





Rig and Sail Plan Dimensions

	Main		Fore		Spin
P	22.000	IG	21.750	SPL	8.000
E	7.500	J	6.800	SMW	13.000
BAD	2.000	LP	7.400	SLU	25.900
		HBI	1.800	SLE	23.900
				ISP	23.990

Sail Inventory

Name	Area	Span	BaseHt	AFx	Aero	Base
Spin	245.000	23.990	0.000	0.750	Spin_0	SPIN
Main	103.000	22.000	2.000	1.000	Main_0	MAIN
Jib	76.000	21.750	0.000	1.000	Jib_0	HEAD

Windage Elements

Name	Ax	Ay	Cdx	Cdy	Ht	Type
MainRigging	3.138	3.138	1.000	1.000	10.080	other
MastSail	5.230	7.580	0.400	1.000	10.080	mast w/sail
MastBare	5.230	7.580	0.800	1.100	10.080	mast bare
Hull	7.356	30.451	0.400	0.900	-0.720	hull

Sail Sets and Member Sails

Upwind	Downwind
[Up]	[Dn]
Jib	Spin
Main	Main

Opsets

Name	Flotation	SailSet	TWS-Lo	TWS-Hi	TWA-Lo	TWA-Hi	AWS-Lim	FlatMin	UpOpt
OpsCE-Mlcc-2800 keel		Upwind	4.0	35.0	0.0	140.0	99.0	1.0	*
O CE-Mlcc-2800 kee		Downwind	4.0	35.0	80.0	180.0	99.0	1.0	

Notes

2800 Mtr Keel in Mlcc condition with 1150 kg of
Crew Weight

Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30	35
32.0	2.24	3.79	5.11	6.13	6.81	7.26	7.57	7.91	8.11	8.14	8.02
36.0	2.72	4.39	5.81	6.84	7.47	7.91	8.18	8.51	8.72	8.80	8.79
40.0	3.16	4.94	6.41	7.43	8.03	8.41	8.64	8.93	9.14	9.24	9.27
45.0	3.63	5.52	7.03	8.03	8.55	8.84	9.04	9.31	9.52	9.61	9.67
52.0	4.16	6.18	7.71	8.63	9.02	9.27	9.45	9.70	9.93	10.08	10.17
60.0	4.64	6.73	8.25	9.04	9.39	9.62	9.80	10.09	10.35	10.54	10.67
70.0	5.03	7.14	8.60	9.33	9.73	9.97	10.17	10.50	10.83	11.08	11.27
75.0	5.14	7.25	8.68	9.40	9.84	10.12	10.33	10.69	11.06	11.34	11.55
80.0	5.19	7.31	8.72	9.44	9.92	10.25	10.48	10.88	11.28	11.59	11.84
90.0	5.14	7.25	8.67	9.41	9.93	10.37	10.73	11.22	11.69	12.11	12.50
110.0	4.82	7.02	8.69	9.55	10.07	10.42	10.71	11.39	12.47	13.29	14.07
120.0	4.64	6.78	8.42	9.33	9.95	10.46	10.90	11.53	12.29	13.64	14.91
135.0	3.86	5.77	7.39	8.64	9.40	10.00	10.57	11.71	13.14	14.46	15.78
150.0	2.97	4.52	5.98	7.28	8.40	9.16	9.73	10.80	12.30	14.51	17.24
165.0	2.34	3.56	4.77	5.93	7.02	8.04	8.85	9.98	11.29	12.91	15.21
180.0	2.12	3.22	4.32	5.40	6.42	7.40	8.30	9.55	10.78	12.12	13.99
Up.Vs	3.83	5.59	6.88	7.72	8.06	8.26	8.40	8.62	8.80	8.93	9.01
Up.Bt	47.6	45.7	43.7	42.3	40.2	38.7	37.7	36.9	36.7	37.0	37.7
Up.Vmg	2.58	3.91	4.97	5.71	6.15	6.45	6.64	6.89	7.06	7.13	7.13
Dn.Vs	3.76	5.46	6.78	7.88	8.47	8.92	9.05	9.82	11.13	14.42	16.95
Dn.Bt	136.5	138.7	141.7	144.2	149.3	153.3	161.0	169.6	169.0	150.6	152.3
Dn.Vmg	2.73	4.10	5.31	6.39	7.28	7.97	8.56	9.66	10.93	12.57	15.01

Best Heel Angles (deg)

