



2024 ORR-Ez Certificate - EZ11615



Fandango J/92 46192

Spinnaker

GPH: 0.846 / 625.9

IR#: 0.852 / 629.0

PHRF BM: 92.8

Non-Spin

GPH: 0.793 / 668.0

IR#: 0.829 / 647.1

PHRF BM: 110.9

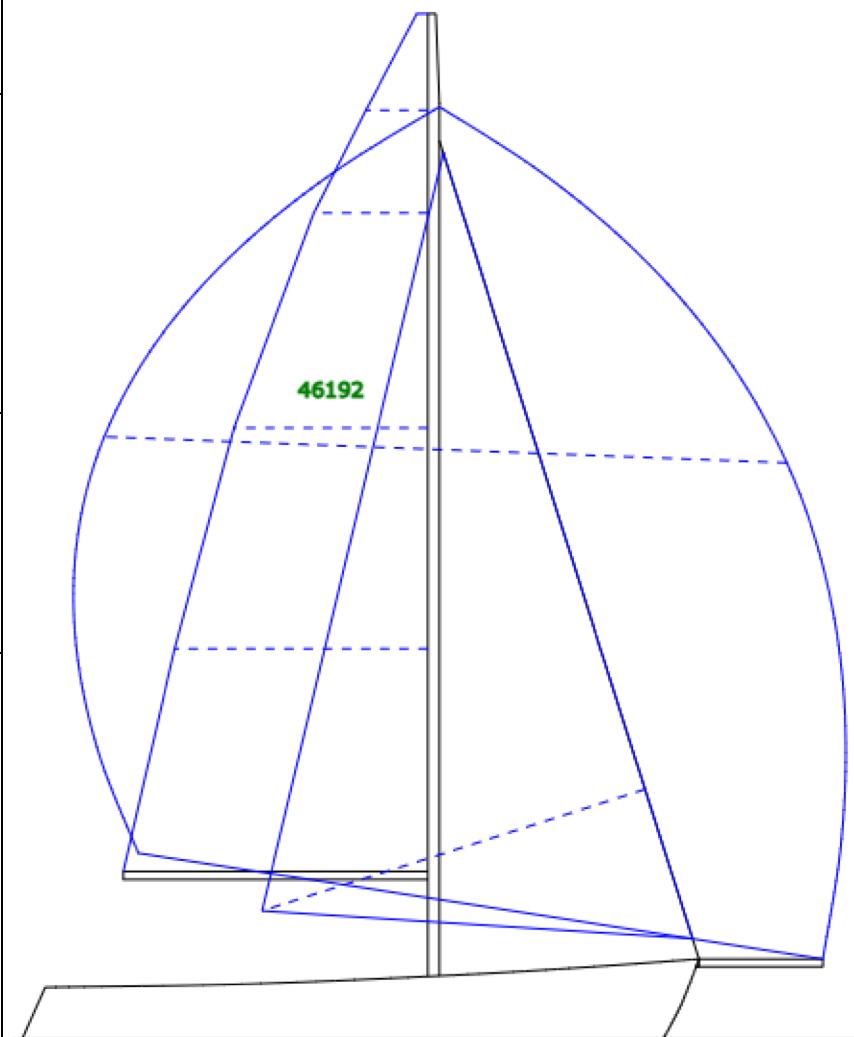
Class:	J/92
Configuration:	
Sail Number:	46192
Year Built:	1993
Builder:	TPI
Owner(s):	Bennett, Scott

Sails drawn In RED are based on Default Values

Certificate #:	EZ11615
Valid Year:	2024
Type:	Renew Chg
Issue Date:	2024-03-26
Exp.Date:	2024-12-31
Offsets_file:	H194.OFF
Cert Group:	ORR-Ez SOCAL
Comment:	

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

LOA:	29.99 ft
LWL:	25.80 ft
Rated Length:	27.87 ft
Beam Max:	9.95 ft
Draft:	6.00 ft
Disp Empty:	6177 lbs
Disp Sailing:	7568 lbs
Crew:	1000 lbs
Water Ballast:	0 lbs
Wetted Area:	203.3 ft ²
LPS:	114.3 °
RM20:	421.8 ft-lbs
Stab Index:	110 °



Spinnaker:	Asymmetrical tacked centerline on bow, sprit or prod
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: 37.00 ft	HB: 0.49 ft	LP: 17.81 ft	ASLU: 47.24 ft
ISP: 38.50 ft	MGT: 2.76 ft	LPG %: 154.9 %	ASLE: 41.37 ft
J: 11.50 ft	MGU: 5.05 ft	J Luff: 37.46 ft	AMG: 30.25 ft
P: 38.00 ft	MGM: 8.60 ft	J Leech: 35.19 ft	ASF: 30.35 ft
E: 13.50 ft	MGL: 11.22 ft	Area: 333.7 ft ²	Area: 1117.6 ft ²
TPS: 17.00 ft	Area: 308.6 ft ²		

