

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A00009CH
Revision 23
Cirrus Design Corporation
SR20
SR22
SR22T
February 24, 2021

TYPE CERTIFICATE DATA SHEET NO. A00009CH

This data sheet, which is part of Type Certificate No. A00009CH, prescribes conditions and limitations under which the product for the which type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Cirrus Design Corporation
 4515 Taylor Circle
 Duluth, MN 55811

I - MODEL SR20, (NORMAL CATEGORY), APPROVED OCTOBER 23, 1998

Engine 1. One (1) Continental Motors, Inc. IO-360-ES engine, Type Certificate Data Sheet (TCDS) E1CE
 2. One (1) Lycoming Engines IO-390-C3B6 engine, Type Certificate Data Sheet (TCDS) E00006NY

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits Continental Motors, Inc. IO-360-ES
 Maximum Take-off 2700 RPM (200 hp)
 Maximum Continuous Power 2700 RPM (200 hp)

 Lycoming Engines IO-390-C3B6
 Maximum Take-off 2700 RPM (215 hp)
 Maximum Continuous Power 2700 RPM (215 hp)

Propeller and 1. Hartzell Propeller Inc. P/N BHC-J2YF-1BF/F7694 (See Note 8)
Propeller limits TCDS P37EA
 Maximum Diameter: 76 inches
 Minimum Diameter: 73 inches
 Number of Blades: 2
 Low Pitch: 14.6°+/-0.5°
 High Pitch: 35.0°+/-1.0°
 High Pitch: 35.0°+/-1.0°
 Not to be operated above 24 inches of manifold pressure between 1900 and 2200 RPM.
 Spinner: Hartzell P/N A-2295(P) NOTE: Spinner may be painted or polished.

 2. Hartzell Propeller Inc. P/N PHC-J3YF-1MF/F7392-1 (See Note 8)
 TCDS P36EA
 Maximum Diameter: 74 inches
 Minimum Diameter: 72 inches
 Number of Blades: 3
 Low Pitch: 14.1°+/-0.5°
 High Pitch: 35.0°+/-1.0°
 No operating limitations to 2800 RPM
 Spinner: Hartzell P/N A-2295-1P

 3. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7392-1 (See Note 8)
 TCDS P36EA
 Maximum Diameter: 74 inches
 Minimum Diameter: 72 inches
 Number of Blades: 3
 Low Pitch: 13.9°+/-0.5°
 High Pitch: 35.0°+/-1.0°
 No operating limitations to 2800 RPM
 Spinner: Hartzell P/N A-2295-1(P) NOTE: Spinner may be painted or polished.

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4. Hartzell Propeller Inc. P/N HC-E3YR-1RF/F7392S-1 (See Note 9)

TCDS P33EA

Maximum Diameter: 74 inches

Minimum Diameter: 73 inches

Number of Blades: 3

Low Pitch: 13.4°±0.5°

High Pitch: 30.0°±1.0°

No operating limitations to 2850 RPM

Spinner: Hartzell P/N A-2295-1(P) NOTE: Spinner may be painted or polished.

5. Hartzell Propeller Inc. P/N 3C1-R919A1/76C03-2 (See Note 9)

TCDS P00016CH

Maximum Diameter: 74 inches

Minimum Diameter: 74 inches

Number of Blades: 3

Low Pitch: 11.9°±0.5°

High Pitch: 30.0°±1.0°

No operating limitations to 2700 RPM

Spinner: Hartzell P/N 105890 NOTE: Spinner may be painted or polished.

Airspeed
LimitsS/N 1005 thru 1147:

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	165 KIAS
Vo	(2900 lbs) Operating Maneuvering Speed	135 KIAS
Vo	(2600 lbs) Operating Maneuvering Speed	126 KIAS
Vo	(2200 lbs) Operating Maneuvering Speed	116 KIAS
Vfe	Maximum Flap Extension Speed	100 KIAS
Vpd	Maximum Parachute Deployment Speed	135 KIAS

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01-00 is complied with:

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	165 KIAS
Vo	(3000 lbs) Operating Maneuvering	131 KIAS
Vo	(2600 lbs) Operating Maneuvering	122 KIAS
Vo	(2300 lbs) Operating Maneuvering	114 KIAS
Vfe	Maximum Flap Extension Speed	100 KIAS
Vpd	Maximum Parachute Deployment Speed	135 KIAS

S/N 1878, 1886 thru 2219, and S/N 2221 thru 2338 (See Note 8):

