

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A7EA
Revision 6
Found Aircraft
Canada, Inc.
FBA-2C
FBA-2C1
FBA-2C2

November 15, 2005

TYPE CERTIFICATE DATA SHEET NO. A7EA

This data sheet which is a part of type certificate No. A7EA prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder Found Aircraft Canada, Inc.
R.R. #2, Site 12, Box 10
95 Airport Road
Parry Sound Municipal Area Airport
Parry Sound ON P2A 2W8

I - Model FBA-2C, 5 PCLM (Normal Category), Approved June 23, 1965 by the FAA and February 19, 1964 by the Canadian Department of Transport (DOT)

Engine Lycoming O-540-A1C5

Fuel 91-96 minimum grade aviation gasoline

Engine limits Maximum for all operations, 250 hp. at 2575 r.p.m.
Full throttle at sea level

Propeller and
Propeller limits McCauley variable pitch Model 2D36C28/80MM-6
Diameter: Maximum 74 inches, minimum 73 inches
No reduction in minimum size allowed
Pitch setting at Station 30.0: low 15.7°, high 32.0°

 Constant speed governor Woodward 210395

 Hartzell Constant Speed HC-927K-1D/8847-0 70 lb. (-63.0 in.)
Diameter: maximum 88 inches, minimum 88 inches
Pitch setting at Station 30.0 inches: low 12°, high 26.4°

 Woodward constant speed governor B210340

Airspeed limits (CAS) Vne (never exceed) 155.3 m.p.h. (135 knots)
Vno (max. structural cruising) 123.3 m.p.h. (107 knots)
VA (maneuvering) 130 m.p.h. (112.5 knots)
Vfe (flaps extended) 108.0 m.p.h. (93.5 knots)

C.G. range
(Landing Gear Fixed) Landplane and Skiplane (See Note 4 for Ski Installations)

<u>Gross Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
2850 lb.	+17.0 in.	+24.5 in.
2250 or less	+15.3 in.	+24.5 in.

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Seaplane (See Note 5 for Float Installations)

	<u>Gross Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
	2850 lb.	+17.0 in.	+23.5 in.
	2250 or less	+15.3 in.	+23.5 in.
	Straight line variation between points given		
Datum	Main landing gear beam center line		
M.A.C.	62.3 in.		
Leveling means	Aircraft cabin floor level - laterally and longitudinally		
Maximum weight	Landplane and Skiplane - 2850 lb. Seaplane - 2850 lb. (See Note 3 for eligibility at 3,000 lbs.)		
Minimum crew	1 (pilot)		
No. of seats	5 (2 at +17.8 in., 3 at +61.75 in.)		
Maximum baggage	150 lb. at +92.5 in.		
Fuel capacity	56.0 Imperial gallons (67.3 U.S. gallons) total (+22.2 in.) 28 Imperial gallons (33.6 U.S. gallons) each wing tank. 55.0 Imperial gallons (66.1 U.S. gallons) usable.		
Oil capacity	10.5 Imperial quarts (12.6 U.S. quarts) max. (-38.8 in.)		
Control surface movements	Wing Flaps	0° up	32° down
	Aileron	18° up	12° down
	Elevator (0° Stab.)	29.5° up	21.5° down
	Stabilizer	3° up	5° down
	Rudder	30° left	30° right
Serial Nos. eligible	3 to 27 inclusive. 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.		
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: Landplane, Skiplane and Seaplane: (a) D.O.T. Approved Flight Manual dated February 25, 1964. (b) Stall Warning Indicator per Found Brothers Drawing No. W-535.		

I I- Model FBA-2C1, (Bush Hawk) (Normal Category), Approved March 3, 2000 by the FAA and March 5, 1999 by the Canadian Department of Transport (DOT)

Engine	Lycoming I0-540-D4A5 (260 HP) or Lycoming I0-540-L1C5 (300 HP)
Fuel	100LL or 100 (Formerly 100/130) Grade aviation fuel
Engine limits	Maximum for all operations; Full throttle at sea level I0-540-D4A5: 260 HP at 2700 r.p.m. I0-540-L1C5: 300 HP at 2700 r.p.m.

C.G. range
(Landing Gear Fixed)

Landplane

<u>Gross Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
3500 lbs.	+20.5 in.	+24.5 in.
2750 lbs	+17.0 in.	+24.5 in.
1950	+17.0 in.	+24.5 in.