Fandango J/92 46192

Spinnaker**Polar Time Allowances**

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.2	44.3	43.1	39.9	37.7	35.7	35.4	35.7
Beat VMG	1,477.35	1,064.99	869.44	784.79	743.69	707.31	694.77	690.87
52°	935.16	688.88	577.25	543.62	527.60	511.66	503.27	499.09
60°	847.58	640.42	554.24	524.81	510.48	495.26	485.45	479.57
75°	778.26	597.95	529.14	501.69	484.08	461.92	449.15	441.02
90°	721.02	561.83	506.96	480.33	461.48	435.19	418.41	407.24
110°	722.95	559.22	499.48	465.89	443.87	409.78	382.58	364.94
120°	743.74	575.22	513.66	477.30	446.95	401.05	368.05	348.33
135°	952.73	687.86	562.58	517.84	485.40	428.91	364.62	321.95
150°	1,182.92	841.23	676.04	584.52	532.00	469.23	417.30	357.21
165°	1,319.37	938.27	754.02	651.94	583.03	504.28	452.60	398.42
Run VMG	1,365.91	971.37	780.62	674.94	603.60	515.59	460.98	412.47
Opt Run Angle	135.4	137.4	139.8	149.7	159.2	173.0	172.6	147.3

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.846	625.9
IR#	0.852	629.0

Performance Metrics

SA/D Dnwind:	59.210
SA/D Average:	42.74
SA/D Upwind:	26.270
D/Length:	156.0
Ave Perf Screen:	27.400
DnWind Perf Screen:	38.0

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,173.5	846.0	690.6	609.3	562.3	512.1	482.6	460.9
W50/L50	1,450.7	1,038.6	841.1	740.5	682.0	618.0	583.3	556.8
W60/L40	1,461.9	1,048.4	850.7	751.9	696.3	637.3	607.0	585.0
MOSTLY WW	1,546.0	1,107.6	897.8	789.4	729.0	673.9	652.2	642.3
MOSTLY LW	1,264.7	902.3	727.8	630.9	570.2	497.4	452.4	419.0
MOSTLY REACH	1,075.3	779.7	640.9	570.1	529.2	484.2	455.7	436.4

Non-Spinnaker**Polar Time Allowances**

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.2	44.3	43.1	39.9	37.7	35.7	35.4	35.7
Beat VMG	1,477.35	1,064.99	869.44	784.79	743.69	707.31	694.77	690.87
52°	935.16	688.88	577.25	543.62	527.60	511.66	503.27	499.09
60°	847.58	640.42	554.24	524.81	510.48	495.26	486.65	481.87
75°	779.59	601.08	534.47	502.44	488.18	471.29	460.75	453.29
90°	773.33	597.45	532.71	497.88	473.52	452.20	438.43	427.83
110°	867.62	654.15	564.55	525.56	496.91	450.51	417.29	402.24
120°	1,001.64	730.09	603.94	551.41	518.28	468.71	425.46	394.50
135°	1,347.76	930.93	724.35	614.88	557.59	493.87	446.88	402.05
150°	1,656.47	1,105.18	829.51	687.02	595.69	512.46	461.79	416.31
165°	1,683.42	1,136.44	863.21	706.96	606.70	511.85	456.16	407.03
Run VMG	1,707.62	1,151.96	874.36	715.25	613.35	517.13	461.49	412.58
Opt Run Angle	172.1	172.1	172.2	172.2	172.3	173.0	172.6	171.5

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.793	668.0
IR#	0.829	647.1

Performance Metrics

SA/D:	26.27
D/Length:	156.0
Perf Screen:	16.8

PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,304.0	927.4	745.2	648.4	591.7	533.9	503.8	483.3
W50/L50	1,611.7	1,126.4	887.6	761.2	688.4	618.7	583.6	556.9
W60/L40	1,590.2	1,118.6	888.0	768.6	701.3	637.9	607.2	585.0
MOSTLY WW	1,577.2	1,126.0	909.0	796.2	733.1	676.1	654.3	644.4
MOSTLY LW	1,488.1	1,035.5	812.2	688.4	611.5	525.7	475.4	437.6
MOSTLY REACH	1,201.4	860.8	697.7	611.8	562.3	510.8	482.4	462.8

