

Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00125

for

SR20, SR22, SR22T

Cirrus Design Corporation

4515 Taylor Circle

Duluth, Minnesota 55811

United States of America

Model(s): Model SR20
 Model SR22
 Model SR22T

Issue: 1.0

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TABLE OF CONTENTS

Section 1 Model SR203

 I. General **Error! Bookmark not defined.**

 II. Certification Basis **Error! Bookmark not defined.**

 III. Technical Characteristic and Operating Limitations.....4

 IV. Operating and Service Instructions.....9

 V. Operational Suitability Data9

 VI. Notes.....9

Section 2 Model SR2212

 I. General12

 II. Certification Basis12

 III. Technical Characteristic and Operating Limitations.....13

 IV. Operating and Service Instructions17

 V. Operational Suitability Data18

 VI. Notes18

Section 3 Model SR22T20

 I. General20

 II. Certification Basis20

 III. Technical Characteristic and Operating Limitations21

 IV. Operating and Service Instructions24

 V. Operational Suitability Data25

 VI. Notes25

Section 4

 I. Acronyms and Abbreviations26

 II. Type Certificate Holder Record26

 III. Amendment Record26

Section 1 Model SR20**I. General**

1. a) Type: SR20
b) Variant: N/A
2. Airworthiness Category:
JAR-23 Normal Category
3. Type Certificate Holder:
Cirrus Design Corporation
4515 Taylor Circle Duluth, MN 55811 U.S.A.
4. Manufacturer: Cirrus Design Corporation
4515 Taylor Circle Duluth, MN 55811 U.S.A.
5. JAA Certification Application Date:
18-Mar-1999
6. JAA recommendation Date: Not applicable
7. EASA Type Certification Date: 27 May 2004

II. Certification Basis

Certification Basis. JAR-23 Normal Category

1. Reference Date for determining the applicable requirements: 27-May-2004
2. (Reserved)
3. (Reserved)
4. Certification Basis:
As defined in CRI A-1 UK, Issue 2

5. Airworthiness Requirements: JAR-23, Change 1, dated 11-Mar-1994
6. Requirements elected to comply:
None
7. EASA Special Conditions: System CRI B-1, Cirrus Airframe Parachute
CRI B-2, Spins
CRI F-1, Protection from the Effects of HIRF
CRI F-2, Protection from the Effects of Lightning Strikes, Direct Effects
CRI F-3, Protection from the Effects of Lightning Strikes, Indirect Effects
8. Exemptions: None
9. Equivalent Safety Findings: FAA ACE-96-5A 'Spinning' 2 February 2010
10. Environmental Standards: ICAO Annex 16, Volume 1, Amdt 4, third edition, Chapter X
JAR 36, issued 23-May-1997

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List, Document No. 13750, latest FAA Approved Revision.
2. Description:
Single-engine, four-seat, low-wing airplane, composite construction, fixed tricycle landing gear
3. Equipment:
Equipment list, AFM, Doc. No. 11934-002E, 11934-003E, 11934-004E, 11934-005 Section 6.
(See Note 2)
4. Dimensions:
- a. Serial Numbers 1005 thru 1877, and 1879 thru 1885:

Span	10.7 m	(35.3 ft)
Length	7.9 m	(25.9 ft)
Height	2.8 m	(9.2 ft)
Wing Area	12.6 m ²	(135.2 ft ²)

b. Serial Numbers 1878, 1886 and subsequent:

Span	11.67 m	(38.3 ft)
Length	7.92 m	(26.0 ft)
Height	2.71 m	(8.9 ft)
Wing Area	13.46 m ²	(144.90 ft ²)

5. Engines:
1. One (1) Teledyne Continental IO-360-ES
EASA TC IM.E.005
 2. One (1) Lycoming IO-390-C3B6
EASA TC IM.E.097

5.1 Firmware:
Not Applicable

5.2 Mapping:
Not Applicable

5.3 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)

For power-plants limits refer to AFM, Doc. No. 11934-002E, 11934-003E, 11934-004E or 11934-005 Section 2

7. Propellers:
- a. Hartzell Propeller Inc. P/N PHC-J3YF-1MF/F7392-1 (See note 6)
EASA TC IM.P.132
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
 - b. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7392-1 (See note 6)
EASA TC IM.P.187
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

