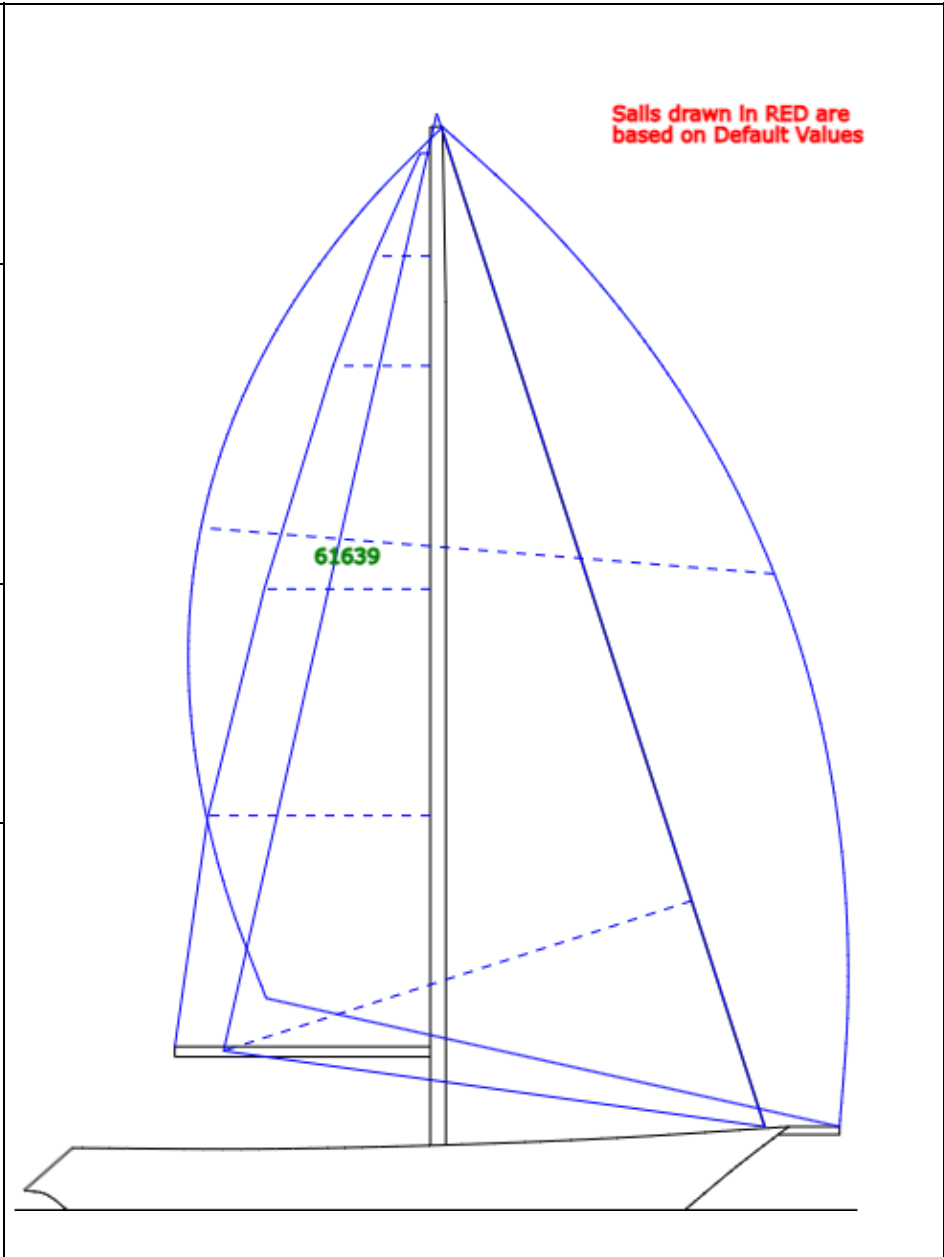


## Miguelito C&C 40-2 AC 61639

<b>Spinnaker</b>	<b>GPH: 0.834 / 635.5</b>	<b>IR#: 0.843 / 636.0</b>	<b>PHRF BM: 99.8</b>
<b>Non-Spin</b>	<b>GPH: 0.794 / 667.5</b>	<b>IR#: 0.832 / 644.5</b>	<b>PHRF BM: 108.3</b>

Class:	C&C 40-2 AC
Configuration:	
Sail Number:	61639
Year Built:	1983
Builder:	C&C
Owner(s):	VanderPloeg, Larry
Certificate #:	EZ11723
Valid Year:	2024
Type:	Renewal HPA
Issue Date:	2023-12-17
Exp.Date:	2024-12-31
Offsets_file:	US943.OFF
Cert Group:	ORR-Ez SOCAL
Comment:	
Rig Type:	Sloop
Forestay:	Masthead
Keel Type:	Fixed
Prop Type:	Feathering
Prop Install:	Exposed
Prop Blades:	3
LOA:	39.79 ft
LWL:	31.50 ft
Rated Length:	30.94 ft
Beam Max:	12.72 ft
Draft:	6.93 ft
Disp Empty:	17754 lbs
Disp Sailing:	19577 lbs
Crew:	1564 lbs
Water Ballast:	0 lbs
Wetted Area:	316.6 ft <sup>2</sup>
LPS:	123.9 °
RM20:	1227.2 ft-lbs
Stab Index:	127 °



