

## New M.A.T. 1245 VPP Notes

A was the original, B is the light deep combination, and C is the shallow heavy configuration. Performance deltas just looks at the differences on 4 different course types boat for boat, and Rating Deltas looks at the results for a WL course after the rating differences are included.

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 DELTAS (Valid only after Fleet Run)

**WL- Course Deltas for range of true wind speeds**

Yacht	TWS (kt)											
	4	5	6	7	8	9	10	12	14	16	20	25
MAT12 CHvSh	4.04	2.46	1.67	1.68	2.05	2.44	2.45	2.57	2.64	2.53	2.54	3.83
MAT12 BLtDp	9.36	5.75	3.61	2.95	2.11	1.65	1.38	1.22	1.18	1.22	1.68	4.08
MAT12 Abase*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OLYMPIC- Course Deltas for range of true wind speeds**

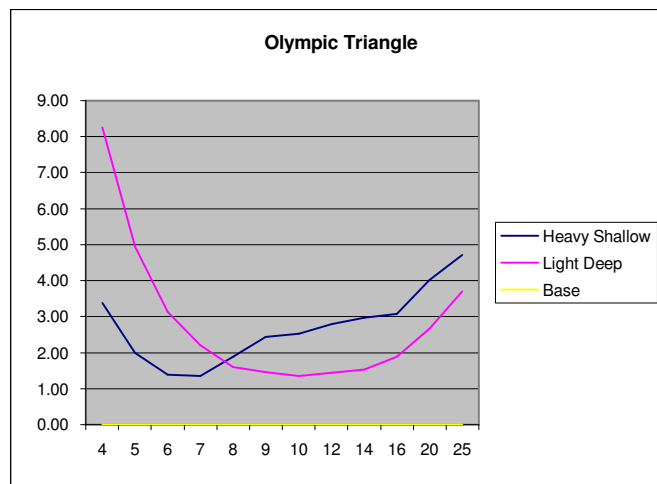
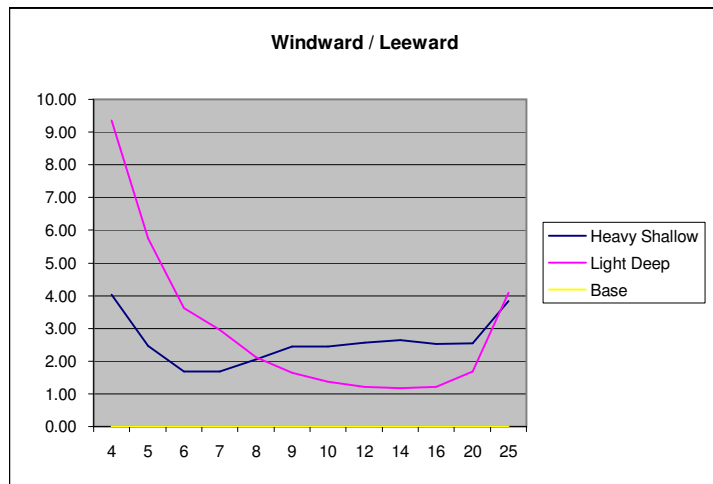
Yacht	TWS (kt)											
	4	5	6	7	8	9	10	12	14	16	20	25
MAT12 CHvSh	3.39	2.00	1.38	1.35	1.88	2.43	2.53	2.79	2.97	3.08	4.02	4.72
MAT12 BLtDp	8.26	4.95	3.14	2.21	1.60	1.45	1.35	1.45	1.54	1.89	2.67	3.69
MAT12 Abase*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**CR- Course Deltas for range of true wind speeds**

Yacht	TWS (kt)											
	4	5	6	7	8	9	10	12	14	16	20	25
MAT12 CHvSh	3.16	1.88	1.16	1.06	1.38	1.83	1.94	2.32	2.50	2.74	3.51	4.52
MAT12 BLtDp	6.69	4.12	2.33	1.67	1.36	1.33	1.34	1.57	1.80	2.13	3.12	4.48
MAT12 Abase*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**LR- Course Deltas for range of true wind speeds**

Yacht	TWS (kt)											
	4	5	6	7	8	9	10	12	14	16	20	25
MAT12 CHvSh	3.10	1.81	1.06	0.94	1.26	1.71	1.81	2.21	2.36	2.64	3.61	4.79
MAT12 BLtDp	6.22	3.86	2.05	1.42	1.26	1.32	1.36	1.66	1.91	2.33	3.60	5.52
MAT12 Abase*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