Seaplane

<u>Gross Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
3800 lbs.	+20.5 in.	+23.5 in.
2750 lbs	+17.0 in.	+23.5 in.
2250	+17.0 in.	+23.5 in.

Straight line variation between points given. Gross weight and c.g. may vary depending on the installation of Optional Equipment.

Datum

Landplane: Main wheel axle.
Seaplane: Lower forward corner of the front door.

M.A.C.

62.3 in.

Leveling Means

Aircraft cabin floor level – laterally and longitudinally.

Maximum Weight

Landplane 3,500 lbs.
Seaplane 3800 lbs. (see Note 5 for specific weight limitation with each float installation.)

Minimum crew

1 (pilot)

Maximum
Occupants

5, including pilot. (2 at +17.8 in., and 3 at +62 in.)

Maximum Baggage

250 lbs. at 94 in.

Fuel Capacity

At +21.8 in.	<u>Liters</u>	<u>Imp. Gals.</u>	<u>U.S. Gals.</u>
Usable	372	81.9	98.3
Unusable	6	1.4	1.7
Total	378	83.3	100.0

Oil Capacity

11.4 liters / 10 imperial quarts / 12 U.S. quarts maximum

Control Surface
Movements

Wing Flaps	0°	up	30°	down
Aileron	18°	up	12°	down
Elevator (0° Stab.)	29.5°	up	21.5°	down
Stabilizer	6°	up	4°	down
Rudder	24°	left	24°	right

Serial Numbers
Eligible

100 and subsequent.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification

Approved Configuration	The approved configuration is defined by the latest Transport Canada Approved revision of the "Master Drawing List", Document No. MDL-2C2, dated April 15, 2004, and subsequent TCCA approved revision.
Approved Publications	Transport Canada Approved Flight Manual FAC2-M400, dated December 9, 2003, Issue 1, and subsequent approved revisions.
Certification basis	Maintenance Program FAC2-M200.
	<u>FBA-2C</u> CAR 3 dated May 15, 1956 and Amendments 3-1 to 3-7 inclusive. Type Certificate No. A7EA issued June 23, 1965. Date of Application for Type Certificate February 11, 1963.
	<u>FBA-2C1</u> Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6 except as follows: FAR 23.51; 23.65; 23.75; 23.77; 23.611; 23.619; 23.623; 23.683; 23.689; 23.775; 23.871; 23.954; 23.1147; 23.1323; and 23.1563 amended by amendment 23-7. FAR 23.1524 amended by amendment 23-10. FAR 23.771 and 23.1365 amended by amendment 23-14. FAR 23.607; 23.675; 23.685; 23.733; and 23.1309 amended by amendment 23-17. FAR 23.959 amended by amendment 23-18. FAR 23.1301 amended by amendment 23-20. FAR 23.1353; 23.1541; and 23.1559 amended by amendment 23-21. FAR 23.603; 23.605; 23.863; and 23.1545 amended by amendment 23-23. FAR 23.1529 amended by amendment 23-26. FAR 23.995; 23.1143; 23.777; 23.779; and 23.781 amended by amendment 23-29. FAR 23.1; 23.853; and 23.1165 amended by amendment 23-34. FAR 23.787 amended by amendment 23-36. FAR 23.1311 and 23.1321 amended by amendment 23-41. FAR 23.301; 23.331; 23.351; 23.421; 23.423; 23.425; 23.427; 23.441; 23.443; 23.677; 23.701; 23.735 and 23.831 amended by amendment 23-42. FAR 23.901; 23.903; 23.905; 23.925; 23.951; 23.953; 23.955; 23.957; 23.963; 23.965; 23.967; 23.971; 23.973; 23.975; 23.977; 23.991; 23.993; 23.997; 23.999; 23.1093; 23.1145; 23.1303; 23.1322; 23.1337; 23.1351; 23.1357; 23.1361; and 23.1385 amended by amendment 23-43. FAR 23.562(a) and 23.562(e) amended by amendment 23-44. FAR 23.33; 23.305; 23.321; 23.397; 23.561; 23.572; 23.613; 23.621; 23.655; 23.731; and 23.1549 amended by amendment 23-45. FAR 23.783; 23.805; 23.807 and 23.811 amended by amendment 23-46. FAR 36 dated December 1, 1969, as amended by Amendment 36-1 through 36-22.
<u>FBA-2C2</u> The Certification Basis for the model FBA-2C1, except as follows: FAR 23.49; 23.141; and 23.867 amended by amendment 23-7. FAR 23.1397; 23.1401 amended by amendment 23-11. FAR 23.345; 23.723 amended by amendment 23-23. FAR 23.2 amended by amendment 23-36. FAR 23.1305; 23.1307; 23.1365; 23.1387; 23.1389; 23.1391; 23.1393; 23.1395, and 23.1431 amended by amendment 23-43. FAR 23.25; 23.207; and 23.473 amended by amendment 23-45. FAR 36 dated December 1, 1969, as amended by Amendment 36-1 through 36-22.	
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. 67, Issue 13, or later Transport Canada approved revisions, (FAA Type Certificate No. A7EA) and to be in a condition for safe operation."