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	163 KIAS
Vo	(3050 lbs) Operating Maneuvering	130 KIAS
Vfe	Maximum Flap Extension Speed (50%)	119 KIAS
Vfe	Maximum Flap Extension Speed (100%)	104 KIAS
Vpd	Maximum Parachute Deployment Speed	133 KIAS

S/N 2220, 2339 and subsequent (See Note 9):

Vne	Never Exceed Speed	201 KIAS
Vno	Maximum Structural Cruising Speed	164 KIAS
Vo	(3150 lbs) Operating Maneuvering	133 KIAS
Vfe	Maximum Flap Extension Speed (50%)	150 KIAS
Vfe	Maximum Flap Extension Speed (100%)	110 KIAS
Vpd	Maximum Parachute Deployment Speed	133 KIAS

C.G. Range

S/N 1005 thru 1147:

Forward Limits: 138.7 inches at 2110 lbs with a straight line taper to 141.0 inches at 2694 lbs, and 143.0 inches at 2900 lbs.

Aft Limits: 144.6 inches at 2110 lbs, with straight line taper to 147.4 inches at 2570 lbs, and to 147.9 inches at 2745 lbs, and 148.2 inches at 2900 lbs.

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01-00 is complied with:

Forward Limits: 138.7 inches at 2110 lbs with a straight line taper to 141.0 inches at 2694 lbs, and 144.1 inches at 3000 lbs.

Aft Limits: 144.6 inches at 2110 lbs, with straight line taper to 147.4 inches at 2570 lbs, and to 148.1 inches at 2900 lbs, and 148.0 inches at 3000 lbs.

S/N 1878, 1886 thru 2219, and S/N 2221 thru 2338 (See Note 8):

Forward Limits: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 140.7 inches at 3050 lbs

Aft Limits: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3050 lbs.

S/N 2220, 2339 and subsequent (See Note 9):

Forward Limits: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 141.1 inches at 3150 lbs

Aft Limits: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3150 lbs.

Empty Weight
C.G. Range

None

Maximum
Weights

S/N 1005 thru 1147:
Takeoff and Landing: 2900 lbs.

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01-00 is complied with:

Takeoff: 3000 lbs.
Landing: 2900 lbs.
Zero Fuel: 2900 lbs.

S/N 1878, 1886 thru 2219, and S/N 2221 thru 2338 (See Note 8):

Takeoff and Landing: 3050 lbs.

S/N 2220, 2339 and subsequent (See Note 9):

Takeoff and Landing: 3150 lbs.

Minimum Crew

One (1) Pilot

Number of
Seats

S/N 1005 thru 2126:
4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum)

S/N 2127 thru 2219, and S/N 2221 thru 2338:
4+1 (2 at 143.5 inches aft of datum, 2+1 at 180 inches aft of datum)

S/N 2220, 2339 and subsequent:
4+1 (2 at 143.5 inches aft of datum, 2+1 at 180 inches aft of datum)
3 (2 at 143.5 inches aft of datum, 1 at 180 inches aft of datum)
2 (2 at 143.5 inches aft of datum)

Maximum
Baggage:

130 Lbs. at 208 inches

Fuel Capacity
Total:

S/N 1005 thru 1877, 1879 thru 1885:
60.5 gal at 153.75 inches
Usable: 56 gal (See Note 1)

S/N 1878, 1886 and subsequent:
58.5 gal at 154.9 inches
Usable: 56 gal (See Note 1)

Oil Capacity	<u>S/N 1005 thru 2219, and S/N 2221 thru 2338 (See Note 8):</u> 8 quarts at 76.2 inches			
	<u>S/N 2220, 2339 and subsequent (See Note 9):</u> 7 quarts at 80.5 inches			
Maximum Operating Altitude	The aircraft is limited to 17,500 ft MSL.			
Control Surface Movements	Wing Flaps:	Up $0^{\circ} \pm 0.5^{\circ}$	Down 50% $16^{\circ} \pm 0.5^{\circ}$	Down 100% $32^{\circ} \pm 0.5^{\circ}$
	Aileron:	Up $12.5^{\circ} \pm 1.0^{\circ}$	Down $12.5^{\circ} \pm 1.0^{\circ}$	
	Elevator:	Up $25.0^{\circ} +0^{\circ}/-1.0^{\circ}$	Down $15^{\circ} \pm 1.0^{\circ}$	
	Elevator Trim:	Up 17.0° Minimum	Down $10.5^{\circ} \pm 1.0^{\circ}$	
	Rudder:	Right $20.0^{\circ} \pm 1.0^{\circ}$	Left $20.0^{\circ} \pm 1.0^{\circ}$	
Additional Limitations:	Airframe life limit: 12,000 flight hours			
Design Data:	The airplane shall be manufactured in accordance with the latest FAA approved revision of "Master Drawing List", Document No. 13750, or other FAA approved data. NOTE: Document No. 12609 is the predecessor document to Document No. 13750.			
Serial Nos. Eligible	1005 and on			