**MAT12 BLtDp**

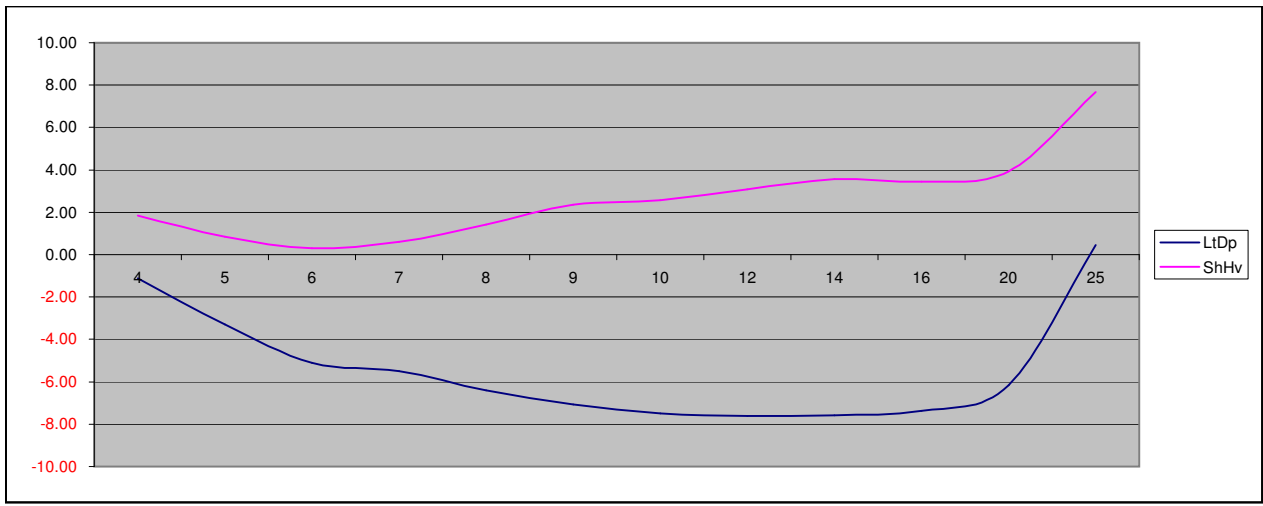
Deltas against Trialhorse (s/nm) Trialhorse: MAT12 Abase

