



COMMONWEALTH AVIATION SERVICE, INC
d/b/a MILLION AIR - RICHMOND
CRS VXWR051W

Revised Weight and Balance
& Equipment List

Aircraft Model No.: Cirrus SR22

Revision Date: 12/15/2020

Aircraft Registration No.: N193SR

Max. Takeoff Weight: 3400.00

Aircraft Serial No.: 2663

Previous Data	Weight	Arm	Moment
Dated: 11/18/2019	2478.66	138.86	344202.20
Removed the Following:			
Strobe Power Supplies (2)	-2.60	147.80	-384.28
P/N: 01-0770880-00			
Left Nav/Strobe Light Assy	-1.30	161.80	-210.34
P/N: 01-0790006-25			
Right Nav/Strobe Light Assy	-1.30	161.80	-210.34
P/N: 01-0790006-24			
Installed the Following:			
Left Nav/Strobe Light Assy	0.50	161.80	80.90
P/N: 01-0771733-12			
Right Nav/Strobe Light Assy	0.50	161.80	80.90
P/N: 01-0771733-11			
Totals	2474.46	138.84	343559.04
New Empty Weight:	2474.46		
New E. W. C. G.:	138.84		
New E. W. Moment:	343559.04		

for CRS VXWR051W

Date: 11/18/2019
12:08PM

NorthPoint Aviation
Aircraft Weight & Balance Report

Page: 1

Aircraft: N193SR Type: Fixed Wing S/N: 2663
Model: SR22
Prior Empty Weight: 2,477.1 As Of: 7/18/2017 Prior Useful Load: 922.9
Prior Longitudinal Moment: 343,999.5400 Arm: 138.8700

Items Removed:

Date	Description	Weight	Arm	Longitudinal Moment
11/15/2019	MLB 700	1.60	175.0000	280.0000
11/18/2019	GTX-327	1.60	124.9000	199.8400
Total of Items Removed:		3.20		479.8400

Items Installed:

Date	Description	Weight	Arm	Longitudinal Moment
11/15/2019	AXP 322 XPDR	3.00	120.0000	360.0000
11/15/2019	Skytrax 100b	1.50	175.0000	262.5000
11/15/2019	CI 105 Antenna	0.24	250.0000	60.0000
Total of Items Installed:		4.74		682.5000

New Final Figures:

~~Weight: 2,478.66 Useful Load: 921.34~~
~~Longitudinal Moment: 344,202.2000 Arm: 138.8662~~

*Superseded
12/15/2020*

Date: 11/18/2019, A/C: N193SR, Model: SR22, S/N: 2663, Type: Fixed Wing
, Hobbs: 1,070.70, Tach: 951.00, Total: 956.60

Removed: MLB 700, GTX-327
Installed: AXP 322 XPDR, Skytrax 100b, CI 105 Antenna

Weight & Balance calculations listed above have been performed in accordance with manufacturer's specs.
Aircraft is approved for return to service.

Prepared By:  CRS- 6DVR982C

Monaco Air Duluth
4535 Airport Approach Road
Duluth, MN 55811
(218)727-2911

Weight and Balance Change for Equipment Installed or Removed

Date:	7/18/2017
N-Number	193SR
S/N	2663

WEIGHING POINT	Scale Reading	Tare	Net Weight	ARM	MOMENT
Empty Weight			2475.00	138.82	343598.98
(Unusable fuel is included in empty weight.)			C.G.(% MAC)		
Space below is provided for additions or subtractions					
SB2X-95-18R3 Rocket and Shelf Assembly			1.34	231.40	310.08
SB2X-95-18R3 Electrical Wiring Modification			0.78	116.00	90.48
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
					0.00
			2477.12	138.87	343999.54
Max. Gross Weight			3400.00		
Basic Empty Weight			2477.12	138.87	344.000
Useful Load			922.88		
			C.G.(% MAC)	12.1%	
Prepared by Rick Hagberg A&P 3268908					

Park Rapids Avionics

Weight and Balance and Equipment List Revision

Date:	14-Jan-10
Make & Model:	Cirrus SR22
Serial Number:	2663
N Number:	N193SR

	Weight	Arm	Moment
Previous	2464	138.9	342349
Removed Equipment:			
Avidyne Flight Max Entegra PFD ADHRS EFIS	12	115.5	1386
Avidyne Flight Max Entegra MFD EX-5000	6.4	121.8	779.52
Garmin #1 GNS-430W Nav/Com/GPS	5.1	121	617.1
Garmin #2 GNS-430W Nav/Com/GPS	5.1	122	622.2
Garmin GMA-340 Audiopanel/Intercom	1.7	118	200.6
Heads Up XMD076 Datalink Weather Receiver	1.7	175	297.5