II - MODEL SR22, NORMAL CATEGORY, APPROVED NOVEMBER 30, 2000

Engine	One (1) Continental Motors, Inc. IO-550-N engine, Type Certificate Data Sheet E3SO
Fuel	100/100LL minimum grade aviation gasoline
Engine Limits	Maximum Take-off 2700 RPM (310 hp) Maximum Continuous Power 2700 RPM (310 hp)
Propeller and Propeller limits	1. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7694 or F7694B TCDS P36EA Hartzell Maximum Diameter: 78 inches Minimum Diameter: 76 inches Number of Blades: 3 Low Pitch: $14.1^{\circ} +/ -0.5^{\circ}$ High Pitch: $35.0^{\circ} +/ -1.0^{\circ}$ No operating limitations to 2700 RPM Spinner: Hartzell P/N A-2295-1(P) NOTE: Spinner may be painted or polished.
	2. McCauley Propeller Systems P/N D3A34C443/78CYA-0 TCDS P47GL McCauley Maximum Diameter: 78 inches Minimum Diameter: 76 inches Number of Blades: 3 Low Pitch: $11.8^{\circ} +/ -0.5^{\circ}$ at 30" station High Pitch: 31.5° at 30" station No operating limitations to 2700 RPM Spinner: McCauley D-7779-1 (Polished) or D-7779-2 (Satin)

3. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7693DF or F7693DFB

TCDS P36EA Hartzell

Maximum Diameter: 78 inches

Minimum Diameter: 76 inches

Number of Blades: 3

Low Pitch: 13.9°+/-0.5°

High Pitch: 40.0°+/-1.0°

No operating limitations to 2700 RPM

Spinner: Hartzell P/N A-2295-1(P) NOTE: Spinner may be painted or polished.

4. Hartzell Propeller Inc. P/N PHC-J3YF-1N/N7605 or N7605B

TCDS P36EA Hartzell

Maximum Diameter: 78 inches

Minimum Diameter: 78 inches

Number of Blades: 3

Low Pitch: 12.2°+/-0.5°

High Pitch: 35.0°+/-1.0°

No operating limitations to 2700 RPM

Spinner: Hartzell P/N A-2295-11(P) NOTE: Spinner may be painted or polished.

5. Hartzell Propeller Inc. P/N PHC-J3Y1F-1N/N7605, N7605B, N7605C or N7605CB

TCDS P36EA Hartzell

Maximum Diameter: 78 inches

Minimum Diameter: 78 inches

Number of Blades: 3

Low Pitch: 12.2°+/-0.5°

High Pitch: 35.0°+/-1.0°

No operating limitations to 2700 RPM when using type design throttle-propeller controls

Spinner: Hartzell P/N 102870() or A-2295-11() NOTE: () indicates various finish options.

6. MT-Propeller Entwicklung GmbH P/N MTV-9-D/198-52

TCDS P24NE MT-Propeller

Maximum Diameter: 78 inches

Minimum Diameter: 76 inches

Number of Blades: 3

Low Pitch: 12.5°+/-0.2°

High Pitch: 38.0°+/-1.0°

No operating limitations to 2700 RPM

Spinner: MT-Propeller P/N P-187 NOTE: Spinner may be painted or polished.

Airspeed
LimitsS/N 0002 thru 3914:

Vne	Never Exceed Speed	204 KIAS
Vno	Maximum Structural Cruising Speed	180 KIAS
Vo	(3400 lbs) Operating Maneuvering	133 KIAS
Vo	(2900 lbs) Operating Maneuvering	124 KIAS
Vo	(2400 lbs) Operating Maneuvering	112 KIAS
Vfe	Maximum Flap Extension Speed (50%)	119 KIAS
Vfe	Maximum Flap Extension Speed (100%)	104 KIAS
Vpd	Maximum Parachute Deployment Speed	133 KIAS

S/N 3915 and subsequent:

Vne	Never Exceed Speed	208 KIAS
Vno	Maximum Structural Cruising Speed	179 KIAS
Vo	(3600 lbs) Operating Maneuvering	140 KIAS
Vo	(3400 lbs) Operating Maneuvering	133 KIAS
Vo	(2900 lbs) Operating Maneuvering	124 KIAS
Vo	(2400 lbs) Operating Maneuvering	112 KIAS
Vfe	Maximum Flap Extension Speed (50%)	150 KIAS
Vfe	Maximum Flap Extension Speed (100%)	110 KIAS
Vpd	Maximum Parachute Deployment Speed	140 KIAS

C.G. Range	<u>S/N 0002 thru 3914:</u> Forward: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 142.3 inches at 3400 lbs. (See Note 6) Aft: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3400 lbs.		
	<u>S/N 3915 and subsequent:</u> Forward: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 143.2 inches at 3600 lbs. Aft: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3600 lbs		
Empty Weight C.G. Range	None		
Maximum Weights	<u>S/N 0002 thru 3914:</u> 3400 lbs <u>S/N 3915 and subsequent:</u> Takeoff and Landing: 3600 lbs Zero Fuel: 3400 lbs		
Minimum Crew	One (1) Pilot		
Number of Seats	<u>S/N 0002 thru 3827:</u> 4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum) <u>S/N 3828 and subsequent:</u> 4+1 (2 at 143.5 inches aft of datum, 2+1 at 180 inches aft of datum)		
Maximum Baggage	130 Lbs. at 208 inches		
Fuel Capacity Total:	<u>S/N 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437:</u> 84 gallon at 154.9 inches Usable: 81 gallon (See Note 1) <u>S/N 2334, 2420, 2438 and subsequent:</u> 94.5 gallon at 154.9 inches Usable: 92.0 gallon (See Note 1)		
Oil Capacity	8 quarts at 77.1 inches		
Maximum Operating Altitude	The aircraft is limited to 17,500 ft MSL.		
Control Surface Movements	<u>S/N 0002 thru 3914:</u> Wing Flaps: Up 0°±0.5° Down 50% 16° ± 0.5° Down 100% 32° ±0.5° Aileron: Up 12.5° ± 1.0° Down 12.5° ± 1.0° Elevator: Up 25.0° +0°/-1.0° Down 15° ± 1.0° Elevator Trim: Up 17.0° Minimum Down 10.5° ± 1.0° Rudder: Right 20.0° ± 1.0° Left 20.0° ± 1.0° <u>S/N 3915 and subsequent:</u> Wing Flaps: Up 0°±0.5° Down 50% 16° ± 0.5° Down 100% 35.5° ±0.5° Aileron: Up 12.5° ± 1.0° Down 12.5° ± 1.0° Elevator: Up 25.0° +0°/-1.0° Down 15° ± 1.0° Elevator Trim: Up 17.0° Minimum Down 10.5° ± 1.0° Rudder: Right 20.0° ± 1.0° Left 20.0° ± 1.0°		
Additional Limitations:	Airframe life limit: 12,000 flight hours		

Design Data: The airplane shall be manufactured in accordance with the latest FAA approved revision of "Master Drawing List", Document No. 13750, or other FAA approved data.

Serial Nos. Eligible 0001 and on.
Eligible

III - MODEL SR22T, NORMAL CATEGORY, APPROVED FEBRUARY 10, 2010

Engine One (1) Continental Motors, Inc. TSIO-550-K engine, Type Certificate Data Sheet E5SO

Fuel 100/100LL minimum grade aviation gasoline

Engine Limits Maximum Take-off 2500 RPM (315 hp)
Maximum Continuous Power 2500 RPM (315 hp)

Propeller and Propeller limits Hartzell Propeller Inc. P/N PHC-J3Y1F-1N/N7605, N7605B, N7605C or N7605CB
TCDS P36EA Hartzell
Maximum Diameter: 78 inches
Minimum Diameter: 78 inches
Number of Blades: 3
Low Pitch: 12.2°+/-0.5°
High Pitch: 35.0°+/-1.0°
No operating limitations to 2700 RPM
Spinner: Hartzell P/N 102870() or A-2295-11() NOTE: () indicates various finish options.