- c. Hartzell Propeller Inc. P/N HC-E3YR-1RF/F7392S-1 (See note 7)

EASA TC IM.P.132

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

- d. Hartzell Propeller Inc. P/N 3C1-R919A1/76C03-2 (See note 7)

EASA TC IM.P.137

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

8. Fluids:

8.1 Fuel: Aviation Grade 100LL or 100

8.2 Oil: Engine AFM, Doc. No.11934-002E, 11934-003E, 11934-004E, 11934-005 Section 2

8.3 Coolant: Not Applicable

9. Fluid capacities:

9.1 Fuel: Standard Fuel Tank S/N 1005 thru 1877, 1879 thru 1885

Usable: Total: 229.0 liters 60.5 US Gallons
212.0 liters 56.0 US Gallons

S/N 1878, 1886 and subsequent:

Usable: Total: 221.4 liters 58.5 US Gallons
212.0 liters 56.0 US Gallons

9.2	Oil:	Maximum: 7.6 liters	8.0 US qts
		Minimum: 5.7 liters	6.0 US qts

10. Air Speeds:

a. Serial Numbers 1005 through 1147 without Service Bulletin SB 20-01-00:

Never Exceed Speed VNE	200 KIAS
Maximum Structural Cruising Speed VNO	165 KIAS
1315 kg (2900 lb) Operating Maneuvering Speed VO	135 KIAS
1179 kg (2600 lb) Operating Maneuvering Speed VO	126 KIAS
998 kg (2200 lb) Operating Maneuvering Speed VO	116 KIAS
Maximum Flap Extension Speed VFE	100 KIAS
Maximum Parachute Deployment Speed VPD	135 KIAS

b. Serial Numbers 1148 through 1877, 1879 through 1885, and serials 1005 through 1147 with SB 20-01-00:

Never Exceed Speed VNE	200 KIAS
Maximum Structural Cruising Speed VNO	165 KIAS
1361 kg (3000 lb) Operating Maneuvering Speed VO	131 KIAS
1179 kg (2600 lb) Operating Maneuvering Speed VO	122 KIAS
1043 kg (2300 lb) Operating Maneuvering Speed VO	114 KIAS
Maximum Flap Extension Speed VFE	100 KIAS
Maximum Parachute Deployment Speed VPD	135 KIAS

c. Serial Numbers 1878, 1886 and subsequent (see note 6):

Never Exceed Speed VNE	200 KIAS
Maximum Structural Cruising Speed VNO	163 KIAS
1383 kg (3050 lb) Operating Maneuvering Speed VO	130 KIAS
Maximum Flap Extension Speed VFE	104 KIAS
Maximum Parachute Deployment Speed VPD	133 KIAS

d. Serial Numbers 2339 and subsequent (see note 7):

Never Exceed Speed VNE	201 KIAS
Maximum Structural Cruising Speed VNO	164 KIAS
1429 kg (3150 lb) Operating Maneuvering Speed VO	133 KIAS
Maximum Flap Extension Speed VFE	110 KIAS
Maximum Parachute Deployment Speed VPD	133 KIAS

