

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

A00055SE  
Initial Release  
CUB CRAFTERS  
EL-1,  
Original Issue Date:  
March 22, 2018

**TYPE CERTIFICATE DATA SHEET A00055SE**

This data sheet, which is part of Type Certificate No. A00055SE, 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:                      Cub Crafters, Inc.  
    1918 South 16<sup>th</sup> Ave.  
    Yakima, WA 98903

**I - Model EL-1 (Normal Category), Approved March 22, 2018**

Engine:                                      Engine Manufacturer:                      Lycoming Engines, an Operating Division of AVCO Corporation  
    Number of Engines:                      One (1)  
    Engine TC Number:                      E-14EA  
    Engine Model Designation:              TIO-540-W2A

Fuel:    100 (green) or 100LL (blue) grade aviation fuel.

Engine Limits:                              Maximum takeoff power:                      350 horsepower at 2600 RPM  
    Maximum continuous power:              350 horsepower at 2600 RPM  
    See Engine Type Certificate Data Sheet E-14EA for additional limitations.

Propeller:                                      Propeller Manufacturer:                      Hartzell Propeller, Inc.  
    Number of Propellers:                      One (1) Three (3) blades  
    Propeller TC Number:                      P-25EA  
    Propeller Model Designation:              Hub HC-C3YR-1RF, Blade F8468A-6R  
    Diameter Limits:                              80 inches. No diameter reduction allowed  
    High Pitch angle:                              34.0° ±1° at station 30"  
    Low Pitch Angle:                              12.4°±1° at station 30"  
    See Propeller Type Certificate Data Sheet P-25EA for additional limitations.

Airspeed Limits                              V<sub>o</sub> (4,140 lbs)                                      123 KCAS  
    V<sub>FE</sub> (36°)    85 KCAS  
    V<sub>NO</sub>    123 KCAS  
    V<sub>NE</sub>    155 KCAS

Center of Gravity                              Normal Category  
(C.G.) Range                                      Aft Limits:    126" aft of datum (at all weights)  
  
    Forward Limits:                                      117.9" aft of datum at 4,140 lbs.  
    112.0" aft of datum at 3,350 lbs. or less  
  
    *Straight line variation between points.*

Datum:    Datum is 105.8" forward of the wing leading edge.

Levelling means:                              seat tracks in cabin section

Maximum Weights:                              Maximum Ramp:                                      4,140 lbs.

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	Maximum Takeoff:	4,140 lbs.
	Maximum Landing:	4,140 lbs.
Minimum Crew:	One (1) Pilot	
Number of Seats:	Two (2) seats total located at station 105.0	
Maximum Compartment Weights:	As defined in the latest approved revision of the EL-1 <i>"Pilot's Operating Handbook and FAA Approved Flight Manual"</i> .	
Fuel Capacity:	105 gallons at station 135.0 (2 wing tanks)	
Oil Capacity:	12 quart total <i>See Lycoming Service Instruction 1014 for approved oil.</i>	
Maximum Operating Altitude	14,000 feet	
Control Surface Movements:	Wing flaps: 0°, 15°, 30°, 36° ± 1.0° Ailerons: Up: 20° ± 1.0° Down 18° ± 1.0° Elevator: Up 26° ± 1.0° Down 19° ± 1.0° Elevator Trim: Up 14.0° ± 1.0° Down 29.0° ± 1.0° Rudder Left 26.0° ± 1.0° Right 26° ± 1.0° See the latest FAA approved revision of the EL-1 <i>"Airplane Maintenance Manual"</i> , or other FAA approved data, for control system rigging instructions and setting flaps up (0°) configuration.	
Manufacturer's Serial Numbers:	The information contained herein is applicable to Serial Number E1.	
Certification Basis:	Part 23 of the Federal Aviation Regulations (FAR) effective December 18, 1964, as amended by 23-1 through 23-62. FAR 36 as amended on the date of certification.	
Equivalent Level of Safety Finding	Correction to errors in Amendment 23-62 in accordance with ELOS No TC6535NY-A-PSPM.	
TC Number:	A00055SE	
	TC Issuance Date:	March 22, 2018
	TC Application Date:	August 28, 2017
Operational Limitations:	Day Visual Flight Rules (VFR)	
Airframe Life Limits:	5,000 hours provided there are no changes to engine type or power or increase in gross weight, in which case compliance with 14 CFR§23.2240, amendment 64 or later amendment will be required.	
Production Basis:	None.	
Equipment:	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for airworthiness certification.	
Additional Equipment Necessary for Type Certification:	The latest FAA Approved/ Revision of <i>"EL-1 Pilot's Operating Handbook and FAA Approved Flight Manual"</i> .	
NOTE 1:	A current weight and balance report with a list of equipment included in the certificated empty weight must be provided for each aircraft at the time of original airworthiness certification.	
NOTE 2:	The placards specified in the latest FAA Approved/Accepted Revision of <i>"EL-1 Pilot's Operating Handbook and FAA Approved Flight Manual,"</i> are required.	

## NOTE 3

The airplane must be subsequently maintained in accordance with the Instructions for Continued Airworthiness, and Airworthiness Limitations section, as contained in the latest FAA approved data.

END