Airspeed S/N 0001 thru 0441:

Limits	Vne	Never Exceed Speed	204 KCAS from S/L to 17,500 ft MSL linearly reducing from 204 KCAS @ 17,500 ft to 173 KCAS @ 25,000 ft
	Vno	Maximum Structural Cruising Speed	180 KCAS from S/L to 17,500 ft MSL linearly reducing from 180 KCAS @ 17,500 ft to 153 KCAS @ 25,000 ft
	Vo	(3400 lbs) Operating Maneuvering	133 KIAS
	Vo	(2900 lbs) Operating Maneuvering	124 KIAS
	Vo	(2400 lbs) Operating Maneuvering	112 KIAS
	Vfe	Maximum Flap Extension Speed (50%)	119 KIAS
	Vfe	Maximum Flap Extension Speed (100%)	104 KIAS
	Vpd	Maximum Parachute Deployment Speed	133 KIAS

S/N 0442 and subsequent:

	Vne	Never Exceed Speed	208 KCAS from S/L to 17,500 ft MSL linearly reducing from 208 KCAS @ 17,500 ft to 178 KCAS @ 25,000 ft
	Vno	Maximum Structural Cruising Speed	179 KCAS from S/L to 17,500 ft MSL linearly reducing from 179 KCAS @ 17,500 ft to 152 KCAS @ 25,000 ft
	Vo	(3600 lbs) Operating Maneuvering	140 KIAS
	Vo	(3400 lbs) Operating Maneuvering	133 KIAS
	Vo	(2900 lbs) Operating Maneuvering	124 KIAS
	Vo	(2400 lbs) Operating Maneuvering	112 KIAS
	Vfe	Maximum Flap Extension Speed (50%)	150 KIAS
	Vfe	Maximum Flap Extension Speed (100%)	110 KIAS
	Vpd	Maximum Parachute Deployment Speed	140 KIAS

C.G. Range S/N 0001 thru 0441:

Forward: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 142.3 inches at 3400 lbs. (See Note 6)

Aft: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3400 lbs.

S/N 0442 and subsequent:

Forward: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 143.2 inches at 3600 lbs.

Aft: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3600 lbs

Empty Weight	None		
C.G. Range			
Maximum Weights	<u>S/N 0001 thru 0441:</u> 3400 lbs		
	<u>S/N 0442 and subsequent:</u> Takeoff and Landing: 3600 lbs Zero Fuel: 3400 lbs		
Minimum Crew	One (1) Pilot		
Number of Seats	<u>S/N 0001 thru 0250, and 0252 thru 0267:</u> 4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum)		
	<u>S/N 0251, 0268 and subsequent:</u> 4+1 (2 at 143.5 inches aft of datum, 2+1 at 180 inches aft of datum)		
Maximum Baggage	130 Lbs. at 208 inches		
Fuel Capacity Total:	94.5 gallon at 154.9 inches Usable: 92.0 gallon (See Note 1)		
Oil Capacity	8 quarts at 77.1 inches		
Maximum Operating Altitude	The aircraft is limited to 25,000 ft MSL.		
Control Surface Movements	<u>S/N 0001 thru 0441:</u>		
	Wing Flaps:	Up $0^{\circ} \pm 0.5^{\circ}$	Down 50% $16^{\circ} \pm 0.5^{\circ}$ Down 100% $32^{\circ} \pm 0.5^{\circ}$
	Aileron:	Up $12.5^{\circ} \pm 1.0^{\circ}$	Down $12.5^{\circ} \pm 1.0^{\circ}$
	Elevator:	Up $25.0^{\circ} +0^{\circ}/-1.0^{\circ}$	Down $15^{\circ} \pm 1.0^{\circ}$
	Elevator Trim:	Up 17.0° Minimum	Down $10.5^{\circ} \pm 1.0^{\circ}$
	Rudder:	Right $20.0^{\circ} \pm 1.0^{\circ}$	Left $20.0^{\circ} \pm 1.0^{\circ}$
	<u>S/N 0442 and subsequent:</u>		
	Wing Flaps:	Up $0^{\circ} \pm 0.5^{\circ}$	Down 50% $16^{\circ} \pm 0.5^{\circ}$ Down 100% $35.5^{\circ} \pm 0.5^{\circ}$
	Aileron:	Up $12.5^{\circ} \pm 1.0^{\circ}$	Down $12.5^{\circ} \pm 1.0^{\circ}$
	Elevator:	Up $25.0^{\circ} +0^{\circ}/-1.0^{\circ}$	Down $15^{\circ} \pm 1.0^{\circ}$
	Elevator Trim:	Up 17.0° Minimum	Down $10.5^{\circ} \pm 1.0^{\circ}$
	Rudder:	Right $20.0^{\circ} \pm 1.0^{\circ}$	Left $20.0^{\circ} \pm 1.0^{\circ}$
Additional Limitations:	Airframe life limit: 12,000 flight hours		
Design Data:	The airplane shall be manufactured in accordance with the latest FAA approved revision of "Master Drawing List", Document No. 13750, or other FAA approved data.		
Serial Nos. Eligible	Eligible 0001 and on		

