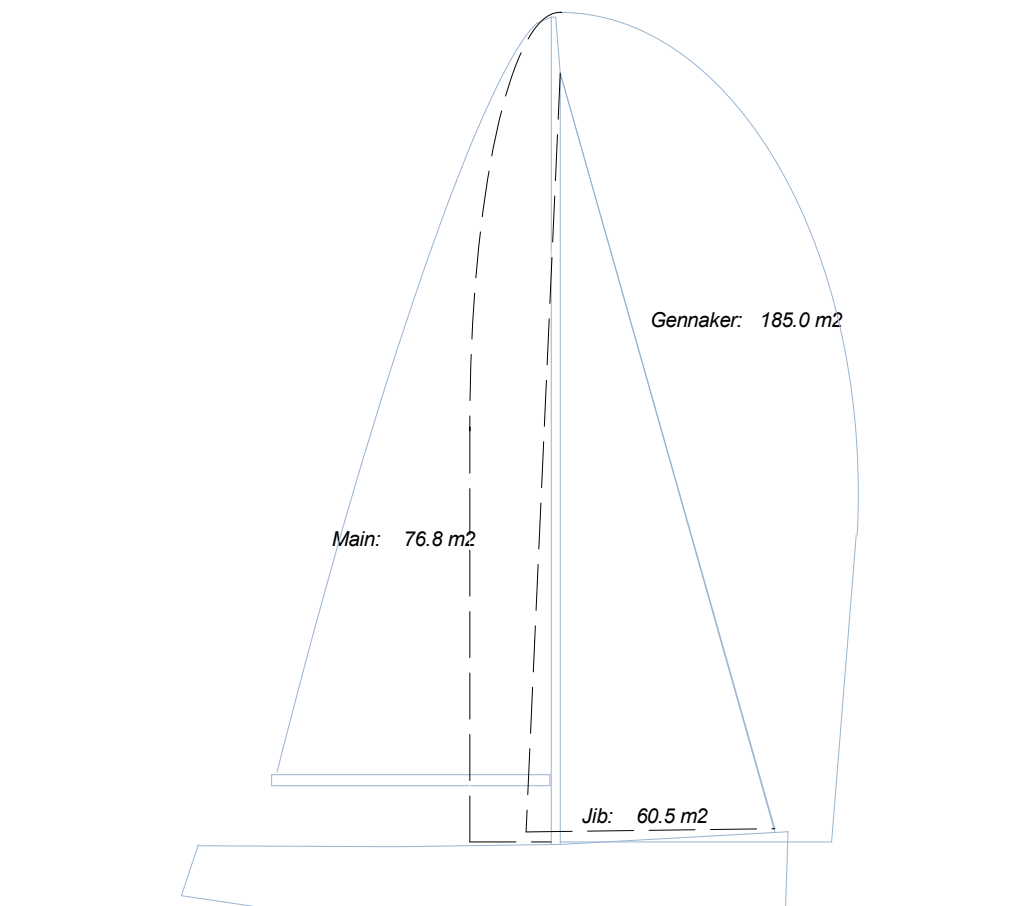


Rig and Sail Plan Cartoon



## Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25
36.0	3.23	4.86	6.13	6.87	7.28	7.51	7.67	7.85	7.93
40.0	3.65	5.39	6.69	7.39	7.74	7.94	8.08	8.27	8.37
52.0	4.62	6.52	7.80	8.28	8.52	8.69	8.83	9.04	9.20
60.0	5.05	7.01	8.15	8.62	8.85	9.03	9.19	9.42	9.63
70.0	5.38	7.35	8.37	8.91	9.18	9.39	9.56	9.86	10.14
80.0	5.52	7.46	8.43	9.04	9.45	9.70	9.91	10.27	10.61
90.0	5.48	7.60	8.65	9.04	9.52	9.95	10.22	10.65	11.13
100.0	5.58	7.70	8.75	9.19	9.50	9.90	10.37	11.02	11.67
110.0	5.53	7.63	8.67	9.28	9.65	9.95	10.23	11.20	12.24
120.0	5.26	7.30	8.38	9.05	9.64	10.12	10.45	11.12	12.52
130.0	4.68	6.60	7.89	8.64	9.24	9.84	10.42	11.54	12.69
135.0	4.28	6.15	7.57	8.37	8.98	9.55	10.13	11.44	13.02
140.0	3.87	5.68	7.15	8.08	8.68	9.23	9.78	10.99	13.13
150.0	3.08	4.65	6.03	7.22	8.04	8.61	9.12	10.16	11.99
160.0	2.56	3.87	5.14	6.29	7.34	8.10	8.66	9.66	11.09
170.0	2.30	3.49	4.66	5.76	6.78	7.66	8.30	9.28	10.53
180.0	2.18	3.30	4.41	5.47	6.46	7.37	8.06	9.06	10.23
Up.Vs	4.22	5.84	7.00	7.40	7.58	7.71	7.82	7.99	8.13
Up.Bt	46.4	44.1	42.6	40.1	38.5	37.7	37.4	37.3	37.7
Up.Vmg	2.91	4.20	5.16	5.66	5.93	6.10	6.21	6.36	6.43
Dn.Vs	4.43	5.93	7.08	7.64	7.87	8.01	8.41	9.33	11.06