Fandango J/92 46192

Spinnaker

Standard 5 Winds

	TOT (Spin)					TOD (Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.444	0.576	0.728	0.868	1.073	1,173.5	903.4	715.3	599.9	485.2
W50/L50	0.438	0.572	0.727	0.871	1.083	1,450.7	1,110.1	873.4	728.4	586.0
W60/L40	0.443	0.578	0.733	0.874	1.062	1,461.9	1,120.3	883.6	741.4	609.7
MOSTLY WW	0.444	0.580	0.738	0.882	1.047	1,546.0	1,183.8	931.6	779.4	656.1
MOSTLY LW	0.418	0.548	0.702	0.859	1.159	1,264.7	964.9	753.7	615.7	456.3
MOSTLY REACH	0.452	0.584	0.732	0.864	1.058	1,075.3	831.9	663.5	561.7	458.8

Standard Single Wind

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.843	617.1
W50/L50	0.846	750.6
W60/L40	0.847	765.2
MOSTLY WW	0.850	808.3
MOSTLY LW	0.839	630.2
MOSTLY REACH	0.842	576.6

Legacy 4 Winds

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.410	0.643	0.847	0.992	1,173.5	748.0	567.8	484.5
W50/L50	0.405	0.643	0.854	1.005	1,450.7	914.7	688.6	585.3
W60/L40	0.411	0.649	0.855	0.986	1,461.9	924.8	702.8	609.0
MOSTLY WW	0.407	0.645	0.854	0.960	1,546.0	975.6	737.2	655.2
MOSTLY LW	0.384	0.615	0.843	1.068	1,264.7	790.8	576.3	455.3
MOSTLY REACH	0.419	0.650	0.844	0.984	1,075.3	692.6	533.8	458.0

Non-Spinnaker

Standard 5 Winds

	TOT (Non-Spin)					TOD (Non-Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.399	0.525	0.673	0.817	1.027	1,304.0	992.2	773.7	637.0	507.0
W50/L50	0.394	0.525	0.686	0.849	1.082	1,611.7	1,208.6	925.1	747.7	586.4
W60/L40	0.407	0.540	0.700	0.856	1.062	1,590.2	1,199.0	925.1	756.9	610.0
MOSTLY WW	0.436	0.571	0.728	0.874	1.044	1,577.2	1,204.1	943.8	785.8	658.2
MOSTLY LW	0.355	0.476	0.626	0.789	1.103	1,488.1	1,111.9	845.3	670.1	479.6
MOSTLY REACH	0.404	0.528	0.671	0.806	1.000	1,201.4	920.0	723.4	602.1	485.3

Standard Single Wind

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.791	658.4
W50/L50	0.816	777.6
W60/L40	0.823	786.9
MOSTLY WW	0.842	815.8
MOSTLY LW	0.765	691.4
MOSTLY REACH	0.782	621.0

Legacy 4 Winds

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.369	0.592	0.803	0.950	1,304.0	812.1	598.6	506.2
W50/L50	0.365	0.603	0.843	1.004	1,611.7	975.4	697.9	585.7
W60/L40	0.378	0.617	0.846	0.986	1,590.2	973.5	710.2	609.3
MOSTLY WW	0.399	0.636	0.848	0.957	1,577.2	989.3	741.8	657.3
MOSTLY LW	0.327	0.544	0.784	1.016	1,488.1	892.9	620.0	478.5
MOSTLY REACH	0.375	0.594	0.793	0.930	1,201.4	757.8	568.3	484.6

Fandango J/92 46192

Spinnaker

PHRF Benchmark

92.8

Aligned Ratings are based on the Farr
40 MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	96.6
W50/L50	115.9
W60/L40	117.4
MOSTLY WW	121.2
MOSTLY LW	101.4
MOSTLY REACH	91.1

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	184.6	141.2	110.6	92.2	82.1
W50/L50	243.2	181.5	137.0	108.8	98.1
W60/L40	242.4	181.8	138.1	110.5	99.6
MOSTLY WW	239.4	181.8	141.0	115.4	101.8
MOSTLY LW	202.9	153.9	119.2	96.8	85.3
MOSTLY REACH	168.5	129.9	103.0	87.6	77.2

Non-Spinnaker

PHRF Benchmark

110.9

Aligned Ratings are based on the Farr
40 MH as Scratch Boat.

PHRF Single Wind

RANDOM LEG	137.9
W50/L50	142.9
W60/L40	139.1
MOSTLY WW	128.7
MOSTLY LW	162.6
MOSTLY REACH	135.5

PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	315.1	230.0	169.0	129.3	103.9
W50/L50	404.2	280.0	188.7	128.1	98.5
W60/L40	370.7	260.5	179.6	126.0	99.9
MOSTLY WW	270.6	202.1	153.2	121.8	103.9
MOSTLY LW	426.3	300.9	210.8	151.2	108.6
MOSTLY REACH	294.6	218.0	162.9	128.0	103.7