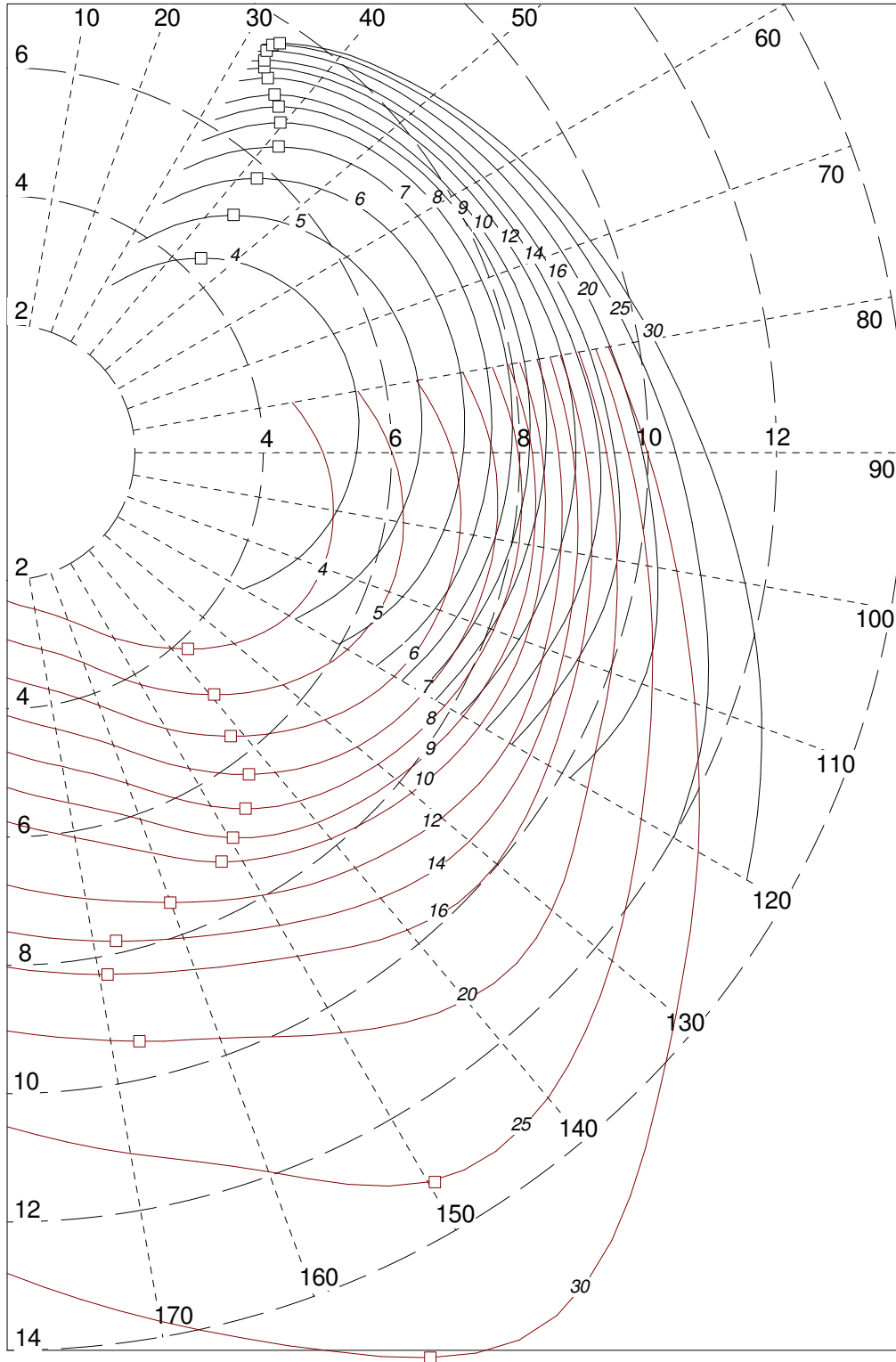
	4	5	6	7	8	9	10	12	14	16	20	25
32	4.50	4.70	1.20	0.30	-0.10	0.60	1.20	1.60	1.60	1.40	1.30	1.30
36	5.30	3.00	1.60	0.70	1.00	1.30	1.40	1.40	1.40	1.40	1.40	1.50
40	5.40	3.70	1.60	1.30	1.30	1.30	1.30	1.50	1.50	1.50	1.60	1.70
45	5.00	3.00	1.90	1.20	1.10	1.20	1.40	1.50	1.60	1.60	1.80	1.90
52	4.80	2.80	1.90	0.80	1.00	1.40	1.50	1.60	1.70	1.80	2.10	2.40
60	4.50	3.10	1.30	0.60	0.90	1.40	1.70	1.80	2.00	2.20	2.60	2.90
70	4.40	3.10	1.00	0.60	0.80	1.10	1.60	1.10	2.40	2.70	2.90	3.30
80	4.70	3.10	1.00	0.70	0.70	0.90	1.30	2.30	2.70	2.80	3.30	4.60
90	5.30	3.40	1.20	0.70	1.20	1.70	1.10	2.00	2.60	2.60	4.30	5.40
100	6.40	2.20	0.80	0.70	1.20	1.80	2.00	2.40	2.00	3.10	5.00	6.70
110	3.20	2.50	0.90	0.70	0.90	1.30	1.90	2.50	2.70	3.00	5.10	7.50
120	4.40	3.20	1.40	0.80	0.70	0.90	1.30	2.20	2.70	3.40	4.80	7.10
135	7.70	4.90	3.70	1.60	0.80	0.70	0.80	1.30	1.70	3.20	5.60	6.00
150	9.30	6.50	4.60	3.30	2.70	1.30	0.80	0.70	1.10	1.50	3.50	5.30
160	9.40	7.00	5.20	4.00	3.00	2.60	1.80	0.60	0.70	1.10	2.40	4.10
170	8.40	6.30	4.90	3.80	3.00	2.40	2.10	0.80	0.60	0.70	1.50	3.80
180	8.90	6.50	5.10	4.00	3.20	2.60	2.10	1.30	0.60	0.60	1.30	3.10
Up	7.50	4.20	2.30	1.90	1.70	1.80	1.70	1.70	1.70	1.60	1.60	1.70
Dn	11.20	7.30	4.90	4.00	2.60	1.50	1.00	0.70	0.60	0.80	1.70	6.50
Avg	9.35	5.75	3.60	2.95	2.15	1.65	1.35	1.20	1.15	1.20	1.65	4.10
Kn Avg	3.04	3.74	4.35	4.89	5.34	5.68	5.96	6.37	6.71	6.98	7.45	8.15
SPH	28.47	21.48	15.64	14.42	11.48	9.38	8.04	7.65	7.72	8.38	12.29	33.43
Equivalent	8.90	6.71	4.89	4.51	3.59	2.93	2.51	2.39	2.41	2.62	3.84	10.45
Estimated	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Delta	-1.10	-3.29	-5.11	-5.49	-6.41	-7.07	-7.49	-7.61	-7.59	-7.38	-6.16	0.45