DATA PERTINENT TO ALL MODELS

Reference Datum 100 inches in front of the forward face of firewall bulkhead

Leveling Means Door sill and leveling points as defined in AFM

Certification Basis Model SR20: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 thru 23-47, except as follows:

14 CFR 23.573, 23.575, 23.611, 23.657, 23.673 thru Amendment 23-48;
 14 CFR 23.783, 23.785, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1329,
 23.1361, 23.1383, 23.1401, 23.1431, 23.1435 thru Amendment 23-49;
 14 CFR 23.3, 23.25, 23.143, 23.145, 23.155, 23.1325, 23.1521, 23.1543, 23.1555, 23.1559,
 23.1567, 23.1583, 23.1585, 23.1589 thru Amendment 23-50;
 14 CFR 23.777, 23.779, 23.901, 23.907, 23.955, 23.959, 23.963, 23.965, 23.973, 23.975, 23.1041,
 23.1091, 23.1093, 23.1107, 23.1121, 23.1141, 23.1143, 23.1181, 23.1191, 23.1337 thru
 Amendment 23-51;
 14 CFR 23.1305 thru Amendment 23-52

14 CFR Part 36 dated December 1, 1969 as amended by 36-1 thru 36-21.

In addition to the certification basis stated above, for SR20 S/N 1423 thru 1877 and SR20 serials 1879 and subsequent the certification basis is amended to include the following regulations at the amendment levels stated for the SR20 Fuselage Redesign (G2 marketing designation):

14 CFR 23.561, 23.607, 23.629 thru Amendment 23-48.
 14 CFR 23.853 thru Amendment 23-49.
 14 CFR 23.161, 23.177, 23.201, 23.203, 23.233, 23.1581 thru Amendment 23-50.
 14 CFR 23.925, 23.1043, 23.1047, 23.1183 thru Amendment 23-51.
 14 CFR 23.901 thru Amendment 23-53.

In addition to the certification basis stated in the paragraphs above, for SR20 S/N 1878, 1886 and subsequent the certification basis is amended to include the following regulations at the amendment levels stated for SR20 Wing Redesign (G3 marketing designation):

14 CFR 23.473, 23.499, 23.725, 23.865 thru Amendment 23-48.
 14 CFR 23.677, 23.723, 23.735, 23.1351, 23.1353, 23.1359, 23.1365 thru 23-49.
 14 CFR 23.45, 23.49, 23.51, 23.53, 23.63, 23.71, 23.75, 23.77, 23.147, 23.157, 23.175, 23.1511,
 23.1553, 23.1563 thru Amendment 23-50.

For aircraft equipped with Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 2016 thru S/N 2219 and S/N 2221 thru 2338):

14 CFR 23.1308 thru Amendment 23-57.

For aircraft equipped with Garmin G1000 NXi avionics or Garmin G1000 NXi avionics with Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated (Effective S/N 2220, 2339 and subsequent):

14 CFR 23.207 thru Amendment 23-50.
 14 CFR 23.1308 thru Amendment 23-57.
 14 CFR 23.1306 thru Amendment 23-61

For aircraft equipped with Lycoming Engines IO-390-C3B6 the certification basis is amended to include the following regulations at the amendment levels stated (Effective S/N 2220, 2339 and subsequent):

14 CFR 23.572 thru Amendment 23-48.
 14 CFR 23.697, 23.701, 23.787, 23.865, thru Amendment 23-49.
 14 CFR 23.33, 23.65, 23.69, 23.73, 23.153, 23.207, 23.235, 23.562, 23.1545, 23.1587 thru
 Amendment 23-50.
 14 CFR 23.925, 23.1043, 23.1047, 23.1183 thru Amendment 51.

14 CFR 23.903 thru Amendment 23-54.
14 CFR 23.905, 23.907 thru Amendment 23-59.
14 CFR 23.1308 thru Amendment 23-57.
14 CFR 23.1306 thru Amendment 23-61.

14 CFR 36 dated December 1, 1969 as amended by 36-1 thru 36-30.

The aircraft certification basis is amended to include the following regulation at the amendment level stated (Effective S/N 2650 and subsequent): (Note: The amended certification basis allows for the optional removal of the wet compass.)