Data Pertinent To All Models Except As Indicated

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.

FBA-2C 7.5 lbs. (+22.2 in.) and unusable oil of 2.8 lb. (-38.8 in.).

FBA-2C1 Bush Hawk 10.2 lbs. (+21.8 in)

FBA-2C2 Bush Hawk XP 10.2 lbs. (+21.8 in)

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

FBA-2C

(a) "THIS AIRPLANE 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 APPROVED".

FBA-2C1 and FBA-2C2

(a) "The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the normal category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Airplane Flight Manual."

(b) Normal Category: "No acrobatic maneuvers including spins approved."

(c) "Flight into known icing conditions is prohibited. This airplane is certified for the following flight operations:

DAY-NIGHT-VFR-IFR
(WITH REQUIRED EQUIPMENT)"

NOTE 3. FBA-2C

Serial Nos. 3,5 and up, eligible for 3,000lb. Gross weight modification on seaplane per Found Brothers Modification No. 117, and the following are applicable:

Airspeed limits (CAS)	Vne (never exceed)	153 m.p.h.
	Vno (max. structural cruising)	122 m.p.h.
	VA (maneuvering)	133 m.p.h.
	Vfe (flaps extended)	111 m.p.h.
C.G. Range	Fwd. Limit 15.3 in. aft of datum at all weights	
	Aft limit 23.6 in aft of datum all weights	
Maximum Weight	3,000 lbs.	
Control surface movements	Wing Flaps	0° up 32° down
	Aileron	18° up 12° down
	Elevator (0° Stab.)	29.5° up 21.5° down
	Stabilizer	4.5° up 3.5° down
	Rudder	30° left 30° right
Equipment	In addition to the pertinent basic equipment specified in the applicable airworthiness regulations (CAR 3), the following items of equipment must be installed:	
	(a)	Hartzell Constant Speed HC-927K-1D/8847-0 70 lb. (-63.0 in.) Diameter: maximum 88 in. minimum 88 in. Pitch setting at Station 30.0 in.: low 12°, high 26.4° Woodward Constant Speed Governor B210340
	(b)	D.O.T. approved Flight Manual dated April 28, 1965
(c)	Stall warning indicator per Found Brothers Drawing No. W-535.	

NOTE 4. **Ski Installations:**
FBA-2C

- (a) Federal Model CF3000; installed in accordance with Found Brothers Drawing No. 2C36-1 Issue 2C.

FBA-2C1

- (a) Wipaire/Fluidyne/Federal C3200 skis. Maximum gross weight allowable 3200 lbs. Installation and operation in accordance with the latest Transport Canada approved revisions of Master Drawing List, Document No. MDL-1101 and Flight Manual Supplement, P/N M300-S04 or other Transport Canada approved data.
- (b) Wipaire/Fluidyne/Federal C3600 skis. Maximum gross weight allowable 3200 lbs. Installation and operation in accordance with the latest Transport Canada approved revisions of Master Drawing List, Document No. MDL-1102 and Flight Manual Supplement, P/N M300-S04 or other Transport Canada approved data.

FBA-2C2

- (a) Wipaire/Fluidyne/Federal C3200 skis. Maximum gross weight allowable 3200 lbs. Installation and operation in accordance with the latest Transport Canada approved revisions of Master Drawing List, Document No. MDL-1101 and Flight Manual Supplement, P/N M400-S05 or other Transport Canada approved data.
- (b) Wipaire/Fluidyne/Federal C3600 skis. Maximum gross weight allowable 3500 lbs. Installation and operation in accordance with the latest Transport Canada approved revisions of Master Drawing List, Document No. MDL-1102 and Flight Manual Supplement, P/N M400-S06 or other Transport Canada approved data.