**MAT12 CShHv**

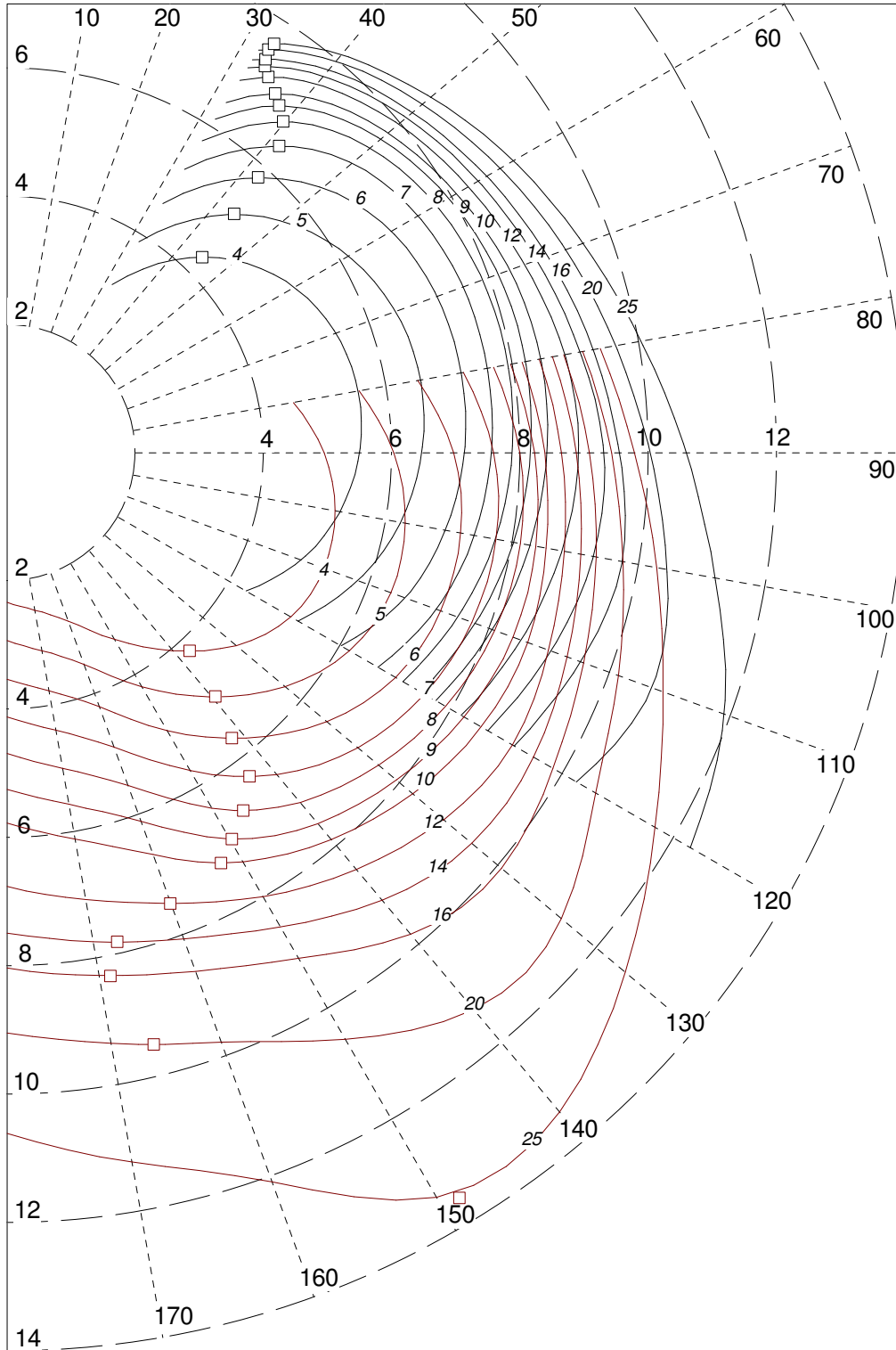
Deltas against Trialhorse (s/nm) Trialhorse: MAT12 Abase