Installed Equipment:			
Avidyne #1 IFD 5000I Integrated Flight Displays ADHRS	17.8	115	2047
Avidyne #2 IFD 5000I Integrated Flight Displays ADHRS	17.8	116	2064.8
Avidyne ADC 215 Control Display Unit	2.3	126	289.8
Avidyne MAG 300 Magnetometer	0.5	145	72.5
Avidyne ACM 100 Config Module	0.2	110	22
PS Engineering PMA8000B Audiopanel Intercom MKB	1.7	118	200.6
Avidyne MLB 700 Datalink Weather Receiver	1.6	175	280
Avidyne MLB 700 Datalink Weather Antenna	0.6	202	121.2
AIS 240-35 Relay	0.5	110	55

Gross Weight:	3400
Empty Weight:	2475
Moment:	343598.98
CG:	138.82
Useful Load:	925

Park Rapids Avionics
CRS# K15R981Y

Delivered Weight Data & Equipment List

Model SR22

Serial Number: 2663
Registration Number: N193SR
Basic Empty Weight: 2464 lb
Total Moment/1000: 342.349
Center of Gravity: F.S.138.9 or 12.3 MAC
Parachute Canopy Color: Orange / White

The following pages list required, standard, and optional equipment, as well as gives the weight and arm of each listed item. This listing represents the airplane and all options available at the time of delivery and does not include any equipment installed after delivery.

Note:

Not all optional equipment in this listing was installed in the above serial number airplane. Equipment listed as optional but not installed in the airplane is indicated by a hyphen (-) in the quantity column for that piece of equipment.

ATA - Item:

Each item in the listing is provided a unique number. The first two digits of the number represent the ATA or GAMA Chapter reference number. These numbers are used industry wide and in the Cirrus Design SR22 Maintenance Documentation to locate items in the Maintenance Manuals and or Parts Catalogs. The two digits following the hyphen are sequence numbers for each item in that chapter.

*Refer To corrected Delivered
Weight Data and Equipment List
Per SB 2X-08-01*

Delivered Weight Data & Equipment List

Model SR22

Serial Number:	2663
Registration Number:	N193SR
Basic Empty Weight:	2464 lb
Total Moment/1000:	344.099
Center of Gravity:	F.S.139.7 or 13.7 MAC
Parachute Canopy Color:	Orange / White

The following pages list required, standard, and optional equipment, as well as gives the weight and arm of each listed item. This listing represents the airplane and all options available at the time of delivery and does not include any equipment installed after delivery.

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Description:

This is the component, assembly, or installation name.

Sym:

Items in this listing are coded by a symbol indicating the status of the item. These codes are:

C Required item for FAA Certification.

S Standard equipment. Most standard equipment is applicable to all airplanes. Some equipment may be replaced by optional equipment.

O Optional equipment. Optional equipment may be installed in addition to or to replace standard equipment.

Qty:

The quantity of the listed item in the airplane. A hyphen (-) in this column indicates that the equipment was not installed

Part Number

This is the Cirrus Design Part Number for the component, assembly, or installation

Unit Wt

The weight, in pounds, of one each of the listed item.

Arm

The arm, in inches, of the listed item.

ATA / Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
21	Air Conditioning					
21-01	Blower Fan Only	O	-	20970-001	7.3	133.0
21-02	Compressor	O	1	21119-003	15.0	93.1
21-03	Condenser Assembly	O	1	21209-001	17.0	132.8
21-04	Evaporator Assembly	O	1	21114-005	17.5	199.5
22	AutoFlight					
22-01	Sys 55X Autopilot Prgrmmr	S	1	14779-002	3.0	123.3
22-02	Altitude Transducer	S	1	12722-001	0.2	112.4
23	Communications					
23-01	Radios, See 34 – Navigation	-	-	-	-	-
23-02	Com 1 Antenna	C	1	12740-001	0.5	178.5
23-03	Com 2 Antenna	S	1	12741-001	0.5	204.6

