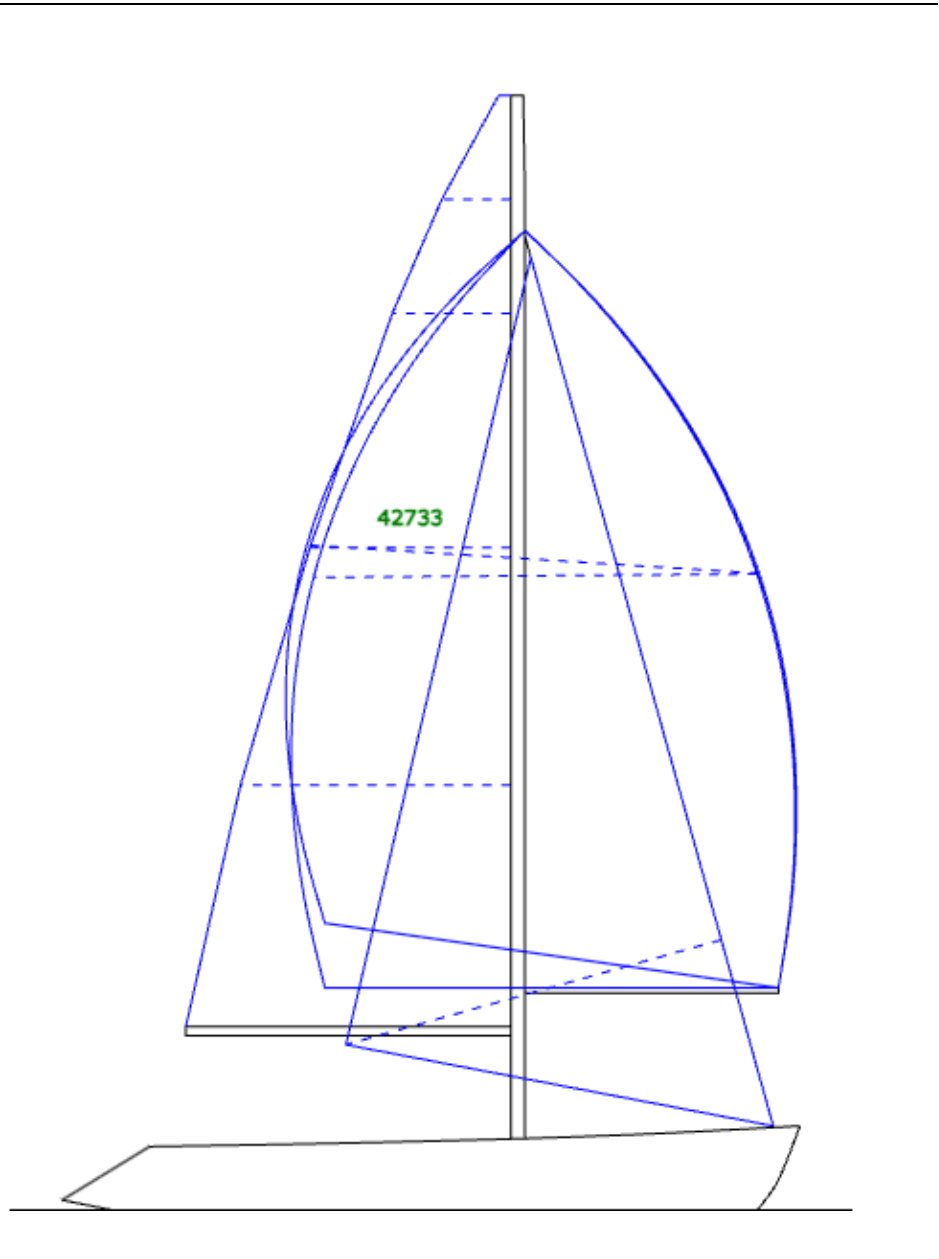


## Maleficent Beneteau 42s7 42733

<b>Spinnaker</b>	<b>GPH: 0.890 / 595.3</b>	<b>IR#: 0.902 / 594.2</b>	<b>PHRF BM: 58.0</b>
<b>Non-Spin</b>	<b>GPH: 0.852 / 621.7</b>	<b>IR#: 0.884 / 606.9</b>	<b>PHRF BM: 70.7</b>