	4	5	6	7	8	9	10	12	14	16	20	25
32	-0.90	1.10	-1.30	-0.90	0.10	1.90	3.10	4.20	4.50	4.20	4.00	4.10
36	0.60	-0.40	-0.30	0.10	1.40	2.90	3.40	3.70	3.70	3.50	3.50	3.60
40	1.40	0.30	0.20	0.70	2.00	3.00	3.10	3.40	3.30	3.20	3.20	3.40
45	1.80	0.70	0.60	1.00	2.00	2.70	2.90	3.10	3.10	3.10	3.20	3.30
52	2.00	1.00	0.90	0.80	1.60	2.60	2.80	2.90	2.90	3.00	3.20	3.60
60	2.20	1.20	0.70	0.60	1.10	2.00	3.00	2.90	3.00	3.20	3.50	3.90
70	2.30	1.40	0.60	0.50	0.60	1.10	2.00	2.40	3.20	3.40	3.70	4.10
80	2.60	1.40	0.60	0.40	0.40	0.60	0.90	2.60	3.40	3.50	3.90	5.20
90	3.10	2.00	0.60	0.80	1.70	2.60	0.50	1.20	2.50	3.50	4.80	5.90
100	3.80	1.30	0.60	0.60	1.20	2.40	2.80	3.10	1.00	2.10	5.30	7.00
110	1.90	1.20	0.60	0.50	0.70	1.20	2.10	3.10	3.20	3.40	3.30	7.60
120	2.60	1.80	0.80	0.50	0.40	0.50	0.70	2.00	3.00	3.70	4.90	4.70
135	4.50	2.90	2.10	1.20	0.60	0.40	0.30	0.50	0.70	1.50	5.30	5.90
150	5.30	3.80	2.80	2.10	1.70	1.00	0.60	0.40	0.40	0.50	1.00	2.10
160	5.30	4.00	3.10	2.40	1.90	1.60	1.10	0.50	0.40	0.40	0.70	1.20
170	4.70	3.60	2.80	2.20	1.80	1.50	1.30	0.70	0.40	0.40	0.50	1.00
180	4.90	3.70	2.90	2.40	1.90	1.60	1.30	0.90	0.50	0.40	0.50	0.90
Up	2.00	0.90	0.60	1.20	2.60	3.90	4.20	4.60	4.90	4.70	4.60	4.70
Dn	6.10	4.00	2.80	2.20	1.50	1.00	0.70	0.50	0.40	0.30	0.50	2.90
Avg	4.05	2.45	1.70	1.70	2.05	2.45	2.45	2.55	2.65	2.50	2.55	3.80
Kn Avg	3.04	3.74	4.35	4.89	5.34	5.68	5.96	6.37	6.71	6.98	7.45	8.15
SPH	12.33	9.15	7.39	8.31	10.95	13.92	14.59	16.25	17.79	17.46	18.99	30.99
Equivalent	3.85	2.86	2.31	2.60	3.42	4.35	4.56	5.08	5.56	5.46	5.93	9.68
Estimated	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Delta	1.85	0.86	0.31	0.60	1.42	2.35	2.56	3.08	3.56	3.46	3.93	7.68