ATA / Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
24	Electrical Power					
24-01	Alternator 1	C	1	646843	12.3	61.8
24-02	Alternator 2	C	1	13565-001	5.7	91.0
24-03	MCU	C	1	19910-001	9.8	98.0
24-04	Volt / Ammeter	C	1	11240-001	0.8	119.7
24-05	Battery 1	C	1	50366-001	28.0	96.0
24-06	Battery 2	C	1	50979-011	11.5	230.0
25	Equipment & Furnishings					
25-01	Emergency Locator Transmitter & Batteries (121.5 MHz)	O	-	20220-001	3.6	228.8
25-02	Emergency Locator Transmitter & Batteries (406 MHz)	C	1	17190-100	3.4	229.5
25-03	Fwd Seat & Restraint Inst. (Leather: add 0.4 lb each)	C	2	20907-003/-004	27.0	149.3
25-04	Rear Seat Installation (Leather: add 0.4 lb each)	C	2	12053-002	21.8	180.0
25-05	Rear Seat Restraint	C	2	12491-001	2.3	180.0
26	Fire Protection					
26-01	Portable Fire Extinguisher	C	1	12533-003	1.5	118.4
27	Flight Controls					
27-01	Flap Actuator, Modified	C	1	11787-002	4.4	173.9
27-02	Roll Trim Cartridge Assy	C	1	15660-001	0.4	161.8
27-03	Roll Trim Motor Assembly	C	1	12546-001	1.3	159.8
27-04	Pitch Trim Cartridge Assy	C	1	15560-002	0.4	310.9
27-05	Pitch Trim Motor Assy	C	1	11794-004	1.3	303.5
27-06	Yaw Trim Cartridge Assy	C	1	11898-002	0.4	106.2
28	Fuel					
28-01	Fuel Quantity Indicator	C	1	13557-002	0.8	138.0
28-02	Fuel Selector Valve	C	1	11627-001	1.8	140.8
28-03	Gascolator	C	1	14069-001	1.0	98.5
28-04	Fuel Cap Assy	S	2	18051-001	0.4	154.0
28-05	Fuel Level Sender (OTBD)	C	2	18484-001	0.3	151.7
28-06	Fuel Level Sender (INBD)	C	2	18483-001	0.3	155.7
30	Ice & Rain Protection					

ATA / Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
30-01	Propeller Slinger Ring	O	1	15321-001	1.5	55.0
30-02	De-Icing Fluid Reservoir	O	1	Integral to Wing	9.2	148.4
30-03	Metering Pump	O	1	17351-001	5.0	181.3
31	Indicating & Recording					
31-01	Annunciator Panel	C	1	15262-001	0.3	117.2
31-02	Hourmeter	S	1	12135-001	0.1	142.3
32	Landing Gear					
32-01	Main Landing Gear Installation	C	2	18560-001/ 002	34.0	157.5
32-02	Main Landing Gear Fairing Installation	S	2	18143-001/002	14.3	157.5
32-03	Brake Assembly	C	2	17122-103	3.2	157.5
32-04	Main Wheels	C	2	17122-101	7.8	157.5
32-05	Main Tire	C	2	14075-006	6.3	157.5
32-06	Main Tube	C	2	14076-002	1.0	157.5
32-07	Nose Landing Gear Installation	C	1	18100-001	35.0	77.0
32-08	Nose Wheel	C	1	12798-001	4.5	71.8
32-09	Nose Tire 5.00 x 5	C	1	14075-003	4.3	71.8
32-10	Nose Tire Tube	C	1	14076-001	1.0	71.8
32-11	Nose Gear Fairing & Pant	S	1	18303-001	5.2	78.0
32-12	Brake Master Cylinder	C	4	14269-001	0.6	104.5
32-13	Brake Fluid Reservoir	C	1	12006-001	0.4	98.1
33	Lights					
33-01	L/R Strobe/Nav Lights	C	2	17140-001/002	0.6	161.8
33-02	Strobe Power Supply (2)	C	2	14286-002	1.7	147.8
33-03	Landing Light Installation	S	1	20248-004	1.9	80.0
33-03	Recognition Light Installation	S	1	18285-001/002	0.4	138.5
34	Navigation & Pitot Static					
34-01	Avidyne FlightMax MFD	O	1	14751-001	6.4	121.8
34-02	Avidyne FlightMax PFD	O	1	15222-001	12.0	115.5
34-03	Altimeter	C	1	12102-001	1.1	116.1
34-04	TAS Indicator	C	1	13568-002	0.7	116.9
34-05	Magnetic Compass	C	1	12451-002	0.3	132.7
34-06	Attitude Gyro	C	1	13459-002	2.2	114.5
34-07	Marker Beacon Antenna	S	1	12743-001	0.6	200.0
34-08	GPS 1 Antenna	C	1	12744-001	0.4	136.2
34-09	GPS 2 Antenna	S	1	12744-001	0.4	110.3
34-10	Transponder Antenna	C	1	12739-001	0.1	105.0