Class:	Beneteau 42s7
Configuration:	
Sail Number:	42733
Year Built:	1997
Builder:	BENETEAU
Owner(s):	Bennett, Christopher
Certificate #:	EZ11961
Valid Year:	2024
Type:	New Cert
Issue Date:	2024-05-20
Exp. Date:	2024-12-31
Offsets_file:	FIRST42S7_leg.off
Cert Group:	ORR-Ez SOCAL
Comment:	
Rig Type:	Sloop
Forestay:	Fractional
Keel Type:	Fin
Prop Type:	Folding
Prop Install:	Exposed
Prop Blades:	2
LOA:	41.67 ft
LWL:	35.75 ft
Rated Length:	37.03 ft
Beam Max:	13.58 ft
Draft:	7.43 ft
Disp Empty:	18973 lbs
Disp Sailing:	21149 lbs
Crew:	1280 lbs
Water Ballast:	0 lbs
Wetted Area:	373.1 ft <sup>2</sup>
LPS:	119.9 °
RM20:	1759.5 ft-lbs
Stab Index:	122 °



Spinnaker:	Both Symmetrical & Asymmetrical flown with spin pole
Genoa/Jib Leech:	No Roach - Leech is straight
Large Roach Headsail:	No
Jib Furler:	No
Main Roller Furling:	No

Rig Dimensions	Mainsail Meas.	Jib/Genoa Meas.	Asymmetric Spin. Meas.	Symmetric Spin. Meas.
IG: 50.86 ft	HB: 0.70 ft	LP: 21.98 ft	ASLU: 53.81 ft	SL: 49.60 ft
ISP: 51.20 ft	MGT: 3.89 ft	LPG %: 157.0 %	ASLE: 49.21 ft	SMW: 25.00 ft
J: 14.00 ft	MGU: 6.69 ft	J Luff: 50.85 ft	AMG: 25.50 ft	SF: 25.59 ft
P: 52.50 ft	MGM: 11.34 ft	J Leech: 45.60 ft	ASF: 25.59 ft	Area: 1038.2 ft <sup>2</sup>
E: 18.33 ft	MGL: 15.25 ft	Area: 559.0 ft <sup>2</sup>	Area: 1095.3 ft <sup>2</sup>	
SPL: 14.30 ft	Area: 573.2 ft <sup>2</sup>			

## Maleficent Beneteau 42s7 42733

### 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	47.3	45.6	43.4	42.1	39.7	37.0	35.9	36.1
Beat VMG	1,426.70	1,027.69	838.24	734.96	685.57	639.01	619.67	612.57
52°	895.26	652.73	540.13	494.06	474.55	455.95	446.93	441.59
60°	816.14	604.48	509.97	474.26	457.08	440.76	432.35	425.52
75°	732.39	557.14	486.48	452.43	436.00	416.34	404.66	396.36
90°	711.97	540.48	470.65	438.05	418.89	397.10	382.65	372.31
110°	717.06	545.58	476.51	444.73	421.97	385.55	359.56	343.31
120°	772.66	577.89	493.56	459.43	435.53	397.84	363.53	329.08
135°	1,029.14	719.38	567.74	499.62	466.15	421.60	386.55	352.17
150°	1,260.44	881.05	694.47	579.99	509.06	446.51	408.02	375.07
165°	1,405.84	982.69	774.58	646.90	560.89	469.85	425.45	392.04
Run VMG	1,455.43	1,017.35	801.91	669.72	580.67	483.43	435.68	401.59
Opt Run Angle	127.4	131.6	137.7	146.8	158.3	172.4	174.6	174.5

#### Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.890	595.3
IR#	0.902	594.2

#### Performance Metrics

SA/D Dnwind:	34.910
SA/D Average:	29.30
SA/D Upwind:	23.690
D/Length:	185.9
Ave Perf Screen:	15.800
DnWind Perf	18.8
Screen:	

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,155.2	823.8	664.1	577.7	527.2	474.2	446.9	429.0
W50/L50	1,471.9	1,041.2	831.7	713.0	641.6	567.6	532.9	512.0
W60/L40	1,469.6	1,042.7	835.8	720.1	652.2	583.2	551.5	533.4
MOSTLY WW	1,493.8	1,062.9	854.6	741.0	676.4	612.6	586.4	575.4
MOSTLY LW	1,290.1	908.3	721.7	616.5	550.6	474.3	430.0	397.3
MOSTLY REACH	1,051.7	754.9	613.1	538.2	495.2	450.0	425.1	407.7

### 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	47.3	45.6	43.4	42.1	39.7	37.0	35.9	36.1
Beat VMG	1,426.70	1,027.69	838.24	734.96	685.57	639.01	619.67	612.57
52°	895.26	652.73	540.13	494.06	474.55	455.95	446.93	441.59
60°	816.14	604.48	509.97	474.26	457.08	440.76	432.35	427.10
75°	732.39	557.14	486.48	455.45	436.19	420.22	411.27	404.93
90°	722.59	551.76	484.21	453.62	432.54	406.22	395.12	386.66
110°	814.53	605.61	513.38	476.64	452.47	417.24	389.06	369.54
120°	920.53	673.20	559.12	500.74	470.93	430.87	400.39	373.35
135°	1,267.07	872.07	675.95	575.01	510.75	452.47	415.92	385.78
150°	1,558.24	1,043.36	785.96	644.79	557.88	470.35	427.69	395.53
165°	1,649.41	1,112.38	844.08	684.78	587.29	479.89	431.48	396.68
Run VMG	1,679.26	1,131.72	858.14	695.46	595.75	485.54	436.44	401.69
Opt Run Angle	171.8	171.9	172.0	172.1	172.1	173.3	173.8	173.6

#### Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.852	621.7
IR#	0.884	606.9

#### Performance Metrics

SA/D:	23.69
D/Length:	185.9
Perf Screen:	12.7

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,235.5	874.1	698.4	602.5	545.9	487.2	458.7	441.4
W50/L50	1,576.0	1,096.5	859.9	726.8	649.2	568.9	533.3	512.0
W60/L40	1,552.5	1,087.0	858.4	731.2	658.3	584.3	551.8	533.4
MOSTLY WW	1,512.1	1,073.9	861.7	745.6	679.6	614.2	587.8	576.6
MOSTLY LW	1,425.5	989.5	774.0	651.1	575.6	490.9	446.1	415.5
MOSTLY REACH	1,131.8	805.7	648.3	564.4	515.3	465.0	439.4	422.7

*Maleficent Beneteau 42s7 42733*

**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	0.450	0.591	0.756	0.917	1.156	1,155.2	881.0	688.5	567.4	450.1
W50/L50	0.431	0.569	0.736	0.910	1.181	1,471.9	1,114.9	861.9	697.7	537.5
W60/L40	0.441	0.580	0.748	0.917	1.165	1,469.6	1,116.0	866.2	706.5	556.0
MOSTLY WW	0.460	0.604	0.775	0.942	1.162	1,493.8	1,137.1	886.2	729.1	591.5
MOSTLY LW	0.410	0.543	0.706	0.881	1.219	1,290.0	973.4	748.9	600.3	433.8
MOSTLY REACH	0.462	0.602	0.764	0.916	1.135	1,051.6	806.5	635.4	529.8	427.6