11. Maximum Operating Altitude: The aircraft is limited to 5334 m (17500 ft MSL).
12. Operational Capability: VFR Day and Night (see Note 3)
IFR Day and Night
13. Maximum Masses:
- a. Serial Numbers 1005 through 1147 without Service Bulletin SB 20-01-00:
Take-Off 1315 kg (2900 lb) Landing 1315 kg (2900 lb)
- b. Serial Numbers 1148 through 1877, 1879 through 1885, and serials 1005 through 1147 with SB 20-01-00:
Take-Off 1361 kg (3000 lb) All weights in excess of Landing 1315 kg (2900lb)
1315 kg (2900 lb) must consist of wing fuel.
- c. Serial Numbers 1878, 1886 and subsequent (See note 6):
Take-Off 1383 kg (3050lb) Landing 1383 kg (3050lb)
- d. Serial Numbers 2339 and subsequent (See note 7):
Take-Off 1429 kg (3150lb) Landing 1429 kg (3150lb)
14. Centre of Gravity Range:
- a. Serial Numbers 1005 through 1147 without Service Bulletin SB 20-01-00:
Forward Limits: 3.523 m at 952 kg with a straight line taper to 3.581 m at 1222 kg, and 3.632 m at 1315 kg.
Aft Limits: 3.673 m at 952 kg, with straight line taper to 3.744 m at 1166 kg, and to 3.757 m at 1245 kg, and 3.764 m at 1315 kg.
- b. Serial Numbers 1148 through 1877, 1879 through 1885, and serials 1005 thru 1147 with SB 20-01-00:
Forward Limits: 3.523 m at 952 kg with a straight line taper to 3.581m at 1222 kg, and 3.660 m at 1361 kg.
Aft Limits: 3.673 m at 952 kg, with straight line taper to 3.744 m at 1166 kg, and to 3.762 m at 1315 kg, and 3.759 m at 1361 kg.
- c. Serial Numbers 1878, 1886 and subsequent (See note 6):
Forward Limits: 3.500 m at 953 kg with a straight line taper to 3.533m at 1225 kg, and 3.574 m at 1383 kg.
Aft Limits: 3.762 m at 953 kg, with straight line to 3.762 m at 1383kg.
- d. Serial Numbers 2339 and subsequent (See note 7):
Forward Limits: 3.500 m at 953 kg with a straight line taper to 3.533m at 1225 kg, and 3.584 m at 1429 kg.
Aft Limits: 3.762 m at 953 kg, with straight line to 3.762 m at 1429kg.

15. Datum: 2.54 m (100 inches) in front of leading firewall
16. (Reserved)
17. Levelling Means: Spirit Level: Cabin door sill
Optical Level: Fuselage leveling points
18. Minimum Flight Crew: 1 (Pilot)
19. Maximum Passenger Seating Capacity:

3 (S/N 1005 thru 2126)
3+1 (S/N 2127 and subsequent) (see Note 5)
20. (Reserved)
21. Baggage / Cargo Compartment 59 kg (130 lb) at 5.283 m (208 in)
22. Wheels and Tires
- | | |
|----------------------|---------------|
| Nose Wheel Tire Size | 5.00 x 5 |
| Main Wheel Tire Size | 15 x 6.00 x 6 |

IV. Operating and Service Instructions

Airplane Flight Manual (AFM): Document No. 11934-002E, 11934-003E, 11934-004E or 11934-005 Approved by the FAA and, Supplement for aeroplanes registered in Europe No 11934-S29 or later approved revision.

Airplane Maintenance Manual (AMM)

(Including Airworthiness Limitations)

Document No. 12137-001 or later EASA approved Revisions.

V. Operational Suitability Data Not Applicable

VI. Notes

1. Deleted, please refer to TCDS-N IM.A.007
2. Serial Numbers 1337 and subsequent with SRV (VFR Only) Option are eligible for VFR Day and Night only.
3. Cirrus Design Service Advisories and Service Bulletins are listed on the internet at <http://www.cirrusaircraft.com/support/>
4. For Optional Equipment Garmin G1000/G1000NXi:
 - CS23, Original issue plus
 - Special Conditions:
 - CRI B-52: Human Factors
 - CRI F-51: Equipment Systems and Installations
 - CRI F-52: Protections from the Effects of HIRF
 - CRI F-53: Protection from the effects of Lightning Strike; Direct Effects
 - CRI F-54: Protection from the Effects of Lightning Strike; Indirect Effects
 - CRI F-5: Databases and Configuration Files
 - CRI F-6: Digital Devices Design Assurance
 - CRI F-7: Software Aspects of Certification, Application of DO-178B Field Loadable Software and User Modifiable Software
5. For Maximum Passenger Seating Capacity 4 + 1 maximum occupancy limit according to 11934-004E, Reissue A, or later approved revision.
6. For aircraft equipped with Teledyne Continental IO-360-ES and Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system.
7. For aircraft equipped with Lycoming Engines, IO-390-C3B6 and Garmin G1000 NXi avionics or Garmin G1000 NXi avionics with Garmin GFC-700 autopilot system.
8. For aircraft equipped with Garmin G2000 suite of avionics with SW part number 006-B3956-Q4 or later approved revisions and related upgrades: Airplane Flight Manual (AFM) Document No. 44763-001 Approved by FAA and Supplement 60846-001, or later approved revisions.