	4	6	8	10	12	14	16	20	25	30	35
32.0	1.68	4.30	8.23	13.39	16.74	19.15	20.84	22.14	22.41	22.82	23.12
36.0	1.94	5.02	9.25	15.22	18.30	20.35	21.75	22.14	22.42	22.74	23.22
40.0	2.17	5.54	10.10	16.59	19.37	21.09	21.92	22.00	22.22	22.57	22.98
45.0	2.41	6.04	10.90	17.75	20.23	21.62	21.76	21.80	21.98	21.92	22.36
52.0	2.64	6.51	11.50	18.12	20.76	21.51	21.48	21.31	21.54	21.88	22.31
60.0	2.78	6.64	11.40	17.06	20.92	21.11	21.14	21.25	21.50	21.83	22.23
70.0	2.72	6.29	10.30	14.56	19.53	21.04	21.06	21.16	21.39	21.71	22.12
75.0	2.61	5.94	9.53	13.15	17.44	22.25	21.01	21.11	21.34	21.67	22.08
80.0	2.45	5.52	8.70	11.76	15.34	19.52	20.98	21.07	21.30	21.63	22.04
90.0	2.02	4.14	6.96	9.14	11.53	14.39	17.81	21.00	21.24	21.56	21.97
110.0	1.97	4.39	8.26	12.31	16.92	20.66	20.64	11.60	17.49	21.57	22.01
120.0	1.59	3.50	6.28	8.79	11.55	14.97	19.04	20.86	21.16	16.17	22.13
135.0	0.76	1.70	2.86	4.10	5.67	7.08	8.74	13.03	20.64	22.13	22.59
150.0	0.22	0.50	0.89	1.34	1.85	2.35	2.91	4.34	7.38	11.02	15.93
165.0	0.06	0.13	0.23	0.36	0.53	0.74	1.00	1.71	2.88	4.29	6.29
180.0	0.00	0.00	0.01	0.01	0.02	0.03	0.04	0.07	0.13	0.21	0.29
Up	2.70	6.10	10.72	17.20	19.41	20.89	21.97	22.12	22.39	22.70	23.12
Dn	0.72	1.40	1.93	2.35	2.09	1.87	1.41	1.19	2.17	10.62	13.64

Best Flat

	4	6	8	10	12	14	16	20	25	30	35
32.0	1.000	1.000	1.000	0.993	0.854	0.731	0.627	0.552	0.557	0.558	0.550
36.0	1.000	1.000	1.000	0.999	0.848	0.718	0.614	0.611	0.625	0.629	0.628
40.0	1.000	1.000	1.000	1.000	0.842	0.713	0.649	0.674	0.693	0.702	0.702
45.0	1.000	1.000	1.000	1.000	0.846	0.719	0.723	0.755	0.778	1.000	1.000
52.0	1.000	1.000	1.000	1.000	0.872	0.798	0.825	1.000	1.000	1.000	1.000
60.0	1.000	1.000	1.000	1.000	0.930	1.000	1.000	1.000	1.000	1.000	1.000
70.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
75.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
80.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
90.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
110.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
120.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
135.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
150.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
165.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
180.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Up	1.000	1.000	1.000	1.000	0.842	0.713	0.616	0.626	0.637	0.646	0.659
Dn	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Best Reef or Twist

	4	6	8	10	12	14	16	20	25	30	35
32.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.936	0.821	0.739	0.678
36.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.890	0.779	0.700	0.640
40.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.974	0.854	0.748	0.671
45.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.936	0.821	0.720	0.587
52.0	1.000	1.000	1.000	1.000	1.000	1.000	0.972	0.901	0.748	0.665	0.601
60.0	1.000	1.000	1.000	1.000	1.000	1.000	0.912	0.859	0.773	0.689	0.623
70.0	1.000	1.000	1.000	1.000	1.000	1.000	0.957	0.904	0.816	0.729	0.660
75.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.932	0.842	0.753	0.683
80.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.964	0.872	0.782	0.709
90.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.947	0.852	0.774
110.0	1.000	1.000	1.000	1.000	1.000	1.000	0.983	0.919	1.000	1.000	0.960
120.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.913	0.806	1.000
135.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.911
150.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
165.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
180.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Up	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.997	0.880	0.773	0.693
Dn	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Best Leeway

