

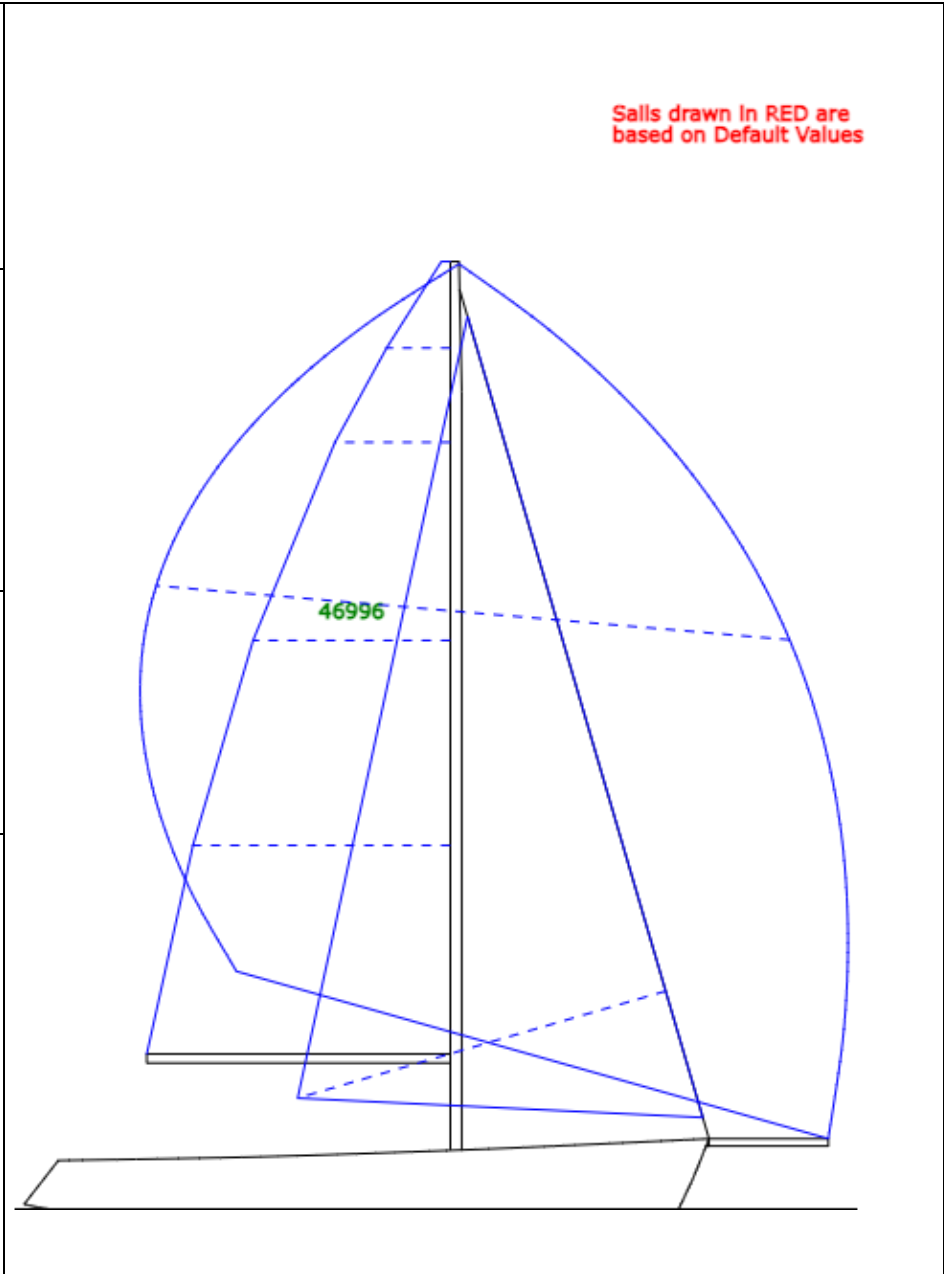
capar J/120 R 46996

Class: J/120 R
 Configuration:
 Sail Number: 46996
 Year Built: 2001
 Builder: TILLOTSON-PEARSON
 Owner(s): Laun, John