Dn.Bt	133.3	137.4	140.7	145.8	152.4	161.8	166.7	168.7	160.5
Dn.Vmg	3.03	4.36	5.48	6.32	6.97	7.61	8.19	9.15	10.43

## Best Heel Angles (deg)

	4	6	8	10	12	14	16	20	25
36.0	2.36	5.97	11.24	16.84	19.18	20.55	20.69	20.97	21.48
40.0	2.60	6.54	12.34	17.85	19.80	20.40	20.49	20.74	21.17
52.0	3.07	7.49	13.74	19.07	19.86	19.90	19.79	20.04	20.45
60.0	3.16	7.51	12.89	19.21	19.53	19.61	19.71	19.92	20.27
70.0	3.03	6.92	10.99	16.61	19.46	19.50	19.55	19.69	20.02
80.0	2.70	5.92	16.05	12.50	17.69	19.32	19.33	19.53	19.90
90.0	2.23	8.02	16.19	19.00	12.33	16.63	19.20	19.42	19.64
100.0	3.06	7.54	13.94	18.96	18.98	10.87	13.91	19.24	19.56
110.0	2.70	6.38	10.44	15.40	18.96	18.93	19.00	13.60	19.49
120.0	2.10	4.33	7.04	9.55	12.93	17.59	19.05	19.15	13.71
130.0	1.30	2.64	3.98	5.72	7.26	9.14	11.48	18.55	19.62
135.0	0.91	1.90	2.99	3.89	5.26	6.50	8.04	12.51	19.73
140.0	0.60	1.29	2.08	2.77	3.42	4.20	5.68	8.70	15.00
150.0	0.20	0.46	0.78	1.17	1.60	2.06	2.58	3.83	6.53
160.0	0.07	0.15	0.27	0.42	0.60	0.81	1.06	1.65	2.59
170.0	0.02	0.04	0.08	0.12	0.18	0.25	0.33	0.55	0.90
180.0	0.00	0.01	0.01	0.02	0.03	0.04	0.05	0.10	0.18
Up	3.16	7.00	12.92	17.88	19.62	20.51	20.64	20.91	21.37
Dn	1.09	1.69	2.09	1.82	1.38	0.72	0.54	0.70	2.68