Section 2 SR22**I General**

1. a) Type: SR22
b) Variant:N/A
2. Airworthiness Category:
JAR-23 Normal Category
3. Type Certificate Holder:
Cirrus Design Corporation
4515 Taylor Circle
Duluth, MN 55811
U.S.A.
4. Manufacturer:
Cirrus Design Corporation
4515 Taylor Circle
Duluth, MN 55811
U.S.A.
5. JAA Certification Application Date: 10-June-2004
6. JAA recommendation Date: Not applicable
7. EASA Type Certification Date: 27 January 2006

II Certification Basis

1. Reference Date for determining
the applicable requirements: 06-Jan-2000
2. (Reserved)
3. (Reserved)
4. Certification Basis: As defined in CRI A-1 UK issue 2

5. Airworthiness Requirements: JAR-23, Change 1, dated 11-Mar-1994
6. Requirements elected to comply: None
7. EASA Special Conditions:
- | | |
|----------|---|
| CRI B-1: | Cirrus Airframe Parachute System |
| CRI B-2, | Spins |
| CRI F-1: | Protection from the Effects of HIRF |
| CRI F-2: | Protection from the Effects of Lightning Strike; Direct Effects |
| CRI F-3: | Protection from the Effects of Lightning Strike; Indirect Effects |
| CRI F-4: | Human factors in integrated avionics |
| CRI F-5: | Equipment Systems and Installations |
| CRI F-6: | Software |
| CRI F-7: | BRNAV |
| CRI F-8: | Use of Sandel HSI SN3308 |
8. EASA Exemptions: None
9. EASA Equivalent Safety Findings: None
10. EASA Environmental Standards: ICAO Annex16, Volume 1, Amdt 4, third edition, Chapter X
JAR 36, issued 23-May-1997
CRI A-3

III Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List, Document No. 13750, latest FAA Approved Revision.
2. Description: Single-engine, four-seat, low-wing airplane, composite construction, fixed tricycle landing gear.
3. Equipment:
- Equipment list, AFM, Doc. No. 13772-001E or
Equipment list, AFM, Doc. No. 13772-002E (for aircraft equipped with optional G1000 avionics) or
Equipment list, AFM, Doc. No. 13772-004E (for aircraft equipped with 1633kg MTOW) or
Equipment list, AFM, Doc. No. 13772-006 (for aircraft equipped with optional Garmin G1000 NXi avionics)

4. Dimensions:

Span	11.67 m	(38.3 ft)
Length	7.92 m	(26.0 ft)
Height	2.71 m	(8.90 ft)
Wing Area	13.46 m ²	(144.90 ft ²)

5. Engines: Teledyne Continental IO-550-N
EASA TC IM.E.100

5.1 Firmware: Not Applicable

5.2 Mapping: Not Applicable

5.3 Engine Limits: Maximum Take-off 2700 RPM (310 hp)
Maximum Continuous Power 2700 RPM (310 hp)

For power-plants limits refer to AFM, Doc. No. 13772-001E, 13772-002E, 13772-004E or 13772-006 Section 2

7. Propellers: a. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7694 or F7694B

EASA TC IM.P.187
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

b. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7393DF or F7693DFB

EASA TC IM.P.187
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

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

EASA TC IM.P.187
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

d. 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.

8. Fluids:

8.1 Fuel: Aviation Grade 100LL or 100

8.2 Oil: Engine AFM, Doc. No. 13772-001E, 13772-002E, 13772-004E or 13772-006

8.3 Coolant: Not Applicable

9. Fluid capacities:

9.1 Fuel:

9.1.1 Aircraft serials 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437

Standard Fuel Tank	Total:	318.0 liters	84 US Gallons
	Usable:	306.6 liters	81 US Gallons

9.1.2 Aircraft serials 2334, 2420, 2438 and subsequent

Standard Fuel Tank	Total:	357.7 liters	94.5 US Gallons
	Usable:	348.3 liters	92 US Gallons
	Or		
	Total:	221.4 liters	58.5 US Gallons
	Usable:	212.0 liters	56.0 US Gallons

