

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00057SE
Initial Release
CUB CRAFTERS
CC21-180

February 14, 2019

TYPE CERTIFICATE DATA SHEET A00057SE

This data sheet, which is part of Type Certificate No. A00057SE, 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 16th Ave.
 Yakima, WA 98903

I - Model CC21-180 (Primary Category), Approved February 14, 2019

Engine:	Engine Manufacturer:	Lycoming Engines, An Operating Division of AVCO Corporation
	Number of Engines:	One (1)
	Engine TC Number:	E-286
	Engine Model Designation:	O-360-C1G

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

Engine Limits:	Maximum takeoff power:	180 horsepower at 2700 RPM
	Maximum continuous power:	180 horsepower at 2700 RPM
	See Engine Type Certificate Data Sheet E-286 for additional limitations.	

Propeller:	Propeller Manufacturer:	Hartzell Propeller, Inc.
	Number of Propellers:	One (1)
	Propeller TC Number:	P-920
	Propeller Model Designation:	HC-C2YR-1N/NG8301-5
	Diameter Limits:	78 inches. No diameter reduction allowed
	High Pitch angle:	29.0°-30.0°
	Low Pitch Angle:	9.7°-10.0°
	See Propeller Type Certificate Data Sheet P-920 for additional limitations.	

Airspeed Limits	V _o (2300 lbs)	86 KCAS
	V _o (1980 lbs)	79 KCAS
	V _{FE} (46°)	73 KCAS
	V _{NO}	117 KCAS
	V _{NE}	142 KCAS

Center of Gravity (C.G.) Range	Aft Limits:	79.5" aft of datum (1,600 lbs. to 2,300 lbs.) 78.5" aft of datum (1,300 lbs.)
	Forward Limits:	72.0" aft of datum (1,300 lbs. to 1,680 lbs.) 79.1' aft of datum (2,300 lbs.)
	<i>Straight line variation between points.</i>	

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When equipped with Wipaire 2100A amphibious and 2100S seaplane floats

Aft Limits:	79.5" aft of datum (2,070 lbs. to 2,300 lbs.)
	78.0" aft of datum (1,500 lbs.)
Forward Limits:	71.5" aft of datum ((1,500 lbs. to 2,015 lbs.)
	75.0' aft of datum (2,300 lbs.)

Straight line variation between points.

Datum: Datum is 60" forward of the wing leading edge.

Levelling means: See latest approved revision of the CC21-180 "*Pilot's Operating Handbook and FAA Approved Flight Manual*".

Maximum Weights:

Maximum Ramp:	2,300 lbs.
Maximum Takeoff:	2,300 lbs.
Maximum Landing:	2,300 lbs.

Minimum Crew: One (1) Pilot

Number of Seats:	Two (2) seats total	Pilot located at 72.2" aft of datum
		Passenger located at 97.5" aft of datum

Maximum Compartment Weights: As defined in the latest approved revision of the CC21-180 "*Pilot's Operating Handbook and FAA Approved Flight Manual*".

Fuel Capacity: One 24.5 gallon tank in each wing at 84.5" aft of datum; 23 gallons usable in each wing, 1.5 gallons unusable in each wing (49 gallons total; 46 gallons usable; 3 gallons unusable).
Note: add weight of unusable fuel to the certificated weight.

Oil Capacity: 8 quart total
See Lycoming Service Instruction 1014 for approved oil.

Maximum Operating Altitude 14,000 feet

Control Surface Movements:	Wing flaps:	0°, 16°, 33°, 46° ± 1.0°
	Ailerons:	Up: 20° ± 1.5° Down 14° ± 1.5°
	Elevator:	Up 25° ± 1.5° Down 15° ± 1.5°
	Stabilizer	Up 4.9° +0.1°/-0.0° Down 2.5° +0.0°/-0.1°
	Rudder	Left 22.5° +0/-0.75° Right 25° +0/-0.75°

See the latest FAA approved revision of the CC21-180 "*Airplane Maintenance Manual*", 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 Numbers CC21-0001 and greater.

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

Emergency exit requirements of FAR 23.807 in accordance with ELOS No TC10279SE-A-C-1.

Electronic display instruments of FAR 23.1311 in accordance with ELOS No AT12936SE-A-S-1.

Correction to errors in Amendment 23-62 in accordance with ELOS No TC10279SE-A-G-9.

Trim requirements of FAR 23.161(c)(1)(i) and (c)(4)(i) in accordance with ELOS AT12949SE-A-F-1

Exemption: Exemption from the requirements of §23.562 of Title 14, Code of Federal Regulations (14 CFR) Regulatory Docket No. FAA-2009-1161.

TC Number: A00057SE
TC Issuance Date: February 14, 2019
TC Application Date: August 14, 2018

Operational Limitations: Day-Night, Visual Flight Rules (VFR)

Airframe Life Limits: See the latest FAA approved revision of the CC21-180 *"Airplane Maintenance Manual"*.

Production Basis: Production Certificate 72NM.

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 *"CC21-180 Pilots Operating Handbook and FAA Approved Flight Manual"*.

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 *"CC21-180 Pilots Operating Handbook and FAA Approved Flight Manual,"* 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.

NOTE 4: Installation of Wipaire 2100A amphibious or 2100S seaplane floats series floats in accordance with latest FAA Approved Cub Crafters drawings: XC44001 XC44100, XC44500, XC44700. Installation requires approved flight manual supplements.

NOTE 5: Installation of Wipaire 2100A amphibious floats requires installation of Wipaire STC SA39CH *"Installation of an Amphibian Landing Gear Position Advisory System"*.

END