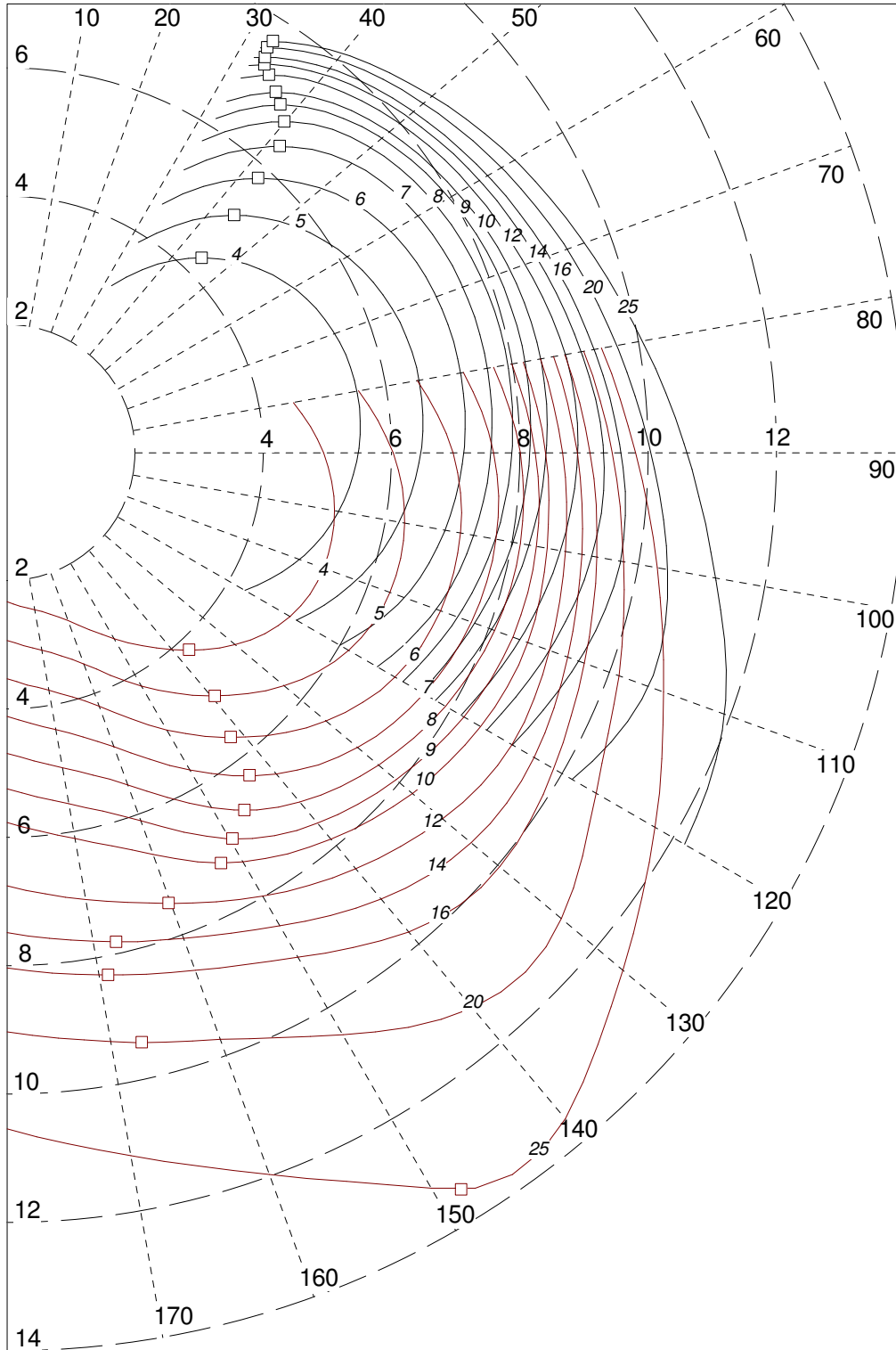


Best Boatspeeds (kt)	4	5	6	7	8	9	10	12	14	16	20	25	30
32.0	3.08	3.86	4.58	5.21	5.73	6.12	6.43	6.83	7.06	7.20	7.38	7.49	7.51
36.0	3.50	4.36	5.11	5.76	6.28	6.64	6.90	7.21	7.39	7.52	7.70	7.81	7.86
40.0	3.88	4.78	5.56	6.21	6.72	7.02	7.22	7.48	7.64	7.77	7.94	8.07	8.13
45.0	4.29	5.23	6.02	6.68	7.11	7.35	7.51	7.73	7.89	8.01	8.19	8.33	8.41
52.0	4.75	5.71	6.53	7.11	7.46	7.66	7.80	8.01	8.16	8.30	8.50	8.67	8.79
60.0	5.13	6.11	6.90	7.38	7.71	7.92	8.05	8.27	8.44	8.58	8.82	9.04	9.20
70.0	5.42	6.41	7.12	7.55	7.87	8.12	8.31	8.54	8.74	8.91	9.20	9.47	9.68
80.0	5.52	6.51	7.17	7.59	7.92	8.19	8.42	8.78	9.01	9.21	9.55	9.91	10.23
90.0	5.45	6.43	7.11	7.57	7.97	8.19	8.40	8.87	9.24	9.47	9.90	10.42	10.89
100.0	5.22	6.28	7.17	7.73	8.10	8.33	8.49	8.77	9.23	9.65	10.30	10.98	11.68
110.0	5.24	6.34	7.18	7.70	8.07	8.37	8.59	8.92	9.22	9.49	10.54	11.61	12.52
120.0	5.08	6.13	6.97	7.50	7.88	8.21	8.51	9.04	9.41	9.74	10.45	12.00	13.31
135.0	4.31	5.29	6.14	6.85	7.34	7.73	8.06	8.66	9.29	9.93	11.24	12.75	14.32
150.0	3.33	4.18	4.96	5.69	6.36	6.93	7.35	7.97	8.50	9.06	10.44	13.13	15.97
160.0	2.77	3.48	4.19	4.85	5.49	6.08	6.64	7.46	8.05	8.57	9.71	11.92	14.91
170.0	2.47	3.11	3.75	4.37	4.97	5.54	6.09	7.05	7.72	8.25	9.30	11.09	13.74
180.0	2.31	2.91	3.51	4.10	4.67	5.22	5.75	6.74	7.47	8.02	9.01	10.50	12.79
Up.Vs	4.28	5.12	5.79	6.38	6.68	6.86	6.97	7.12	7.22	7.32	7.46	7.59	7.67
Up.Bt	44.9	43.7	42.3	41.6	39.7	38.2	36.8	34.8	33.8	33.3	32.9	33.1	33.7
Up.Vmg	3.03	3.70	4.28	4.77	5.15	5.39	5.58	5.84	6.00	6.12	6.27	6.36	6.38
Dn.Vs	4.16	4.97	5.63	6.28	6.68	6.96	7.21	7.46	7.80	8.29	9.41	13.18	15.58
Dn.Bt	137.3	139.4	141.7	143.0	146.2	149.5	152.3	160.0	167.4	169.1	167.3	149.6	154.9