9.2 Oil: Maximum: 7.6 liters 8.0 qts

10. Air Speeds:
- a. Aircraft serials 0002 thru 3914:

Never Exceed Speed VNE	204 KCAS
Maximum Structural Cruising Speed VNO	180 KCAS
(3400 lb) Operating Maneuvering Speed VO	133 KIAS
(2900 lb) Operating Maneuvering Speed VO	124 KIAS
(2400 lb) Operating Maneuvering Speed VO	112 KIAS
Maximum Flap Extension Speed VFE (50%)	119 KIAS
Maximum Flap Extension Speed VFE (100%)	104 KIAS
Maximum Parachute Deployment Speed VPD	133 KIAS

 - b. Aircraft serials 3915 and subsequent:

Never Exceed Speed VNE	208 KCAS
Maximum Structural Cruising Speed VNO	179 KCAS
1633 kg (3600 lb) Operating Maneuvering Speed VO	140 KIAS
1542 kg (3400 lb) Operating Maneuvering Speed VO	133 KIAS
1315 kg (2900 lb) Operating Maneuvering Speed VO	124 KIAS
1089 kg (2400 lb) Operating Maneuvering Speed VO	112 KIAS
Maximum Flap Extension Speed VFE (50%)	150 KIAS
Maximum Flap Extension Speed VFE (100%)	110 KIAS
Maximum Parachute Deployment Speed VPD	140 KIAS
11. Maximum Operating Altitude: The aircraft is limited to 5334 m (17500 ft MSL).
12. Operational Capability: VFR Day and Night (see Note 2)
 IFR Day and Night
 Flight into known icing (see Note 3)
13. Maximum Masses:
- a. Aircraft serials 0002 thru 3914:

Take-Off and Landing	1542 kg (3400 lb)
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 - b. Aircraft serials 3915 and subsequent:

Take-Off and Landing	1633 kg (3600 lb)
Zero fuel	1542 kg (3400 lb)

14. Centre of Gravity Range:

a. Aircraft serials 0002 thru 3914:

Forward Limits: 3.500 m at 952 kg with a straight line taper to 3.533 m at 1225 kg, and to 3.614 m at 1542 kg.

NOTE: For aircraft serial numbers 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437, a no-landing zone applies forward of the line between 3.592 m at 1456 kg and 3.625 m at 1542 kg.

Aft Limits: 3.762 m at 952 kg, with straight line to 3.762 m at 1542 kg.

b. Aircraft serials 3915 and subsequent:

Forward Limits: 3.500 m at 952 kg with a straight line taper to 3.533 m at 1225 kg, and to 3.637 m at 1633 kg.

Aft Limits: 3.762 m at 952 kg, with straight line to 3.762 m at 1633 kg.

15. Datum: 2.54 m (100 inches) in front of leading firewall

16. (Reserved)

18. Levelling Means: Spirit Level: Cabin door sill
Optical Level: Fuselage leveling points

18. Minimum Flight Crew: 1 (Pilot)

19. Maximum Passenger Seating Capacity:

3 (S/N 0002 thru 3827)

3+1 (S/N 3828 and subsequent) (see Note 4)

20. (Reserved)

21. Baggage / Cargo Compartment 59 kg (130 lb) at 5.283 m (208 in)

22. Wheels and Tires

Nose Wheel Tire Size 5.00 x 5

Main Wheel Tire Size 15 x 6.00 x 6

IV Operating and Service Instructions

Airplane Flight Manual (AFM): Document No. 13772-001E, 13772-002E Approved by EASA or later approved revisions for aircraft serials 0002 and subsequent, or Document No. 13772-002E Approved by EASA or later Approved revisions for aircraft serials 2979, 2992, 3002 thru 3914. Or Document No. 13772-004E Approved by EASA or later approved revisions for aircraft serials 3915 thru 4434. Or Document No. 13772-006 Approved by the FAA or later approved revisions for aircraft serials 4435 and subsequent. And Supplement No 13772-122 for aeroplanes registered in Europe or later approved revision. (See note 5)

Airplane Maintenance Manual (AMM) (Including Airworthiness Limitations): Document No. 13773-001 or later EASA approved revision

V. Operational Suitability Data Not Applicable

VI Notes

1. Deleted, please refer to TCDS-N IM.A.007
2. See AFM for specific operational capabilities
Certification Basis as following: As defined in CRI A-1 UK Issue 2:
JAR 23, Change 1, dated 11 March 1994 plus

Special Conditions:

- | | |
|----------|--|
| CRI B-1: | Cirrus Airframe Parachute System |
| CRI B-2: | Spins |
| CRI F-1: | Protection from the Effects of HIRF |
| CRI F-2: | Protection from the effects of Lightning Strike;
Direct Effects |
| CRI F-3: | Protection from the Effects of Lightning Strike;
Indirect Effects |
| CRI F-4: | Human Factors in integrated avionics |
| CRI F-5: | Equipment Systems and Installations |
| CRI F-6: | Software |
| CRI F-7: | BRNAV |
| CRI F-8: | Use of Sandel HSI SN3308 |

For Optional Equipment Garmin G1000: CS23, Original issue plus

Special Conditions:

- | | |
|-----------|--|
| CRI B-52: | Human Factors |
| CRI F-51: | Equipment Systems and Installations |
| CRI F-52: | Protections from the Effects of HIRF |
| CRI F-53: | Protection from the effects of Lightning Strike;
Direct Effects |
| CRI F-54: | Protection from the Effects of Lightning Strike;
Indirect Effects |
| CRI F-5: | Databases and Configuration Files |
| CRI F-6: | Digital Devices Design Assurance |
| CRI F-7: | Software Aspects of Certification, Application of
DO-178B Field Loadable Software and User
Modifiable Software |

4. Flight into known icing only allowed for SR22 serial numbers 3003, 3310, 3326, 3403 and subsequent, if equipped according to AFM 13772-002E, 13772-004E or 13772-006 and AFM-S:
No 13772-134* for aircraft serial numbers 0001 and subsequent, or
No 13772-150* for aircraft serial numbers 3915 and subsequent, or
No 13772-163* for aircraft serial numbers 4433 and subsequent
* or later EASA Approved revisions

5. For Maximum Passenger Seating Capacity 4 +1 maximum occupancy limit according to 13772-002E, 13772-004E or 13772-006

6. For aircraft equipped with Garmin G2000 suite of avionics with SW part number 006-B3956-Q4 or later approved revisions and related upgrades: Airplane Flight Manual (AFM) Document No. 44765-001 Approved by FAA and Supplement 60846-001, or later approved revisions.

Section 3 SR22T**I. General**

1. a) Type: SR22T
b) Variant: N/A
2. Airworthiness Category: CS-23 Normal Category
3. Type Certificate Holder:
Cirrus Design Corporation
4515 Taylor Circle
Duluth, MN 55811
U.S.A.
4. Manufacturer:
Cirrus Design Corporation
4515 Taylor Circle
Duluth, MN 55811
U.S.A.
5. JAA Certification Application Date: Not applicable
6. JAA recommendation Date: Not applicable
7. EASA Type Certification Date: 09 Jul 2010

II. Certification Basis

1. Reference Date for determining the applicable requirements: 06-Jan-2000
2. (Reserved)
3. (Reserved)
4. Certification Basis: As defined in CRI A-01 UK issue 2
5. Airworthiness Requirements: CS 23, Original Issue

TCDS No.: UK.TC.A.00125

Date: 28 October 2024

AW-DAW-TP-004

Copies of this document are not controlled.

Issue: 1

Page 19 of 25

6. Requirements elected to comply: CS 23, except 23.301
7. EASA Special Conditions:
- | | |
|-----------|---|
| CRI B-1: | Cirrus Airframe Parachute System |
| CRI B-2, | Spins |
| CRI B-52: | Human Factors |
| CRI F-51: | Equipment, Systems and Installations |
| CRI F-52: | Protection from the Effects of HIRF |
| CRI F-53: | Protection from the Effects of Lightning Strike; Direct Effects |
| CRI F-54: | Protection from the Effects of Lightning Strike; Indirect Effects |
| CRI F-5: | Databases and Configuration Files |
| CRI F-6: | Digital Devices Design Assurance |
| CRI F-7: | Software Aspects of Certification 23-163-SC for inflatable restraint system (adopted) |
8. EASA Exemptions: None
9. EASA Equivalent Safety Findings: ACE-00-09-A for Engine and Mixture Controls
ACE-08-05A for Cockpit control knob shape
ACE-09-06A for Pitot heat indication system
ACE-10-08 for alternate air door override means
10. EASA Environmental Standards: ICAO Annex 16, Volume I, Chapter X
CS 36, Amdt 2