14 CFR 23.1303 thru Amendment 23-62

Model SR22: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 thru 23-53, except as follows:

14 CFR 23.301 thru Amendment 23-42
14 CFR 23.855, 23.1326, 23.1359, not applicable

14 CFR Part 36 dated December 1, 1969, as amended by 36-1 thru 36-22

For aircraft equipped with Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 2979, 2992, 3002 and subsequent):

14 CFR 23.1308 thru Amendment 23-57.

For aircraft equipped with Garmin G1000 NXi avionics or Garmin G1000 NXi avionics with the Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 4433 and subsequent):

14 CFR 23.1308 thru Amendment 23-57.
14 CFR 23.1306 thru Amendment 23-61.

For aircraft equipped for optional Flight Into Known Icing operation, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 3003, 3310, 3326, 3403 and subsequent),

14 CFR 23.1326, 23.1359 thru Amendment 23-49.
14 CFR 23.1308 thru Amendment 23-57.

For aircraft with 3600 lb max takeoff and landing weight limitation, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 3915 and subsequent):

14 CFR 23.1308 thru Amendment 23-57.

14 CFR Part 36 thru Amendment 36-28.

For aircraft equipped with Special Missions provisions (ref. AFM supplement 13772-157), the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated:

14 CFR Part 36 thru Amendment 36-30.

The aircraft certification basis is amended to include the following regulation at the amendment level stated (Effective S/N 4993 and subsequent): (Note: The amended certification basis allows for the optional removal of the wet compass.)

14 CFR 23.1303 thru Amendment 23-62

Model SR22T: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 thru 23-59, except as follows:

14 CFR 23.301 thru Amendment 23-42

14 CFR Part 36 dated December 1, 1969, as amended by 36-1 thru 36-28

For aircraft equipped with Special Missions provisions (ref. AFM supplement 13772-157), the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated:

14 CFR Part 36 thru Amendment 36-30.

For aircraft equipped with Garmin G1000 NXi avionics or Garmin G1000 NXi avionics with the Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 1473 and subsequent),

14 CFR 23.1308 thru Amendment 23-57.

14 CFR 23.1306 thru Amendment 23-61.

The aircraft certification basis is amended to include the following regulation at the amendment level stated (Effective S/N 2238 and subsequent): (Note: The amended certification basis allows for the optional removal of the wet compass.)

14 CFR 23.1303 thru Amendment 23-62

Equivalent Level
of Safety (ELOS)
Findings

ACE-96-5 for 14 CFR Section (§) 23.221 (Spinning); Refer to FAA Memorandum dated June 10, 1998 for models SR20, SR22.

ACE-96-5A for 14 CFR § 23.221 (Spinning); Refer to FAA Memorandum dated February 02, 2010 for model SR22T.

ACE-01-01 for 14 CFR § 23.1143(g) (Engine Controls) and § 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated February 14, 2001 for model SR20.

ACE-00-09 for 14 CFR § 23.1143(g) (Engine Controls) and § 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated September 11, 2000 for model SR22.

ACE-00-09A for 14 CFR § 23.1143(g) (Engine Controls) and § 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated February 02, 2010 for model SR22T.

ACE-08-05 for 14 CFR § 23.777(d) (Cockpit Controls) and § 23.781(b) (Cockpit control knob shape); Refer to FAA Memorandum dated April 11, 2008 for models SR20, SR22. (effective with optional Garmin G1000 avionics installation, see certification basis above).

ACE-08-05A for 14 CFR § 23.777(d) (Cockpit Controls) and § 23.781(b) (Cockpit control knob shape); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

ACE-09-06 for 14 CFR § 23.1326(b)(1) (Pitot heat indication systems); for Flight Into Known Icing equipped airplanes only (Effective S/N 3003, 3310, 3326, 3403 and subsequent); Refer to FAA Memorandum dated April 20, 2009 for model SR22.

ACE-09-06A for 14 CFR § 23.1326(b)(1) (Pitot heat indication systems); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

ACE-10-08 for 14 CFR § 23.1091(b)(4) (Alternate air door override means); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

Special Conditions 23-ACE-88 for ballistic parachute, for models SR20, SR22, SR22T.