Spinnaker:	Asymmetrical tacked centerline on bow, sprit or prod
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.
IG: 52.75 ft	HB: 0.53 ft	LP: 25.59 ft	ASLU: 58.72 ft
ISP: 53.00 ft	MGT: 2.93 ft	LPG %: 154.2 %	ASLE: 51.18 ft
J: 16.60 ft	MGU: 5.06 ft	J Luff: 55.44 ft	AMG: 29.85 ft
P: 46.50 ft	MGM: 8.65 ft	J Leech: 50.11 ft	ASF: 29.85 ft
E: 13.30 ft	MGL: 11.57 ft	Area: 709.3 ft <sup>2</sup>	Area: 1366.9 ft <sup>2</sup>
TPS: 20.50 ft	Area: 380.4 ft <sup>2</sup>		

### 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	46.8	45.7	44.3	41.6	39.2	36.4	35.3	35.0
Beat VMG	1,465.80	1,069.49	885.76	790.37	740.77	693.32	673.98	669.13
52°	925.21	684.35	576.37	537.71	520.01	502.46	494.89	492.31
60°	841.18	635.65	550.19	518.87	504.05	488.47	481.39	476.29
75°	762.63	590.57	528.29	499.32	483.73	464.92	454.08	447.75
90°	737.74	570.44	509.24	481.71	466.47	446.46	433.95	426.19
110°	737.25	572.35	513.77	484.41	463.11	431.63	416.08	405.61
120°	780.37	599.15	529.71	498.44	475.66	440.14	411.59	397.14
135°	966.62	703.29	587.92	535.33	504.94	463.13	430.88	402.53
150°	1,183.86	860.01	708.53	607.63	546.39	489.26	453.42	424.08
165°	1,320.42	959.21	790.27	695.56	600.34	509.68	465.25	431.98
Run VMG	1,367.00	993.05	818.14	699.44	603.70	513.77	469.89	437.12
Opt Run Angle	131.7	136.3	143.5	172.3	172.2	173.2	173.4	173.0

#### Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.834	635.5
IR#	0.843	636.0

#### Performance Metrics

SA/D Dnwind:	38.490
SA/D Average:	31.34
SA/D Upwind:	24.180
D/Length:	295.0
Ave Perf Screen:	10.600
DnWind Perf	13.0
Screen:	

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,186.7	857.2	701.5	618.6	570.5	520.5	495.9	481.8
W50/L50	1,457.0	1,054.0	864.0	753.9	681.8	610.1	577.6	558.6
W60/L40	1,466.5	1,061.9	871.5	763.8	695.6	628.2	598.2	582.0
MOSTLY WW	1,553.0	1,114.1	904.4	791.8	727.6	664.7	639.5	630.9
MOSTLY LW	1,297.3	926.8	748.8	648.7	585.4	513.0	474.3	451.0
MOSTLY REACH	1,082.0	787.1	649.5	578.0	537.7	496.1	474.6	461.0

### 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	46.8	45.7	44.3	41.6	39.2	36.4	35.3	35.0
Beat VMG	1,465.80	1,069.49	885.76	790.37	740.77	693.32	673.98	669.13
52°	925.21	684.35	576.37	537.71	520.01	502.46	494.89	492.31
60°	841.18	635.65	550.19	518.87	504.05	488.47	481.39	478.74
75°	761.92	590.57	528.98	500.49	484.58	469.43	461.78	458.45
90°	752.95	585.26	526.27	498.23	479.04	456.80	447.84	443.33
110°	853.08	644.64	557.96	523.87	500.83	467.64	442.72	430.97
120°	977.23	721.57	606.43	549.95	520.44	480.90	452.31	429.84
135°	1,387.50	949.37	731.29	624.24	558.76	500.08	464.32	436.71
150°	1,666.20	1,111.73	834.49	687.59	597.09	513.97	472.58	441.19
165°	1,684.53	1,134.07	859.00	700.76	603.67	511.05	465.73	431.98
Run VMG	1,695.39	1,141.26	864.35	705.18	607.38	515.31	470.42	437.12
Opt Run Angle	172.1	172.2	172.2	172.3	172.2	173.2	173.4	173.0

#### Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.794	667.5
IR#	0.832	644.5

#### Performance Metrics

SA/D:	24.18
D/Length:	295.0
Perf Screen:	8.2

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,300.6	925.8	744.9	647.7	591.1	534.1	507.8	493.5
W50/L50	1,603.1	1,123.9	888.7	759.3	683.7	611.0	577.9	558.6
W60/L40	1,582.8	1,117.9	891.4	768.1	697.1	628.9	598.5	582.0
MOSTLY WW	1,576.2	1,127.2	911.7	795.9	730.1	666.1	640.9	632.5
MOSTLY LW	1,472.0	1,026.9	807.7	685.2	610.9	531.0	490.0	462.8
MOSTLY REACH	1,199.2	859.2	696.3	611.0	561.8	513.1	489.8	477.0