III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List, Document No. 13750, latest FAA Approved Revision.
2. Description: Single-engine, four-seat, low-wing airplane, composite construction, fixed tricycle landing gear.
3. Equipment: Equipment list, AFM, Doc. No. 13772-003E, 13772-005E or 13772-007
4. Dimensions:
- | | |
|-----------|--|
| Span | 11.67 m (38.3 ft) |
| Length | 7.92 m (26.0 ft) |
| Height | 2.71 m (8.90 ft) |
| Wing Area | 13.46 m ² (144.90 ft ²) |

- 5. Engines: Teledyne Continental TSIO-550-K
EASA TC IM.E.105
 - 5.1 Firmware: Not Applicable
 - 5.2 Mapping: Not Applicable
- 5.3 Engine Limits:
 - Maximum Take-off 2500 RPM (315 hp)
 - Maximum Continuous Power 2500 RPM (315 hp)

For power-plants limits refer to AFM, Doc. No. 13772-003E, 13772-005E or 13772-007 Section 2

- 7. Propellers:
 - a. Hartzell Propeller Inc. P/N PHC-J3Y1F-1N/N7605, N7605B, N7605C or N7605CB
EASA TC IM.P.187
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.

- 8. Fluids:
 - 8.1 Fuel: Aviation Grade 100LL or 100
 - 8.2 Oil: Engine AFM, Doc. No. 13772-003E, 13772-005E or 13772-007 Section 2
 - 8.3 Coolant: Not Applicable

9. Fluid capacities:

9.1 Fuel:

9.1.1 Aircraft serials 0001, and subsequent

Standard Fuel Tank Total: 357.7 liters 94.5 US Gallons
Usable: 348.3 liters 92 US Gallons

- 9.2 Oil:
 - Maximum: 7.6 liters 8.0 qts

10. Air Speeds:

a. Aircraft serials 0001 thru 0441:

Never Exceed Speed VNE	204 KCAS from S/L to 5334 m (17,500 ft MLS) Linearly reducing from 204 KCAS @ 5334 m (17,500 ft) to 173 KCAS @ 7620 m (25,000 ft)
Maximum Structural Cruising Speed VNO:	180 KCAS from S/L to 5334 m (17,500 ft MLS) Linearly reducing from 180 KCAS @ 5334 m (17,500 ft) to 153 KCAS @ 7620 m (25,000 ft)
1542 kg (3400 lb) Operating Maneuvering Speed VO	133 KIAS
1315 kg (2900 lb) Operating Maneuvering Speed VO	124 KIAS
1089 kg (2400 lb) Operating Maneuvering Speed VO	112 KIAS
Maximum Flap Extension Speed VFE (50%)	119 KIAS
Maximum Flap Extension Speed VFE (100%)	104 KIAS
Maximum Parachute Deployment Speed VPD	133 KIAS

b. Aircraft serials 0442 and subsequent:

Never Exceed Speed VNE	208 KCAS from S/L to 5334 m (17,500 ft MLS)Linearly reducing from 208 KCAS @ 5334 m (17,500 ft) to 178 KCAS @ 7620 m (25,000 ft)
Maximum Structural Cruising Speed VNO	179 KCAS from S/L to 5334 m (17,500 ft MLS) Linearly reducing from 179 KCAS @ 5334 m (17,500 ft) to 152 KCAS @ 7620 m (25,000 ft)
1633 kg (3600 lb) Operating Maneuvering Speed VO	140 KIAS
1542 kg (3400 lb) Operating Maneuvering Speed VO	133 KIAS
1315 kg (2900 lb) Operating Maneuvering Speed VO	124 KIAS
1089 kg (2400 lb) Operating Maneuvering Speed VO	112 KIAS
Maximum Flap Extension Speed VFE (50%)	150 KIAS
Maximum Flap Extension Speed VFE (100%)	110 KIAS
Maximum Parachute Deployment Speed VPD	140 KIAS

11. Maximum Operating Altitude: The aircraft is limited to 7620 m (25,000 ft MSL).

12. Operational Capability: VFR Day and Night (see Note 4)
IFR Day and Night
Flight into known icing (see Note 2)

- 13. Maximum Masses:
 - a. Aircraft serials 0001 thru 0441:

Take-Off and Landing	1542 kg (3400 lb)
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 - b. Aircraft serials 0442 and subsequent:

Take-Off and Landing	1633 kg (3600 lb)
Zero fuel	1542 kg (3400 lb)

- 15. Centre of Gravity Range:
 - a. Aircraft serials 0001 thru 0441:

Forward Limits: 3.500 m at 952 kg with a straight line taper to 3.533 m at 1225 kg, and 3.614 m at 1542 kg.