NOTE 5. **Float Installations:**
FBA-2C

- (a) EDO Model 249A-2870; installed in accordance with Found Brothers Drawing No. 2C37-1 Issue 2A.

FBA-2C1

- (a) EDO Model 628-2960 floats , or Model 249A-2870 (modified per EDO drawing X-43521) floats, with 260 HP engine. Float installation in accordance with Found Aircraft Canada Inc. drawing No. D210 Issue 1. Maximum gross weight allowable 3200 lbs.
- (b) Aerocet Model 3500 floats with 260 HP engine.
Float installation in accordance with Found Aircraft Canada Inc. drawing No. D211 Issue 1.
Maximum gross weight allowable 3350 lbs.
- (c) Aerocet Model 3500L floats with 260 HP engine.
Float installation in accordance with Found Aircraft Canada Inc. drawing No. D211 Issue 1.
Maximum gross weight allowable 3350 lbs.
- (d) Aerocet Model 3500 floats with 300 HP engine.
Float installation in accordance with Found Aircraft Canada Inc. drawing No. D212 Issue 1.
Maximum gross weight allowable 3500 lbs.
- (e) Aerocet Model 3500L floats with 300 HP engine.
Float installation in accordance with Found Aircraft Canada Inc. drawing No. D212 Issue 1.
Maximum gross weight allowable 3500 lbs.

FBA-2C2

- a) Aerocet Model 3500 floats. Float installation and operation in accordance with Master Drawing List, Document No. MDL-1119 and Flight Manual Supplement M400-S02, both Transport Canada Approved December 19, 2003, or later approved revisions. Maximum gross weight allowable 3600 lbs.

- b) Aerocet Model 3500L floats. Float installation and operation in accordance with Master Drawing List, Document No. MDL-1119 and Flight Manual Supplement M400-S01, both Transport Canada Approved December 19, 2003, or later approved revisions. Maximum gross weight allowable 3800 lbs.
- c) Aerocet Model 3400 amphibious floats. Float installation and operation in accordance with Master Drawing List, Document No. MDL-1150 and Flight Manual Supplement M400-S10, both Transport Canada Approved December 19, 2003, or later approved revisions. Maximum gross weight allowable 3775 lbs.
- d) Wipaire 3450 amphibious floats. Float installation and operation in accordance with Master Drawing List, Document No. MDL-1118 and Flight Manual Supplement M400-S09, both Transport Canada Approved April 15, 2004, or later approved revisions. Maximum gross weight allowable 3700 lbs.
- e) Wipaire 3450 seaplane floats. Float installation and operation in accordance with Master Drawing List, Document No. MDL-1182 and Flight Manual Supplement M400-S08, both Transport Canada Approved April 15, 2004, or later approved revisions. Maximum gross weight allowable 3700 lbs.

NOTE 6. **A-Oversize Tire Installation:**

FBA-2C1

- a) GAR-AERO oversize wheels and tires, plus oversize tail wheel, with 260 HP or 300 HP engine. Wheel and tire installation in accordance with the following Found Aircraft Canada Inc. drawings:
No. D205 Issue 1 with 260 HP engine.
No. D206 Issue 1 with 300 HP engine.

FBA-2C2

- a) GAR-Aero Wheel Adapters and 8.5-10 Tires. Installation and operation in accordance with Master Drawing List, Document No. MDL-1117 and Flight Manual Supplement M400-S03, both Transport Canada Approved April 15, 2004, or later approved revisions. Maximum gross weight allowable 3500 lbs.

B- Interior Equipment:

FBA-2C1 and FBA-2C2

- a) Height Adjustable Front Seats. Installation in accordance with Master Drawing List, Document No. MDL-1047, Transport Canada Approved April 15, 2004, or later approved revision.
- b) Individual Rear Seats. Installation and operation in accordance with Master Drawing List, Document No. MDL-1121 and Flight Manual Supplement M400-S07, both Transport Canada Approved April 15, 2004, or later approved revisions.

NOTE 7. **FBA-2C**

Position and Instrument Lights per Found Brothers Modification No. 118.

NOTE 8. Model FBA-2C1 aircraft modified per found Aircraft modification FAC2 1043 are structurally and functionally equivalent to the FBA-2C2 and may be equipped and operated with the optional equipments of the FBA-2C2 model. In addition, these aircraft must be operated in accordance with Found Aircraft Flight Manual FAC2-M400.

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