## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

A6EA Revision 3 Legend Aviation & Marine UC-1 (Twin-Bee)

October 20, 2017

## TYPE CERTIFICATE DATA SHEET NO. A6EA

This data sheet, which is a part of Type Certificate No. A6EA prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the Airworthiness requirements of the Civil Air Regulations (CAR) Part 3 and Part 4 (specifically partial 4b.356).

Type Certificate Holder: Legend Aviation & Marine, LLC

c/o Don Dewey 80 Pickett's Lane West Acworth, GA 30101

Type Certificate Holder Record STOL Aircraft Corporation Norwood Massachusetts transferred TC A6EA to Legend

Aviation & Marine, LLC c/o Don Dewey on October 20, 2017

United Consultants transferred TC A6EA to STOL Aircraft Corporation Norwood

Massachusetts on October 10, 1969

## I - Model UC-1 5 PCAM (Normal) Approved June 25, 1965

Engine 2 Lycoming IO-360-B1D

Fuel 100/130 Minimum grade aviation gasoline

Engine limits For all operations, 2700 r.p.m. (180 h.p.)

Propeller and 2 Hartzell HC-C2YK-2RB/7666A-2 propeller limits Diameter: not over 74", not under 72";

no further reduction permitted

Pitch setting at 30 in. station:

Low: 14.0° Feathered: 79.3°

<u>Placard:</u> Avoid continuous operation between 2000 and 2250 r.p.m.

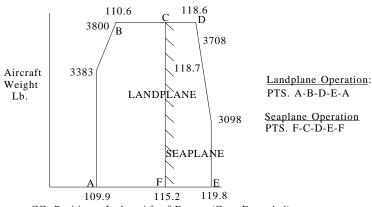
Airspeed limits (CAS) Maneuvering: Vp 131 m.p.h. (114 kt)

Maximum Structural Cruising: Vno 132 m.p.h. (115 kt)
Never exceed: Vne 166 m.p.h. (144 kt)
Flap Extended: Vfe 105 m.p.h. (91 kt)

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## C.G. range



CG. Position - Inches Aft of Datum (Gear Extended)
Gear retraction moment 2900 in.-lb.

Empty weight C.G. range None

Datum Longitudinal reference station 0 located 97.50 inches forward of

leading edge of wing. Horizontal reference is located 50.00 inches below

and parallel to Category the hull deck (W.L.0.00)

Level means Lugs on front and rear left-hand, and rear right-hand door frames

Maximum weight 3800 lb.

Minimum crew 1 (Pilot)

No. of seats 5 (2 at +62.0", 2 at +96.0", 1 at +127.0")

Maximum baggage 300 lb. (200 lb. at +118.0", 100 lb. at +147.0")

Fuel capacity Main Tank: 85 gallons at 116.0"

Wing Flaps

(unusable - 1.5 gallons)

Down

30°

Auxiliary Tank: 16 gallons at 299.5"

Oil capacity 2 gallons per engine at 101.9" (usable - 1.5 gallons). See Note 1 for system oil.

Control surface movements

(Max.) Aileron Up 20° Down 20°

Rudder Right 30° Left 30° Rudder trim tab Right 17 1/2° Left 33° Elevator Up 25° Down 25° Elevator trim tab Up 37° Down

Up

0°

Serial Nos. eligible 1 and up

Certification basis CAR 3 dated May 15, 1956, plus Amendments 3-1 through 3-8, plus CAR 4b.356

(except for the requirement enabling the main cabin door to be opened from the

outside). Date of Application for Type Certificate February 2, 1963.

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Production basis

None. Prior to original certification of each aircraft an FAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.

Determine that all unmodified parts (parts built under the original Republic RC-3 Type Certificate No. 769) are in an airworthy and unaltered condition.

This determination may be accomplished by means of an examination of the aircraft records, and to the extent possible, a visual inspection of the aircraft original parts. Particular attention should be given to the following areas:

- (1) The rudder spar at each of the rudder-fin hinges
- (2) Both main landing gear (especially the actuating tube at the weld)
- (3) The elevator torque tube fittings
- (4) The hull fuel cells (for evidence of deterioration)

Any Republic Model RC-3 parts which may have been altered must be substantiated by the applicant to the controlling region of the Republic Model RC-3 aircraft. For information concerning the United Consultants Model UC-1 modification contact the controlling region of the United Consultants Model UC-1 aircraft.

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) FAA approved Airplane Flight Manual

Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification. The certificated empty weight and corresponding center of gravity location must include unusable fuel (included in main tank capacity) of 9 lb. at (+116.0") and system oil (not included in oil capacity) of 4 lb. at (+101.9")

All placards required in the FAA approved airplane flight manual must be installed in the appropriate locations.

Airworthiness Directive 53-23-3 must be compiled with for original certification and at the repetitive intervals as stated in the Airworthiness Directive.

...END...

Equipment

NOTE 1.

NOTE 2.

NOTE 3.