ATA / Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
34-11	VOR/LOC Antenna	C	1	12742-001	0.4	331.0
34-12	Turn Coordinator, Modified	C	1	11891-001	1.8	118.0
34-13	GMA 340 Audio Panel	S	1	12717-050	1.5	121.5
34-14	GNS 420 (GPS/COM/NAV)	O	-	12718-004	5.0	121.0
34-15	GNS 430 (GPS/COM/NAV)	C	1	12718-051	5.0	121.0
34-16	GNS 430 (GPS/COM/NAV)	O	1	12718-051	5.0	122.4
	EMax Engine Monitoring					
34-17	• Data Acquisition Unit	O	1	16692-001	2.0	118.0
34-18	• Monitor Cabin Harness	O	1	16695-005	2.0	108.0
	Sky Watch Option					
34-19	• Sky Watch Inverter	O	1	14484-001	0.5	118.0
34-20	• Sky Watch Antenna nstl	O	1	14480-001	2.3	150.5
34-21	• Sky Watch Track Box	O	1	14477-050	10.0	140.0
	Stormscope Option					
34-22	• Processor	O	1	12745-050	1.7	199.0
34-23	• Antenna	O	1	12745-070	0.9	191.0
	Transponder Option					
34-24	• Mode A/C Transponder	C	1	13587-001	1.6	124.9
34-25	• Mode S Transponder	O	-	15966-050	2.6	121.0
	TAWS Option					
34-26	• KGP 560 Processor	O	1	15963-001	1.3	117.0
	XM Satellite Options					
34-27	• XM WX / Radio Receiver	O	1	16121-001	1.7	114.0
34-28	• XM Radio Remote Control	O	1	16665-501	0.2	149.3
35	Oxygen					
35-01	Bottle Assembly - Empty	O	1	100N0020-4	17.4	262.3
	Full				23.8	265.3
61	Propeller					
61-01	Hartzell Propeller Installation	C	-	15319-00X	79.8	48.0
61-02	Hartzell Composite Propeller Installation	O	1	18974-001	67.2	48.0
61-02	McCauley Propeller Installation	O	-	15825-00X	78.0	50.0
61-03	MT Propeller	O	-	18606-00X	56.2	48.6
61-03	Propeller Governor	C	1	15524-001	3.2	61.7
71	Power Plant					
71-01	Upper Cowl	C	1	20181-003	10.5	78.4
71-02	Lower Cowl LH	C	1	20182-006	5.4	78.4
71-03	Lower Cowl RH	C	1	18396-001	5.4	78.4

ATA / Item	Description	Sym	Qty	Part Number	Unit Wt	Arm
71-03	Engine Baffling Installation	C	1	15460-001	10.7	78.4
72	Engine					
72-01	Engine	C	1	14057-00X	414.5	76.5
72-02	Engine Mount Assembly	C	1	16546-001	22.0	76.5
72-03	Induction Filter	C	-	50207-001	0.4	62.9
72-04	Reiff Heater	O	-	L-6	1.9	76.0
73	Engine Fuel					
73-01	Engine Driven Fuel Pump	C	1	ETI-SR22-2-11	3.32	93.7
73-02	Electric Fuel Pump Assy.	C	1	11839-001	2.3	97.7
73-03	Fuel Pressure Switch Assy.	C	1	13598-001	0.4	67.8
74	Engine Ignition					
74-01	Spark Plugs	C	12	RHB32E	0.3	78.4
74-02	Magnetos (L & R)	C	2	10-500556-101	11.6	74.5
74-03	Ignition Switch Installation	C	1	11915-003	0.5	123.0
78	Engine Exhaust					
78-01	Heater Muffler	S	1	ETI-SR22-100-1	13.2	87.0
78-02	LH Muffler	S	1	ETI-SR22-103-1	8.5	86.0
78-03	Tailpipe	S	2	ETI-G2-110-L-1/	12	99.0
79	Oil					
79-01	Engine Oil Cooler	S	1	10281A	7.8	90.0
79-02	Oil Filter	S	1	CH48108	1.5	93.4
80	Starting					
80-01	24-volt Starter	S	1	ES-646275-1	15.0	93.0
81	Turbines-SA10588SC & SE10589SC					
81-01	LH Turbocharger	C	1	ETI-SR22-2000	15.0	84.0
81-02	RH Turbocharger	C	1	ETI-SR22-1300	15.0	84.0
81-03	LH Intercooler	C	1	ETI-G2-500-1	5.0	83.0
81-04	RH Intercooler	C	1	ETI-G2-500-2	5.0	83.0
81-05	Lower Cowl Modification	C	1	NA	0.8	81.0
81-06	Air Filter Box and Retainer	C	1	NA	1.5	63.0
95	Special Equipment					
95-01	Packed Parachute (CAPS)	C	1	20331-001	54.0	235.5
95-02	Airplane Flight Manual	C	1	13772-001	1.2	-