	4	6	8	10	12	14	16	20	25	30	35
32.0	5.66	4.79	4.68	4.87	4.64	4.50	4.42	4.49	4.82	5.33	6.02
36.0	4.43	4.00	3.99	4.27	4.07	3.93	3.86	3.98	4.28	4.65	5.14
40.0	3.68	3.46	3.52	3.83	3.64	3.54	3.53	3.68	3.95	4.29	4.68
45.0	3.10	3.00	3.10	3.40	3.29	3.23	3.28	3.43	3.68	4.19	4.53
52.0	2.58	2.55	2.66	2.95	2.98	2.97	3.03	3.29	3.48	3.72	4.00
60.0	2.18	2.18	2.28	2.55	2.74	2.82	2.85	2.95	3.11	3.30	3.52
70.0	1.82	1.84	1.92	2.12	2.40	2.50	2.52	2.59	2.69	2.82	2.98
75.0	1.68	1.69	1.76	1.93	2.16	2.44	2.38	2.42	2.50	2.61	2.75
80.0	1.54	1.55	1.61	1.76	1.94	2.15	2.23	2.26	2.32	2.41	2.52
90.0	1.31	1.31	1.34	1.44	1.56	1.69	1.83	1.96	1.99	2.02	2.06
110.0	1.18	1.19	1.27	1.44	1.62	1.77	1.75	1.18	1.29	1.32	1.26
120.0	1.02	1.02	1.05	1.14	1.24	1.35	1.47	1.48	1.43	0.97	0.95
135.0	0.71	0.70	0.70	0.71	0.75	0.80	0.85	0.93	0.97	0.85	0.73
150.0	0.36	0.35	0.35	0.35	0.35	0.36	0.39	0.46	0.51	0.46	0.36
165.0	0.16	0.15	0.15	0.15	0.15	0.16	0.17	0.22	0.28	0.29	0.24
180.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
Up	2.89	2.95	3.20	3.62	3.62	3.65	3.69	3.90	4.21	4.55	4.92
Dn	0.68	0.61	0.54	0.47	0.36	0.29	0.21	0.15	0.20	0.45	0.34

Best SailSet

	4	6	8	10	12	14	16	20	25	30	35
32.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
36.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
40.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
45.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
52.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
60.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
70.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
75.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
80.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
90.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
110.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up	Up	Up	Up
120.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up	Up
135.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
150.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
165.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
180.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn

Best Apparent Wind Speed

	4	6	8	10	12	14	16	20	25	30	35
32.0	6.0	9.4	12.6	15.5	18.0	20.4	22.6	26.7	31.8	36.6	41.4
36.0	6.4	9.9	13.1	16.0	18.4	20.7	22.9	27.0	32.0	36.9	41.6
40.0	6.7	10.3	13.5	16.3	18.7	20.9	23.0	27.0	32.0	36.8	41.6
45.0	7.0	10.6	13.8	16.5	18.8	20.9	22.9	26.9	31.8	36.6	41.3
52.0	7.3	10.9	14.1	16.6	18.6	20.6	22.6	26.5	31.3	36.0	40.7
60.0	7.5	11.0	14.0	16.3	18.2	20.1	22.0	25.8	30.5	35.1	39.8
70.0	7.4	10.8	13.5	15.7	17.4	19.2	21.0	24.7	29.2	33.8	38.3
75.0	7.3	10.5	13.2	15.2	17.0	18.6	20.4	24.0	28.5	33.0	37.5
80.0	7.1	10.2	12.8	14.8	16.5	18.2	19.8	23.3	27.8	32.2	36.6
90.0	6.5	9.4	11.8	13.6	15.4	17.1	18.6	21.8	26.1	30.4	34.8
110.0	5.1	7.5	9.5	11.0	12.3	13.5	15.0	19.0	22.7	26.4	30.6
120.0	4.4	6.4	8.2	9.6	10.9	12.2	13.4	16.3	20.2	25.0	28.2
135.0	3.0	4.5	5.9	7.2	8.5	9.8	11.2	14.0	17.2	20.8	24.5
150.0	2.1	3.1	4.1	5.2	6.3	7.6	9.0	11.9	15.5	18.7	21.3
165.0	1.8	2.7	3.6	4.5	5.5	6.6	7.8	10.7	14.4	17.8	20.7
180.0	1.9	2.8	3.7	4.6	5.6	6.6	7.7	10.4	14.2	17.9	21.0
Up	7.2	10.7	13.8	16.4	18.7	20.9	22.9	27.0	32.0	36.9	41.7
Dn	2.9	4.1	5.0	5.8	6.4	7.2	8.0	10.5	14.2	18.6	21.1