	23-134-SC for protection of systems for High Intensity Radiated Fields (HIRF), for models SR20, SR22.
	23-163-SC for inflatable restraint system. Addition to the certification basis model SR20 effective S/N 1541 and subsequent; model SR22 S/N 1500, 1520 and subsequent; model SR22T (all serials).
Exemptions	<p>Exemption No. 9849 to 14 CFR § 23.1419(a) for Flight Into Known Icing operations only on model SR22 (Effective S/N 3003, 3310, 3326, 3403 and subsequent). Exemption allows for a higher stall speed than that required by 14 CFR § 23.49(c) & (d) when operating in icing conditions.</p> <p>Exemption No. 9993 to 14 CFR § 23.1419(a) for Flight Into Known Icing operations only on model SR22T (Effective S/N 0001 and on). Exemption allows for a higher stall speed than that required by 14 CFR § 23.49(c) & (d) when operating in icing conditions.</p>
Production Basis	<p>TC Holder: Cirrus Design Corporation headquartered in Duluth, Minnesota. Production Certificate 338CE issued June 12, 2000</p> <p>Licensee: AVIC General Huanan Aircraft Industry Co., Ltd located in the People's Republic of China (PRC). Production Certificate No. PC0040A-ZN. Model effectivity includes all models and serial numbers with unique serial number ending in "H".</p>
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the airplane for airworthiness certification.</p> <p>In addition to the above required equipment, the following equipment are also required:</p> <p>The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS SR20", Document No. 11934-001 for aircraft serials 1005 thru 1147 with 2900 pound TOGW, Document No. 11934-002 for aircraft serials 1005 thru 1147 with 3000 pound TOGW and aircraft serials 1148 thru 1267, Document No. 11934-003 for aircraft serials 1268 and subsequent with Analog or Avidyne Avionics System, Document No. 11934-004 for aircraft serials 2016 and subsequent with Cirrus Perspective Avionics Suite, or Document No. 11934-005 for aircraft serials 2220, 2339 and subsequent with Cirrus Perspective+ Avionics System. (See Note 7)</p> <p>The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS SR22", Document No. 13772-001 for aircraft serials 0002 thru 3914, Document No. 13772-002 for aircraft serials 2979, 2992, 3002 thru 3914, or Document No. 13772-004 for aircraft serials 3915 and subsequent, or Document No. 13772-006 for aircraft serials 4433 and subsequent. (See Note 7)</p> <p>The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS SR22T", Document No. 13772-003 for aircraft serials 0001 thru 0441, or Document No. 13772-005 for aircraft serials 0442 and subsequent, or Document No. 13772-007 for aircraft serials 1473 and subsequent. (See Note 7)</p>
Note 1.	<p>A current weight and balance report including list of equipment included in the 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 loading corresponding center of gravity location must include unusable fuel of:</p> <p>27 lb. at (+153.8 inches) for model SR20 S/N 1005 thru 1877, 1879 thru 1885. 18 lb at (+154.9 inches) for model SR22 S/N 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437. 15 lb at (+154.9 inches) for models SR22 S/N 2334, 2420, 2438 and subsequent; SR20 S/N 1878, 1886 and subsequent; and SR22T for S/N 0001 and subsequent.</p>
Note 2.	<p>All placards specified in the latest FAA approved revisions of the following documents must be displayed in the airplane in the appropriate locations:</p> <p>"PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR20", document numbers 11934-001, 11934-002, 11934-003, 11934-004, or 11934-005. "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22" document numbers 13772-001, 13772-002, 13772-004, or 13772-006. "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22T" document number 13772-003, 13772-005, or 13772-007.</p>

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- Note 3. FAA approved Airworthiness Limitations are included in Section 4 of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20 aircraft serials 1005 thru 2219, and 2221 thru 2338 or Document No. 12137-002 for model SR20 serials 2220, 2339 and subsequent, and Document No. 13773-001 for model SR22 aircraft serials 0002 thru 4432 and model SR22T aircraft serials 0001 thru 1472 or Document No. 13773-002 for model SR22 aircraft serials 4433 and subsequent and model SR22T aircraft serials 1473 and subsequent.
- Note 4. Exterior colors are limited to those specified in the latest FAA accepted revision of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20 aircraft serials 1005 thru 2219 and 2221 thru 2338 or Document No. 12137-002 for model SR20 serials 2220, 2339 and subsequent, and Document No. 13773-001 for model SR22 aircraft serials 0002 thru 4432 and model SR22T aircraft serials 0001 thru 1472 or Document No. 13773-002 for model SR22 aircraft serials 4433 and subsequent and model SR22T aircraft serials 1473 and subsequent.
- Note 6. For Model SR22 S/N 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437 a maximum landing weight exists along the line between 141.4 inches at 3210 lbs and 142.7 inches at 3400 lbs.
- Note 8. For aircraft equipped with Teledyne Continental IO-360-ES and either Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system.
- Note 9. For aircraft equipped with Lycoming Engines IO-390-C3B6 and either Garmin G1000 NXi avionics or Garmin NXi G1000 avionics with Garmin GFC-700 autopilot system.

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