Certificate #: EZ11614
 Valid Year: 2023
 Type: Renew Cert
 Issue Date: 2023-01-24
 Exp.Date: 2023-12-31
 Offsets_file: US30532.OFF
 Cert Group: ORR-Ez SOCAL
 Comment:

Rig Type: Sloop
 Forestay: Masthead
 Keel Type: Fin with Bulb
 Prop Type: Folding
 Prop Install: Exposed
 Prop Blades: 2

LOA: 40.17 ft
 LWL: 35.00 ft
 Rated Length: 37.52 ft
 Beam Max: 12.00 ft
 Draft: 7.11 ft
 Disp Empty: 15395 lbs
 Disp Sailing: 17580 lbs
 Crew: 2035 lbs
 Water Ballast: 0 lbs
 Wetted Area: 353.8 ft²
 LPS: 121.3 °
 RM20: 1267.6 ft-lbs
 Stab Index: 125 °



Spinnaker: Asymmetrical tacked centerline on bow, sprit or prod
 Code Zero: Yes
 Genoa/Jib Leech: No Roach - Leech is straight
 Large Roach Headsail: No
 Jib Furler: Yes Above Deck
 Main Roller Furling: No

Rig Dimensions	Mainsail Meas.	Jib/Genoa Meas.	Asymmetric Spin. Meas.
IG: 50.50 ft	HB: 0.52 ft	LP: 22.48 ft	ASLU: 64.30 ft
ISP: 52.00 ft	MGT: 3.74 ft	LPG %: 155.0 %	ASLE: 52.00 ft
J: 14.50 ft	MGU: 6.77 ft	J Luff: 50.26 ft	AMG: 37.14 ft
P: 46.50 ft	MGM: 11.57 ft	J Leech: 47.93 ft	ASF: 34.71 ft
E: 17.80 ft	MGL: 15.09 ft	Area: 565.0 ft ²	Area: 1776.3 ft ²
TPS: 21.50 ft	Area: 508.1 ft ²		

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Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	47.5	46.0	44.0	42.4	39.8	36.7	35.5	35.6
Beat VMG	1,447.70	1,036.99	840.28	735.26	681.11	630.40	610.10	602.90
52°	905.91	655.68	537.83	489.88	469.12	448.91	439.61	434.32
60°	823.29	604.82	505.11	467.87	450.94	433.27	424.47	418.35
75°	730.42	550.56	474.97	445.95	428.58	407.18	394.54	386.54
90°	669.01	514.03	454.90	428.32	410.56	386.45	370.52	359.77
110°	669.87	511.90	449.71	417.21	397.10	368.14	345.57	327.67
120°	698.00	529.39	460.42	426.97	402.43	362.85	336.06	314.39
135°	885.94	629.44	508.04	465.12	436.47	391.65	348.82	299.66
150°	1,085.06	770.90	618.84	539.27	484.89	425.96	384.81	344.71
165°	1,210.22	859.83	690.22	601.48	538.20	460.18	413.67	377.10
Run VMG	1,252.91	890.16	714.57	622.70	557.19	476.41	427.83	390.35
Opt Run Angle	132.6	134.5	137.0	145.2	154.1	164.8	168.0	166.2

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance Metrics

SA/D Dnwind:	54.070
SA/D Average:	39.85
SA/D Upwind:	25.620
D/Length:	148.5
Ave Perf Screen:	26.800
DnWind Perf	36.4
Screen:	

Standard Ratings

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.437	0.694	0.931	1.107	1,097.0	690.8	514.9	433.2
W50/L50	0.426	0.682	0.926	1.114	1,378.5	860.9	633.9	527.1
W60/L40	0.429	0.685	0.927	1.099	1,398.7	874.6	646.7	545.6
MOSTLY WW	0.447	0.705	0.931	1.057	1,349.7	855.6	648.2	570.9
MOSTLY LW	0.452	0.701	0.925	1.150	1,048.3	675.5	512.0	411.5

