This data sheet, which is part of Type Certificate No. A00009CH, prescribes conditions and limitations under which the product for 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
Teledyne Continental IO-360-ES, Type Certificate Data Sheet (TCDS) E1CE

Fuel
100/100LL minimum grade aviation gasoline

Engine Limits
Maximum Take-off 2700 RPM (200 hp)
Maximum Continuous Power 2700 RPM (200 hp)

Propeller and Propeller limits
1. Hartzell Propeller Inc. P/N BHC-J2YF-1BF/F7694
   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°
   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
   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
   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.
Airspeed Limits

S/N 1005 thru 1147:

- $V_{ne}$: Never Exceed Speed 200 KIAS
- $V_{no}$: Maximum Structural Cruising Speed 165 KIAS
- $V_{o}$ (2900 lbs): Operating Maneuvering Speed 135 KIAS
- $V_{o}$ (2600 lbs): Operating Maneuvering Speed 126 KIAS
- $V_{o}$ (2200 lbs): Operating Maneuvering Speed 116 KIAS
- $V_{fe}$: Maximum Flap Extension Speed 100 KIAS
- $V_{pd}$: Maximum Parachute Deployment Speed 135 KIAS

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

- $V_{ne}$: Never Exceed Speed 200 KIAS
- $V_{no}$: Maximum Structural Cruising Speed 165 KIAS
- $V_{o}$ (3000 lbs): Operating Maneuvering Speed 131 KIAS
- $V_{o}$ (2600 lbs): Operating Maneuvering Speed 122 KIAS
- $V_{o}$ (2300 lbs): Operating Maneuvering Speed 114 KIAS
- $V_{fe}$: Maximum Flap Extension Speed 100 KIAS
- $V_{pd}$: Maximum Parachute Deployment Speed 135 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 and subsequent, 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.

Empty Weight

C.G. Range: None

Maximum Weight

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

S/N 1148 and subsequent, 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.

Minimum Crew

One (1) Pilot

Number of Seats

4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum)

Maximum Baggage

130 Lbs. at 208 inches

Fuel Capacity

Total: 60.5 gal at 153.75 inches
Usable: 56 gal (See Note 1)

Oil Capacity

8 quarts at 76.2 inches
Maximum Operating Altitude
With a portable oxygen system, the aircraft is limited to 17,500 ft MSL.
Oxygen must be provided as required by the operating rules. Only portable oxygen systems listed in the FAA Approved Airplane Flight Manual, document number 11934-002, or later FAA approved revisions, are allowed.

Control Surface Movements
- 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° ± 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. 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
Teledyne Continental IO-550-N, Type Certificate Data Sheet E3SO

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°/-0.5°
   High Pitch: 35.0°/+-1.0°
   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°/-0.5° 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.
Airspeed Limits

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vne</td>
<td>Never Exceed Speed</td>
<td>204 KCAS</td>
</tr>
<tr>
<td>Vno</td>
<td>Maximum Structural Cruising Speed</td>
<td>180 KCAS</td>
</tr>
<tr>
<td>Vo</td>
<td>(3400 lbs) Operating Maneuvering</td>
<td>133 KIAS</td>
</tr>
<tr>
<td>Vo</td>
<td>(2900 lbs) Operating Maneuvering</td>
<td>124 KIAS</td>
</tr>
<tr>
<td>Vo</td>
<td>(2400 lbs) Operating Maneuvering</td>
<td>112 KIAS</td>
</tr>
<tr>
<td>Vfe</td>
<td>Maximum Flap Extension Speed</td>
<td>104 KIAS</td>
</tr>
<tr>
<td>Vpd</td>
<td>Maximum Parachute Deployment Speed</td>
<td>133 KIAS</td>
</tr>
</tbody>
</table>

C.G. Range

Forward: 138.0 inches at 2200 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 141.4 inches at 3210 lbs and 143.8 inches at 3400 lbs.

Aft: 148.1 inches at 2200 lbs, with straight line to 148.1 inches at 3400 lbs.