NOTE: For aircraft serial numbers 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437, a no-landing zone applies forward of the line between 3.592 m at 1456 kg and 3.625 m at 1542 kg.

Aft Limits: 3.762 m at 952 kg, with straight line to 3.762 m at 1542 kg.

 - b. Aircraft serials 0442 and subsequent:

Forward Limits: 3.500 m at 952 kg with a straight line taper to 3.533 m at 1225 kg, and to 3.637 m at 1633 kg.

Aft Limits: 3.762 m at 952 kg, with straight line to 3.762 m at 1633 kg.

- 15. Datum: 2.54 m (100 inches) in front of leading firewall

- 16. (Reserved)

- 19. Levelling Means:
 - Spirit Level: Cabin door sill
 - Optical Level: Fuselage leveling points

- 18. Minimum Flight Crew: 1 (Pilot)

- 19. Maximum Passenger Seating Capacity:
 - 3 (S/N 0001 thru 0250, and 0252 thru 0267)
 - 3+1 (S/N 0251, 0268 and subsequent) (see Note 3)

- 20. (Reserved)

- 21. Baggage / Cargo Compartment 59 kg (130 lb) at 5.283 m (208 in)

- 22. Wheels and Tires
 - Nose Wheel Tire Size 5.00 x 5
 - Main Wheel Tire Size 15 x 6.00 x 6

IV. Operating and Service Instructions

Airplane Flight Manual (AFM): Document No. 13772-003E Approved by EASA or later approved revisions for aircraft serials 0001 thru 0441, or Document No. 13772-005E Approved by EASA or later Approved revisions for aircraft serials 0442 thru 1459, 1461 thru 1470 and 1472. Or 13772-007 Approved by the FAA or later Approved revisions for aircraft serials 1460, 1471, 1473 and subsequent. And Supplement No 13772-122 for aeroplanes registered in Europe or later approved revision. (see Note 5)

Airplane Maintenance Manual (AMM) (Including Airworthiness Limitations): Document No. 13773-001 or later EASA Approved revisions for aircraft serials 0001 thru 1472 excluding serial numbers 1460 and 1471 or Document No. 13773-002 or later EASA Approved revisions for aircraft serial numbers 1460 and subsequent excluding serial numbers 1461, 1462, 1463, 1465, 1466, 1467, 1468, 1469, 1470, and 1472.

V. **Operational Suitability Data** Not Applicable

VI. Notes

1. For further details to noise please refer to TCDS-N IM.A.007
2. Flight into known icing only allowed if equipped according to applicable AFM and AFM-S:
No 13772-134* for aircraft serial numbers 0001 and subsequent, or
No 13772-151* for aircraft serial numbers 0422 and subsequent, or
No 13772-161* for aircraft serial numbers 1460 and subsequent excluding serial numbers 1461, 1462, 1463, 1465, 1466, 1467, 1468, 1469, 1470, and 1472.
* or later EASA Approved revisions
3. For Maximum Passenger Seating Capacity 4 +1 maximum occupancy limit according to 13772-003E, 13772-005E or 13772-007
4. See AFM for specific operational capabilities
5. For aircraft equipped with Garmin G2000 suite of avionics with SW part number 006-B3956-Q4 or later approved revisions and related upgrades: Airplane Flight Manual (AFM) Document No. 44767-001 Approved by FAA and Supplement 60846-001, or later approved revisions.

Section 4. Administration**I. Acronyms and Abbreviations**

Acronym / Abbreviation	Definition
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder

II. Type Certificate Holder Record

TCH Record	Period
Cirrus Design Corporation 4515 Taylor Circle Duluth, Minnesota 55811 United States of America	Present. No changes. Since 27 May 2004

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1.0	28 Oct 2024	Initial	Issue 1.0 28 Oct 2024

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