Dn.Vmg	3.06	3.77	4.42	5.01	5.55	6.00	6.38	7.01	7.61	8.13	9.18	11.37	14.11



Best Boatspeeds (kt)

	4	5	6	7	8	9	10	12	14	16	20	25
32.0	3.09	3.88	4.59	5.21	5.73	6.13	6.44	6.85	7.08	7.22	7.40	7.51
36.0	3.52	4.38	5.13	5.76	6.29	6.65	6.92	7.23	7.41	7.54	7.72	7.84
40.0	3.91	4.80	5.57	6.23	6.73	7.04	7.24	7.50	7.66	7.79	7.97	8.10
45.0	4.32	5.25	6.04	6.69	7.12	7.37	7.53	7.76	7.92	8.04	8.23	8.37
50.0	4.66	5.61	6.42	7.02	7.39	7.60	7.75	7.96	8.13	8.25	8.45	8.63
60.0	5.17	6.14	6.91	7.39	7.72	7.95	8.09	8.30	8.48	8.63	8.88	9.11
70.0	5.45	6.44	7.13	7.56	7.89	8.15	8.34	8.59	8.79	8.97	9.27	9.55
80.0	5.56	6.54	7.19	7.60	7.93	8.21	8.45	8.83	9.07	9.28	9.63	10.04
90.0	5.49	6.47	7.13	7.58	7.99	8.22	8.42	8.91	9.30	9.55	10.02	10.59
100.0	5.27	6.30	7.18	7.74	8.12	8.37	8.53	8.82	9.28	9.73	10.44	11.21
110.0	5.26	6.37	7.19	7.71	8.09	8.39	8.63	8.98	9.29	9.57	10.70	11.90
120.0	5.11	6.16	6.99	7.51	7.89	8.23	8.54	9.09	9.48	9.83	10.59	12.29
135.0	4.36	5.32	6.17	6.87	7.35	7.74	8.07	8.69	9.33	10.01	11.44	13.03
150.0	3.36	4.21	5.00	5.72	6.39	6.95	7.36	7.98	8.52	9.09	10.55	13.39
160.0	2.79	3.51	4.21	4.88	5.51	6.11	6.66	7.47	8.06	8.60	9.77	12.09
170.0	2.49	3.13	3.76	4.39	4.99	5.56	6.11	7.07	7.73	8.27	9.34	11.22
180.0	2.33	2.93	3.52	4.11	4.69	5.24	5.77	6.75	7.48	8.03	9.04	10.60
Up.Vs	4.31	5.14	5.81	6.39	6.72	6.88	6.99	7.14	7.24	7.34	7.49	7.62
Up.Bt	45.0	43.7	42.4	41.6	39.8	38.1	36.7	34.8	33.7	33.3	33.0	33.2
Up.Vmg	3.05	3.72	4.29	4.78	5.16	5.41	5.60	5.86	6.02	6.13	6.28	6.38
Dn.Vs	4.20	5.00	5.66	6.30	6.68	6.97	7.21	7.47	7.81	8.31	9.50	13.58
Dn.Bt	137.3	139.4	141.7	143.1	146.5	149.8	152.4	160.1	167.3	168.8	166.1	148.7
Dn.Vmg	3.09	3.80	4.44	5.04	5.57	6.02	6.39	7.02	7.62	8.15	9.22	11.61