**Standard Single Wind**

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.889	585.6
W50/L50	0.880	721.3
W60/L40	0.886	730.9
MOSTLY WW	0.909	755.7
MOSTLY LW	0.857	616.9
MOSTLY REACH	0.889	546.1

**Legacy 4 Winds**

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.416	0.666	0.902	1.070	1,155.2	722.3	533.2	449.3
W50/L50	0.400	0.649	0.905	1.097	1,471.9	906.8	650.2	536.4
W60/L40	0.409	0.660	0.909	1.082	1,469.6	910.3	660.6	554.9
MOSTLY WW	0.421	0.676	0.919	1.066	1,493.8	930.3	684.6	590.2
MOSTLY LW	0.377	0.616	0.872	1.123	1,290.0	788.7	557.6	432.9
MOSTLY REACH	0.428	0.677	0.900	1.055	1,051.6	665.3	500.3	427.0

**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	0.421	0.556	0.718	0.881	1.125	1,235.5	936.0	725.0	590.8	462.5
W50/L50	0.403	0.539	0.710	0.892	1.180	1,576.0	1,177.5	894.4	711.3	538.1
W60/L40	0.417	0.556	0.726	0.903	1.164	1,552.5	1,166.0	892.2	717.3	556.5
MOSTLY WW	0.454	0.598	0.769	0.937	1.159	1,512.1	1,149.2	893.7	733.4	592.9
MOSTLY LW	0.371	0.497	0.657	0.835	1.173	1,425.5	1,063.0	804.9	633.5	450.8
MOSTLY REACH	0.429	0.563	0.722	0.875	1.097	1,131.8	861.9	672.8	554.6	442.4

**Standard Single Wind**

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.852	611.1
W50/L50	0.859	739.1
W60/L40	0.869	745.2
MOSTLY WW	0.903	760.5
MOSTLY LW	0.808	654.5
MOSTLY REACH	0.847	573.0

**Legacy 4 Winds**

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.389	0.631	0.870	1.042	1,235.5	762.3	552.7	461.5
W50/L50	0.373	0.622	0.893	1.096	1,576.0	945.0	658.6	536.9
W60/L40	0.387	0.638	0.900	1.082	1,552.5	940.9	667.3	555.3
MOSTLY WW	0.416	0.670	0.915	1.064	1,512.1	938.8	687.9	591.6
MOSTLY LW	0.341	0.571	0.833	1.081	1,425.5	851.0	583.9	449.6
MOSTLY REACH	0.398	0.638	0.864	1.020	1,131.8	706.1	521.3	441.6

## Maleficent Beneteau 42s7 42733

### Spinnaker

#### PHRF Benchmark

58.0

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

#### PHRF Single Wind

RANDOM LEG	65.2
W50/L50	86.6
W60/L40	83.1
MOSTLY WW	68.6
MOSTLY LW	88.1
MOSTLY REACH	60.6

#### PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	166.4	118.8	83.8	59.8	47.1
W50/L50	264.4	186.3	125.5	78.1	49.6
W60/L40	250.1	177.5	120.7	75.6	45.9
MOSTLY WW	187.2	135.1	95.6	65.1	37.2
MOSTLY LW	228.2	162.4	114.4	81.4	62.8
MOSTLY REACH	144.8	104.5	74.9	55.7	46.0

### Non-Spinnaker

#### PHRF Benchmark

70.7

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

#### PHRF Single Wind

RANDOM LEG	90.7
W50/L50	104.4
W60/L40	97.4
MOSTLY WW	73.4
MOSTLY LW	125.7
MOSTLY REACH	87.5

#### PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	246.7	173.8	120.3	83.2	59.5
W50/L50	368.5	248.9	158.0	91.7	50.2
W60/L40	333.0	227.5	146.7	86.4	46.4
MOSTLY WW	205.5	147.2	103.1	69.4	38.6
MOSTLY LW	363.7	252.0	170.4	114.6	79.8
MOSTLY REACH	225.0	159.9	112.3	80.5	60.8