up lugs.

M.A.C. 63.5 in. (Leading edge of M.A.C. is 5.2 in. aft of datum.)

Leveling means Aircraft cabin floor - level laterally and longitudinally.

Maximum weight Landplane and skiplane - 3,500 lb.
Seaplane - 3,620 lb.

Minimum crew 1 (pilot)

Number of seats 6 including pilot. (2 at Sta. 82.2, 2 at Sta. 117.2, and 2 at Sta. 148.9.)

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Maximum baggage	No separate defined baggage compartment - limited by maximum weight.				
Fuel capacity	54 Imperial gal. (65 U.S. gal.) (Sta. 82), 27 Imperial gal. (32.5 U.S. gal.) in each wing tank. 50.5 Imperial gal. (60.6 U.S. gal.) usable. See NOTE 1(b) for data on unusable fuel.				
Oil capacity	11 Imperial qt. (13.2 U.S. qt.) maximum (Sta. 22.6) including oil cooler. Oil cooler capacity 1 Imperial qt. (1.2 U.S. qt.) (Sta. 15). 11 Imperial qt. (13.2 U.S. qt.) usable.				
Control surface movements	Wing flap	0°	Up	45°	Down
	Aileron	18°	Up	12°	Down
	Elevator	30°	Up	25°	Down
	Trim tab	26°	Up	16°	Down
	Gear tab	10°	Up	8.3°	Down
	Rudder	26°	Left	26°	Right
Serial Nos. eligible	101 and up. The Canadian Department of Transport Certificate of Airworthiness for export endorsed as noted under "Import Eligibility" must be submitted for each individual aircraft for which application for certification is made.				
Import eligibility	A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by or for the Minister of Transport. This form must contain the following statement: "This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for D.O.T. Type Approval No. A-88, Issue 1 (FAA Type Certificate No. A13EA)."				
Certification basis	FAR 23 dated 1 February 1965, and Amendments 23-1 to 23-3 inclusive. Application for Type Certificate 24 October 1966.				
Required equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required: (a) Aircraft Flight Manual (DOT Approved) dated 19 July 1968; (b) Stall Warning Indicator, Instrument Panel Dwg. 4R2036 and Wing Dwg. 4R1001.				
Optional equipment	<u>Landing gear</u> 201. <u>Ski Installation</u> (a) Airglass LW 3600 skis. Ski installation to Found Bros. Dwg. 4E8015. 202. <u>High Flotation Gear Installation</u> (a) Type III Tires; Tire size 11.00 x 12; 8 ply rating. Installation to Found Bros. Dwg. 4R8011, Issue 3. 203. <u>Float Installation</u> (a) Edo Model 582-3430 Floats. Float Installation to Found Bros. Dwg. 4R8019 Issue 4.				
NOTE 1.	(a) Current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter. (b) The certificated empty weight and corresponding center of gravity locations must include unusable fuel of 25.3 lb. (82.0 in.).				

NOTE 2. The following placards must be placed in clear view of the pilot:

- (a) THIS AIRCRAFT MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS IN THE FORM OF PLACARDS, MARKINGS AND MANUALS."
- (b) "NO ACROBATIC MANEUVERS, INCLUDING SPINS, ARE APPROVED."
- (c) "DO NOT EXCEED 23" HG M.A.P. BELOW 2,350 R.P.M."
- (d) "DAY VFR OPERATION ONLY."
- (e) "DEMONSTRATED CROSSWIND VELOCITY 12 M.P.H."
- (f) "FLIGHT IS NOT PERMITTED WITH RIGHT HAND ELEVATOR AILERON CONTROL INSTALLED."

The following placard must be placed in clear view of the pilot when the aircraft is operated in the seaplane configuration:

- (g) "USE OF FULL FLAP (THIRD NOTCH) IS NOT APPROVED."

NOTE 3. To detect cracks in the welded joint between the lower end of the main landing gear leg, P/N 4R8005-17 and -18, and wheel axle block, P/N 4R8005-24, accomplish the following at intervals not to exceed 100 hours' in service and after each suspected heavy landing:

- (a) Perform a magnetic particle, fluorescent, or visible dye penetrant inspection of the welded area for cracks and evidence of incipient failure or an equivalent inspection approved by the Chief, Engineering and Manufacturing Branch, FAA Eastern Region.
- (b) In the event of cracks or evidence of incipient failure being found, repair part in accordance with an approved repair scheme or replace with a part of the same part number that has been inspected in accordance with paragraph (a) and certified airworthy.
- (c) In the event of the inspection indicating the leg to be free of cracks or incipient failure, re-paint inspected area in accordance with the manufacturer's specifications.

(Canadian Department of Transport Airworthiness Directive CF-69-13 covers this subject).

NOTE 4. The Found Brothers Aviation Limited Model FBA Centennial "100" aircraft is built to the Found Bros. Drawing List, Report No. 4D-60, Issue I, dated 18 July 1968.

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