Best Boatspeeds (kt)	4	5	6	7	8	9	10	12	14	16	20	25
32.0	3.08	3.87	4.57	5.21	5.73	6.14	6.46	6.89	7.12	7.26	7.44	7.55
36.0	3.50	4.36	5.11	5.76	6.29	6.67	6.94	7.27	7.45	7.58	7.75	7.88
40.0	3.89	4.78	5.56	6.22	6.74	7.06	7.27	7.53	7.69	7.82	8.00	8.13
45.0	4.30	5.23	6.03	6.69	7.14	7.39	7.56	7.78	7.94	8.07	8.25	8.39
50.0	4.64	5.60	6.41	7.02	7.40	7.63	7.78	7.99	8.15	8.27	8.48	8.65
60.0	5.15	6.12	6.91	7.39	7.73	7.96	8.11	8.32	8.50	8.65	8.90	9.13
70.0	5.44	6.42	7.12	7.56	7.89	8.14	8.35	8.59	8.81	8.99	9.29	9.57
80.0	5.54	6.52	7.18	7.60	7.92	8.20	8.44	8.83	9.09	9.29	9.65	10.05
90.0	5.48	6.45	7.12	7.58	8.00	8.24	8.41	8.89	9.30	9.57	10.04	10.60
100.0	5.25	6.29	7.18	7.74	8.13	8.38	8.55	8.84	9.25	9.71	10.45	11.22
110.0	5.25	6.35	7.19	7.71	8.09	8.39	8.64	8.99	9.30	9.58	10.64	11.90
120.0	5.10	6.15	6.99	7.51	7.89	8.22	8.53	9.09	9.49	9.84	10.60	12.19
135.0	4.34	5.31	6.16	6.87	7.35	7.74	8.07	8.67	9.30	9.97	11.43	13.03
150.0	3.35	4.19	4.98	5.71	6.38	6.94	7.35	7.98	8.51	9.07	10.47	13.23
160.0	2.78	3.50	4.20	4.87	5.50	6.10	6.66	7.47	8.05	8.58	9.73	11.97
170.0	2.48	3.12	3.76	4.38	4.98	5.55	6.10	7.06	7.73	8.26	9.31	11.12
180.0	2.32	2.92	3.52	4.11	4.68	5.23	5.76	6.75	7.48	8.02	9.02	10.53
Up.Vs	4.29	5.13	5.80	6.39	6.74	6.90	7.01	7.16	7.26	7.36	7.51	7.64
Up.Bt	45.0	43.7	42.4	41.7	39.9	38.2	36.8	34.8	33.6	33.1	32.7	32.9
Up.Vmg	3.04	3.70	4.28	4.78	5.16	5.43	5.62	5.89	6.05	6.17	6.32	6.41
Dn.Vs	4.18	4.99	5.64	6.29	6.69	6.97	7.21	7.46	7.81	8.29	9.42	13.49
Dn.Bt	137.3	139.4	141.7	143.1	146.3	149.7	152.4	160.2	167.4	169.0	167.1	148.3
Dn.Vmg	3.07	3.79	4.43	5.03	5.56	6.01	6.39	7.02	7.62	8.14	9.19	11.47