Empty C.G. Range  None

Maximum Weight  3400 lbs

Minimum Crew  One (1) Pilot

Number of Seats  4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum)

Maximum Baggage  130 Lbs. at 208 inches

Fuel Capacity Total: 84 gallon at 154.9 inches

Usable: 81 gallon (See Note 1)

Oil Capacity  8 quarts at 77.1 inches

Maximum Operating Altitude  With a portable oxygen system, the aircraft is limited to 17,500 ft MSL. Oxygen must be provided as required by the operating rules. Only portable oxygen systems listed in the FAA Approved Airplane Flight Manual, document number 13772-001, or later FAA approved revisions, are allowed.

Control Surface Movements

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>Movement</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing Flaps</td>
<td>Up 0°±0.5°</td>
<td>Down 50% 16° ± 0.5° Down 100% 32° ±0.5°</td>
</tr>
<tr>
<td>Aileron</td>
<td>Up 12.5° ± 1.0°</td>
<td>Down 12.5° ± 1.0°</td>
</tr>
<tr>
<td>Aileron Trim</td>
<td>Up 6 ± 1.0°</td>
<td>Down 6 ± 1.0°</td>
</tr>
<tr>
<td>Elevator</td>
<td>Up 25.0° ± 1.0°</td>
<td>Down 15° ± 1.0°</td>
</tr>
<tr>
<td>Elevator Trim</td>
<td>Up 17.0° Minimum</td>
<td>Down 10.5° ± 1.0°</td>
</tr>
<tr>
<td>Rudder</td>
<td>Right 20.0° ± 1.0°</td>
<td>Left 20.0° ± 1.0°</td>
</tr>
</tbody>
</table>

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.

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**: Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-47, except as follows:

- FAR 23.573, 23.575, 23.611, 23.657, 23.673 through Amendment 23-48;
- FAR 23.1305 through Amendment 23-52

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

- 23.301 through Amendment 47
- 23.855, 23.1326, 23.1359, not applicable
- FAR 36 dated December 1, 1969, as amended by current amendment as of the date of type Certification.

#### Equivalent Safety Items

Equivalent Levels Of Safety finding (ACE-96-5) made per the provisions of 14 CFR Part 23.221; Refer to FAA ELOS letter dated June 10, 1998 for models SR20, SR22.

Equivalent Levels Of Safety finding (ACE-00-09) made per the provisions of 14 CFR Part 23.1143(g) and 23.1147(b); Refer to FAA ELOS letter dated September 11, 2000 for model SR22.

Equivalent Levels Of Safety finding (ACE-01-01) made per the provisions of 14 CFR Part 23.1143(g) and 23.1147(b); Refer to FAA ELOS letter dated February 14, 2001 for model SR20.

#### Special Conditions

23-ACE-88 for ballistic parachute.
23-134-SC for protection of systems for High Intensity Radiated Fields (HIRF).
23-163-SC for inflatable restraint system.

#### Production Basis

Production Certificate 338CE issued June 12, 2000

#### Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the airplane for certification.

In addition to the above required equipment, the following equipment are also required:

- The latest FAA approved Revision of the “PILOT’S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS DESIGN SR20”, Document No. 11934-001 for aircraft serials 1005 through 1147 with 2900 pound TOGW, Document No. 11934-002 for aircraft serials 1005 through 1147 with 3000 pound TOGW and for aircraft serials 1148 through 1267, or Document No. 11934-003 for aircraft serials 1268 and on.
- The latest FAA approved Revision of the “PILOT’S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS DESIGN SR22”, Document No. 13772-001.

#### Note 1

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 27 lb. at (+153.8 inches) for model SR20; and unusable fuel of 18 lb at (+154.9 inches) for model SR22.
Note 2. All placards specified in the latest FAA approved revisions of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR20", document number 11934-002 and the latest FAA approved revisions of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22" document number 13772-001 must be displayed in the airplane in the appropriate locations. Exterior colors are to be limited to those specified in the latest FAA approved revisions of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR20" Document 11934-002 and latest FAA approved revisions of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22" document number 13772-001.

Note 3. FAA approved Airworthiness Limitations for inspection time limits and maintenance checks are included in Section 4 and 5 of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20, and 13773-001 for model SR22.

Note 4. Exterior colors are limited to those specified in the latest FAA approved revision of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20, and 13773-001; for model SR22.

Note 5. Major structural repairs must be accomplished in accordance with FAA approved Cirrus Design repair methods or other methods approved by the FAA.

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