Best Apparent Wind Angle

	4	6	8	10	12	14	16	20	25	30	35
32.0	20.6	19.7	19.4	19.4	19.7	20.1	20.6	21.5	22.7	23.6	24.3
36.0	21.5	20.8	20.7	20.8	21.3	21.9	22.5	23.8	25.1	26.2	27.0
40.0	22.5	21.9	22.0	22.2	22.9	23.7	24.5	26.2	27.7	28.9	29.9
45.0	23.7	23.4	23.7	24.0	25.1	26.2	27.3	29.2	31.1	32.6	33.6
52.0	25.4	25.4	26.0	26.9	28.3	29.9	31.3	33.7	35.9	37.5	38.8
60.0	27.5	28.0	29.0	30.5	32.2	34.2	36.0	38.8	41.4	43.4	44.9
70.0	30.4	31.4	33.1	35.5	37.5	39.8	41.9	45.3	48.5	50.8	52.7
75.0	32.1	33.2	35.3	38.1	40.5	42.3	44.9	48.6	52.1	54.6	56.7
80.0	33.8	35.2	37.6	40.8	43.5	45.7	48.0	52.0	55.8	58.6	60.7
90.0	37.9	39.6	42.5	46.4	49.8	52.6	54.8	59.0	63.4	66.5	68.9
110.0	47.4	48.5	51.3	56.3	61.1	65.4	69.6	76.1	80.1	83.4	86.1
120.0	52.7	54.0	57.3	63.2	68.8	73.5	77.5	84.6	90.6	93.1	95.3
135.0	70.0	70.2	73.0	77.5	83.8	89.4	93.8	100.0	105.3	109.0	111.4
150.0	103.8	102.7	103.4	105.4	108.3	112.9	117.3	123.2	127.0	127.9	127.8
165.0	145.8	145.2	145.0	145.2	145.8	146.6	147.9	151.0	153.3	154.3	154.2
180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0
Up	24.3	23.6	23.2	23.0	23.0	23.1	23.3	24.3	25.6	26.9	28.2
Dn	72.6	76.5	84.2	92.3	106.7	119.8	139.4	160.0	160.4	129.0	131.7

Course Times

(Time in secs for 1 nm course, otherwise decimal hours)

	<u>LR</u> 1.00	<u>WL</u> 1.00	<u>OLYMPIC</u> 1.00	<u>CR</u> 1.00
4.0	933.84	1356.92	1260.30	994.44
6.0	635.97	899.74	835.79	669.95
8.0	509.30	700.65	653.55	531.24
10.0	450.20	596.62	562.07	464.58
12.0	418.39	539.68	515.43	429.42
14.0	398.10	505.13	486.93	407.77
16.0	383.03	481.27	466.95	392.32
20.0	359.82	447.53	438.61	369.67
25.0	336.08	419.73	415.04	348.39
30.0	313.81	395.73	397.73	330.47
35.0	291.76	372.27	383.54	315.07

Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30	35
32.0	1607.4	951.1	705.2	587.6	528.8	495.9	475.8	455.1	444.1	442.5	449.1
36.0	1323.9	819.4	619.7	526.3	481.6	455.2	439.8	423.1	412.9	409.0	409.6
40.0	1140.4	728.1	561.5	484.8	448.1	428.3	416.9	403.2	394.1	389.7	388.4
45.0	992.8	651.8	512.3	448.0	421.2	407.1	398.3	386.7	378.2	374.5	372.2
52.0	864.9	582.3	466.7	417.4	399.0	388.5	381.1	371.0	362.5	357.1	353.9
60.0	775.6	535.1	436.2	398.4	383.2	374.4	367.4	357.0	347.9	341.6	337.3
70.0	716.1	504.3	418.6	386.0	370.0	361.1	354.1	343.0	332.5	324.8	319.3
75.0	701.0	496.5	414.6	382.9	365.7	355.9	348.6	336.8	325.6	317.5	311.6
80.0	693.2	492.7	412.8	381.4	363.1	351.2	343.5	331.0	319.2	310.7	304.0
90.0	699.9	496.9	415.2	382.5	362.4	347.2	335.4	320.8	308.0	297.3	288.0
110.0	746.8	512.7	414.3	377.1	357.6	345.6	336.2	316.1	288.8	270.9	255.9
120.0	775.5	531.1	427.3	385.8	361.9	344.1	330.3	312.1	292.8	263.9	241.5
135.0	933.5	624.1	487.5	416.8	382.9	360.0	340.5	307.3	274.0	248.9	228.1
150.0	1210.3	796.5	602.2	494.4	428.4	393.0	370.0	333.5	292.8	248.1	208.8
165.0	1537.4	1010.7	754.6	607.0	512.8	447.9	406.9	360.7	318.9	278.9	236.7
180.0	1699.0	1117.4	833.5	667.2	560.4	486.8	433.9	376.8	333.9	297.0	257.3
Up	1394.7	921.5	723.9	630.2	584.9	558.5	542.0	522.5	510.1	505.0	504.7
Dn	1319.1	878.0	677.4	563.1	494.4	451.8	420.5	372.5	329.4	286.5	239.9

Deltas against Trialhorse (s/nm)	Trialhorse: DEHLER 60-CR										
	4	6	8	10	12	14	16	20	25	30	35
32.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Up	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0