*Miguelito C&C 40-2 AC 61639*

**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	0.439	0.569	0.717	0.855	1.042	1,186.7	915.2	725.8	609.1	499.4
W50/L50	0.436	0.564	0.713	0.862	1.090	1,457.0	1,125.0	890.6	736.4	582.1
W60/L40	0.442	0.572	0.720	0.866	1.075	1,466.5	1,133.3	899.1	748.2	602.8
MOSTLY WW	0.442	0.577	0.733	0.881	1.065	1,553.0	1,190.5	936.8	780.0	645.0
MOSTLY LW	0.408	0.534	0.682	0.835	1.103	1,297.3	991.0	774.8	633.1	479.4
MOSTLY REACH	0.449	0.578	0.723	0.851	1.017	1,082.0	839.5	671.5	570.5	477.2

**Standard Single Wind**

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.830	627.4
W50/L50	0.839	756.9
W60/L40	0.841	769.9
MOSTLY WW	0.851	807.0
MOSTLY LW	0.814	649.5
MOSTLY REACH	0.827	587.2

**Legacy 4 Winds**

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.405	0.634	0.834	0.964	1,186.7	758.7	576.3	498.6
W50/L50	0.404	0.631	0.851	1.012	1,457.0	931.5	690.9	581.0
W60/L40	0.410	0.639	0.853	0.998	1,466.5	939.8	704.2	601.7
MOSTLY WW	0.405	0.641	0.855	0.978	1,553.0	981.1	735.8	643.6
MOSTLY LW	0.375	0.598	0.821	1.017	1,297.3	812.8	592.2	478.2
MOSTLY REACH	0.416	0.643	0.830	0.945	1,082.0	700.4	542.6	476.6

**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	0.400	0.526	0.674	0.818	1.017	1,300.6	990.4	772.8	636.6	511.8
W50/L50	0.396	0.527	0.687	0.852	1.090	1,603.1	1,205.3	924.0	744.8	582.5
W60/L40	0.409	0.541	0.700	0.858	1.074	1,582.8	1,197.3	925.8	754.9	603.1
MOSTLY WW	0.436	0.570	0.727	0.876	1.063	1,576.3	1,205.1	945.0	784.0	646.5
MOSTLY LW	0.359	0.480	0.630	0.791	1.069	1,472.0	1,102.2	839.9	668.7	494.6
MOSTLY REACH	0.405	0.529	0.672	0.807	0.984	1,199.2	918.2	722.2	601.6	493.3

**Standard Single Wind**

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.790	658.6
W50/L50	0.820	774.1
W60/L40	0.827	783.6
MOSTLY WW	0.846	812.0
MOSTLY LW	0.764	691.9
MOSTLY REACH	0.781	621.9

**Legacy 4 Winds**

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.370	0.593	0.804	0.941	1,300.6	811.1	598.1	510.8
W50/L50	0.367	0.604	0.848	1.012	1,603.1	973.9	693.5	581.3
W60/L40	0.379	0.617	0.850	0.998	1,582.8	973.8	706.3	602.0
MOSTLY WW	0.399	0.635	0.852	0.976	1,576.3	990.5	738.6	645.1
MOSTLY LW	0.330	0.548	0.785	0.985	1,472.0	886.7	619.5	493.4
MOSTLY REACH	0.376	0.596	0.793	0.915	1,199.2	756.4	568.0	492.4

## Miguelito C&C 40-2 AC 61639

### Spinnaker

#### PHRF Benchmark

99.8

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

#### PHRF Single Wind

RANDOM LEG	106.9
W50/L50	122.2
W60/L40	122.1
MOSTLY WW	119.9
MOSTLY LW	120.7
MOSTLY REACH	101.7

#### PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	197.8	153.0	121.1	101.4	96.3
W50/L50	249.5	196.4	154.2	116.8	94.2
W60/L40	247.0	194.8	153.6	117.3	92.7
MOSTLY WW	246.4	188.5	146.2	116.0	90.7
MOSTLY LW	235.5	180.0	140.3	114.2	108.4
MOSTLY REACH	175.2	137.5	111.0	96.4	95.6

### Non-Spinnaker

#### PHRF Benchmark

108.3

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

#### PHRF Single Wind

RANDOM LEG	138.1
W50/L50	139.4
W60/L40	135.8
MOSTLY WW	124.9
MOSTLY LW	163.1
MOSTLY REACH	136.4

#### PHRF 5 Winds

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	311.7	228.2	168.1	128.9	108.7
W50/L50	395.6	276.7	187.6	125.2	94.6
W60/L40	363.3	258.8	180.3	124.0	93.0
MOSTLY WW	269.7	203.1	154.4	120.0	92.2
MOSTLY LW	410.2	291.2	205.4	149.8	123.6
MOSTLY REACH	292.4	216.2	161.7	127.5	111.7