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.923	572.8
IR#	0.929	576.4

ORR-Ez PHRF

TOD (Spin)
40.1

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,098.4	786.3	636.8	556.9	510.0	459.8	432.0	412.1
W50/L50	1,378.6	982.2	791.0	688.6	627.0	559.4	524.1	501.5
W60/L40	1,398.8	997.3	803.7	700.5	639.7	575.0	542.5	523.0
MOSTLY WW	1,349.6	970.0	789.2	693.3	641.7	590.6	567.9	557.3
MOSTLY LW	1,048.5	760.5	625.5	555.7	507.7	446.4	409.3	381.2
MOSTLY REACH								

ORR-Ez PHRF Time Allowance 4 Winds

	TOD (Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	106.6	57.5	33.0	29.6
W50/L50	171.6	92.5	47.2	40.7
W60/L40	182.6	100.0	50.6	40.1
MOSTLY WW	182.6	104.9	48.5	29.5
MOSTLY LW	103.8	55.6	34.2	37.4

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Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	47.5	46.0	44.0	42.4	39.8	36.7	35.5	35.6
Beat VMG	1,447.70	1,036.99	840.28	735.26	681.11	630.40	610.10	602.90
52°	905.91	655.68	537.83	489.88	469.12	448.91	439.61	434.32
60°	823.29	604.82	505.11	467.87	450.94	433.27	424.47	419.12
75°	737.16	555.82	479.71	446.64	429.28	411.86	402.18	395.40
90°	727.05	550.11	476.95	443.91	421.26	397.12	385.03	375.63
110°	817.81	603.50	506.81	467.99	442.31	404.18	372.93	355.85
120°	927.79	673.73	554.82	494.26	462.75	420.10	386.32	355.19
135°	1,295.48	884.48	679.76	575.30	507.68	445.17	405.66	371.68
150°	1,598.15	1,062.57	794.79	649.27	559.70	465.57	419.49	384.03
165°	1,634.73	1,096.99	828.18	670.95	573.80	467.19	416.03	377.02
Run VMG	1,657.76	1,111.93	839.06	679.13	580.22	471.88	420.48	381.66
Opt Run Angle	172.1	172.1	172.2	172.2	172.1	172.8	172.8	172.2

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance Metrics

SA/D:	25.62
D/Length:	148.5
Perf Screen:	17.3

Standard Ratings

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.389	0.634	0.881	1.065	1,232.9	756.5	544.5	450.0
W50/L50	0.376	0.630	0.908	1.122	1,561.1	932.4	646.8	523.4
W60/L40	0.388	0.643	0.912	1.105	1,544.3	931.8	657.1	542.6
MOSTLY WW	0.433	0.691	0.926	1.056	1,392.5	872.9	651.8	571.6
MOSTLY LW	0.357	0.598	0.863	1.107	1,326.0	792.2	548.4	427.6

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.858	616.3
IR#	0.897	596.6

ORR-Ez PHRF

TOD (Non-Spin)
60.3

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Non-Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,239.0	873.2	694.7	597.1	539.0	478.2	448.1	429.4
W50/L50	1,573.3	1,090.5	851.8	718.1	639.2	557.6	520.3	497.0
W60/L40	1,554.1	1,084.0	852.4	724.1	649.5	573.5	539.5	519.4
MOSTLY WW	1,394.8	995.8	803.8	700.5	645.0	591.2	568.6	558.1
MOSTLY LW	1,340.8	929.2	725.5	610.8	543.3	467.0	425.8	393.2
MOSTLY REACH								

ORR-Ez PHRF Allowance 4 Winds

	TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	242.5	123.2	62.6	46.4
W50/L50	354.2	164.0	60.1	37.0
W60/L40	328.2	157.2	61.0	37.1
MOSTLY WW	225.4	122.2	52.1	30.2
MOSTLY LW	381.5	172.3	70.6	53.5