

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A00053SE
Revision 4
CUB CRAFTERS
CC19-180
CC19-215

Date: November 10, 2020

TYPE CERTIFICATE DATA SHEET A00053SE

This data sheet, which is part of Type Certificate No. A00053SE, 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 CC19-180 (Normal and Utility Category), Approved June 2, 2016

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: 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: Normal Category
 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.)
 Utility Category
 Aft Limits: 78.0" aft of datum (1,300 lbs. to 1,980 lbs.)
 Forward Limits: 72.0" aft of datum (1,300 lbs. to 1,680 lbs.)
 75.4" aft of datum (1,980 lbs.)

Straight line variation between points.

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I – CC19-180 (cont'd)

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

Normal Category

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 CC19-180 "*Pilot's Operating Handbook and FAA Approved Airplane Flight Manual*".

Maximum Weights:

Normal Category

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

Utility Category

Maximum Ramp:	1,980 lbs.
Maximum Takeoff:	1,980 lbs.
Maximum Landing:	1,980 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 CC19-180 "*Pilot's Operating Handbook and FAA Approved Airplane 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 Leading Edge:	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 CC19-180 "*Aircraft Maintenance Manual CC19 Series*," or other FAA approved data, for control system rigging instructions and setting flaps up (0°) configuration.

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

Airframe Life Limits: See the latest FAA approved revision of the CC19-180/CC19-215 Document number XC10000AMM "*Aircraft Maintenance Manual CC19 Series*," revision NC or later FAA approved version.

Additional Equipment Necessary for Type Certification: The latest FAA Approved/ Revision of CC19-180 document number XC10000AFM "*CC19-180 Pilots Operating Handbook and FAA Approved Airplane Flight Manual*," revision NC or later FAA approved version.

II - Model CC19-215 (Normal Category), Approved November 10, 2020

Engine:	Engine Manufacturer:	Lycoming Engines, An Operating Division of AVCO Corporation
	Number of Engines:	One (1)
	Engine TC Number:	E00006NY
	Engine Model Designation:	IO-390-D3B6
Fuel:	100LL (blue) grade aviation fuel.	
Engine Limits:	Maximum takeoff power:	215 horsepower at 2700 RPM (3 minute)
	Maximum continuous power:	180 horsepower at 25.5 inches mercury manifold pressure
	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/NG8301-7
	Diameter Limits:	76 inches. No diameter reduction allowed
	High Pitch angle:	29.0°-30.0°
	Low Pitch Angle:	12.3-13.3°
	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:	Normal Category	
	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>	
Datum:	Datum is 60" forward of the wing leading edge.	
Levelling means:	See latest approved revision of the CC19-215 " <i>Pilot's Operating Handbook and FAA Approved Airplane Flight Manual</i> ".	
Maximum Weights:	Normal Category	
	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 CC19-215 " <i>Pilot's Operating Handbook and FAA Approved Airplane Flight Manual</i> ".	
Fuel Capacity:	One 24.5 gallon tank in each wing at 84.5" aft of datum; 22.3 gallons usable in each wing, 2.2 gallons unusable in each wing (49 gallons total; 44.6 gallons usable; 4.4 gallons unusable). <i>Note: add weight of unusable fuel to the certificated weight.</i>	
Oil Capacity:	7 quart total <i>See Lycoming Service Instruction 1014 for approved oil.</i>	

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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 Leading edge:	Up 4.9° +0.1°/-0.0°	Down 2.5° +0.01°/-0.0°
	Rudder:	Left 22.5° +0/-0.75°	Right 25° +0/-0.75°

See the latest FAA approved revision of the CC19 “*Aircraft Maintenance Manual CC19 Series*,” or other FAA approved data, for control system rigging instructions and setting flaps up (0°) configuration.

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

Airframe Life Limits: See the latest FAA approved revision of the CC19-180/CC19-215 document number XC10000AMM “*Aircraft Maintenance Manual CC19 Series*,” revision M or later FAA approved version.

Additional Equipment Necessary for Type Certification: The latest FAA approved revision of the CC19-215 document number XC11000AFM “*CC19-215 Pilot’s Operating Handbook and FAA Approved Airplane Flight Manual*”, revision NC or later FAA approved version.

DATA PERTINENT TO ALL MODELS

Manufacturer’s Serial Numbers: The information contained herein is applicable to Serial Numbers CC19-0003 and greater.

Certification Basis: Title 14 Code of Federal Regulations (14 CFR) Part 23 of the Federal Aviation Regulations (FAR) effective December 18, 1964, as amended by 23-1 through 23-62. 14 CFR Part 36 as amended on the date of certification.

Equivalent Level of Safety Finding: Emergency exit requirements of 14 CFR §23.807 in accordance with ELOS No TC10279SE-A-C-1.

Electronic display instruments of 14 CFR §23.1311 in accordance with ELOS No AT12936SE-A-S-1.

Correction to errors in 14 CFR Part 23 Amendment 23-62 in accordance with ELOS No TC10279SE-A-G-9.

Trim requirements of 14 CFR 23.161(c)(1)(i) and (c)(4)(i) in accordance with ELOS AT12949SE-A-F-1

Exemption: Exemption from the requirements of 14 CFR §23.562 Regulatory Docket No. FAA-2009-1161.

TC Number:	CC19-180	CC19-215
TC Issuance Date:	June 2, 2016	November 10, 2020
TC Application Date:	February 11, 2013	January 30, 2019

Production Basis: Production Certificate 72NM.

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

NOTES FOR ALL MODELS:

- 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. This is contained in the latest FAA Approved/Accepted Revision of document XC10000AFM “*CC19-180 Pilots Operating Handbook and FAA Approved Airplane Flight Manual*,” or document XC11000AFM “*CC19-215 Pilots Operating Handbook and FAA Approved Airplane Flight Manual*.” This is in accordance with 14 CFR 23.23, 23.25, 23.29, and 23.31.
- NOTE 2: The placards specified in the latest FAA Approved/Accepted Revision of document XC10000AFM “*CC19-180 Pilots Operating Handbook and FAA Approved Airplane Flight Manual*,” or document XC11000AFM “*CC19-215 Pilots Operating Handbook and FAA Approved Airplane Flight Manual*,” the applicable operating rules, or the Certification Basis must be installed in the airplane 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/Accepted Revision of CC19-180/CC19-215 document number XC10000AMM “*Aircraft Maintenance Manual CC19 Series*,” revision NC or later FAA approved version for the CC19-180, or revision M or later FAA approved version for the CC19-215. This is in accordance with 14 CFR 23.1529.
- 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*”.

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