## Best Flat

	4	6	8	10	12	14	16	20	25
36.0	1.000	1.000	1.000	0.898	0.733	0.625	0.636	0.649	0.656
40.0	1.000	1.000	1.000	0.884	0.722	0.680	0.694	0.714	0.725
52.0	1.000	1.000	1.000	0.905	0.820	0.849	1.000	1.000	1.000
60.0	1.000	1.000	1.000	0.963	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
80.0	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
100.0	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
120.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
130.0	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
140.0	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
160.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
170.0	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
Up	1.000	1.000	1.000	0.884	0.725	0.648	0.656	0.669	0.685
Dn	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
36.0	1.000	1.000	1.000	1.000	1.000	0.989	0.914	0.801	0.703
40.0	1.000	1.000	1.000	1.000	1.000	0.950	0.878	0.770	0.675
52.0	1.000	1.000	1.000	1.000	0.963	0.883	0.775	0.690	0.609
60.0	1.000	1.000	1.000	1.000	0.914	0.852	0.800	0.714	0.630
70.0	1.000	1.000	1.000	1.000	0.958	0.896	0.842	0.753	0.666
80.0	1.000	1.000	1.000	1.000	1.000	0.954	0.898	0.806	0.715
90.0	1.000	1.000	1.000	0.909	1.000	1.000	0.973	0.876	0.776
100.0	1.000	1.000	1.000	0.960	0.884	1.000	1.000	0.966	0.857
110.0	1.000	1.000	1.000	1.000	0.970	0.903	0.846	1.000	0.959
120.0	1.000	1.000	1.000	1.000	1.000	1.000	0.958	0.858	1.000
130.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.891
135.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.974
140.0	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
160.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
170.0	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
Up	1.000	1.000	1.000	1.000	1.000	0.971	0.901	0.791	0.690
Dn	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
36.0	4.54	4.46	4.68	4.80	4.61	4.56	4.68	5.01	5.57
40.0	3.93	3.92	4.16	4.24	4.11	4.15	4.27	4.57	5.03
52.0	2.89	2.96	3.20	3.43	3.42	3.51	3.74	3.94	4.26
60.0	2.48	2.54	2.78	3.14	3.22	3.27	3.34	3.50	3.75
70.0	2.09	2.14	2.35	2.67	2.85	2.88	2.92	3.02	3.19
80.0	1.78	1.81	2.46	2.18	2.45	2.53	2.55	2.60	2.71
90.0	1.50	1.88	2.30	2.47	1.94	2.11	2.21	2.23	2.25
100.0	1.60	1.71	2.04	2.26	2.25	1.64	1.74	1.88	1.83
110.0	1.43	1.50	1.69	1.88	1.99	1.97	1.96	1.43	1.46
120.0	1.23	1.24	1.32	1.43	1.54	1.65	1.67	1.58	1.08
130.0	0.97	0.96	0.97	1.02	1.09	1.14	1.18	1.23	1.10
135.0	0.82	0.81	0.80	0.83	0.88	0.92	0.97	1.00	0.94
140.0	0.67	0.65	0.64	0.65	0.69	0.73	0.78	0.85	0.77
150.0	0.37	0.37	0.36	0.37	0.40	0.44	0.49	0.56	0.55
160.0	0.20	0.19	0.19	0.19	0.20	0.21	0.24	0.29	0.32
170.0	0.08	0.07	0.07	0.07	0.08	0.08	0.09	0.12	0.14
180.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Up	3.28	3.51	3.89	4.23	4.27	4.37	4.52	4.86	5.33
Dn	0.87	0.73	0.62	0.47	0.34	0.18	0.13	0.13	0.31

## Best SailSet

	4	6	8	10	12	14	16	20	25
36.0	Up	Up	Up	Up	Up	Up	Up	Up	Up
40.0	Up	Up	Up	Up	Up	Up	Up	Up	Up
52.0	Up	Up	Up	Up	Up	Up	Up	Up	Up
60.0	Up	Up	Up	Up	Up	Up	Up	Up	Up
70.0	Up	Up	Up	Up	Up	Up	Up	Up	Up
80.0	Up	Up	Dn	Up	Up	Up	Up	Up	Up
90.0	Up	Dn	Dn	Dn	Up	Up	Up	Up	Up
100.0	Dn	Dn	Dn	Dn	Dn	Up	Up	Up	Up
110.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up	Up
120.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up
130.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
135.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
140.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
150.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
160.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
170.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
180.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn



## Best Apparent Wind Speed

	4	6	8	10	12	14	16	20	25
36.0	6.9	10.3	13.4	15.9	18.2	20.3	22.3	26.3	31.1
40.0	7.2	10.7	13.8	16.2	18.4	20.4	22.4	26.3	31.2
52.0	7.7	11.2	14.1	16.2	18.2	20.1	22.0	25.9	30.6
60.0	7.9	11.3	13.9	15.8	17.7	19.6	21.5	25.2	29.9
70.0	7.7	10.9	13.3	15.2	17.0	18.8	20.6	24.2	28.8
80.0	7.4	10.3	12.4	14.4	16.1	17.7	19.5	23.0	27.4
90.0	6.8	9.6	11.6	13.0	15.1	16.7	18.2	21.6	25.9
100.0	6.3	8.9	10.6	11.9	13.4	15.4	17.0	20.0	24.2
110.0	5.6	7.9	9.5	10.8	12.0	13.4	14.9	18.7	22.3
120.0	4.8	6.7	8.1	9.4	10.7	11.9	13.3	16.3	21.0
130.0	3.7	5.4	6.7	7.9	9.2	10.6	12.0	14.5	18.2
135.0	3.2	4.7	6.0	7.2	8.5	9.8	11.3	14.0	17.2
140.0	2.7	4.0	5.2	6.4	7.7	9.1	10.5	13.4	16.6
150.0	2.0	3.0	4.1	5.2	6.4	7.8	9.3	12.3	15.7
160.0	1.8	2.7	3.6	4.6	5.7	7.0	8.4	11.4	15.1
170.0	1.8	2.6	3.5	4.4	5.4	6.6	8.0	11.0	14.7
180.0	1.8	2.7	3.6	4.5	5.5	6.6	7.9	10.9	14.8
Up	7.5	11.0	13.9	16.2	18.3	20.3	22.4	26.3	31.2
Dn	3.4	4.3	5.1	5.6	6.2	6.9	8.0	11.0	15.0

## Best Apparent Wind Angle

	4	6	8	10	12	14	16	20	25
36.0	20.0	19.8	20.1	20.6	21.4	22.2	23.1	24.5	25.9
40.0	21.0	21.0	21.4	22.1	23.1	24.3	25.3	27.0	28.5
52.0	24.0	24.6	25.7	27.2	29.1	30.8	32.3	34.7	36.8
60.0	26.2	27.2	29.0	30.9	33.3	35.4	37.1	39.9	42.5
70.0	29.1	30.7	33.6	36.0	38.6	41.1	43.2	46.6	49.6
80.0	32.4	34.6	37.5	41.7	44.2	46.9	49.4	53.4	57.0
90.0	36.1	38.0	41.5	46.1	50.8	53.3	55.8	60.4	64.6
100.0	38.9	41.3	46.0	51.1	56.2	61.1	63.5	67.8	72.3
110.0	42.1	45.1	51.2	57.0	62.3	67.3	71.3	76.5	80.4
120.0	46.8	50.3	57.5	64.5	70.1	74.7	79.1	85.8	89.9
130.0	55.4	59.2	65.9	73.8	80.4	85.4	89.2	94.9	100.4
135.0	62.8	65.8	71.3	79.6	86.6	92.0	96.0	101.0	105.4
140.0	72.6	74.4	78.8	86.3	93.8	99.5	103.6	108.8	111.1
150.0	100.9	100.4	102.7	106.1	111.4	116.6	120.6	125.6	127.9
160.0	131.3	130.7	131.0	132.2	133.8	136.6	139.4	143.2	145.4
170.0	157.0	156.7	156.6	157.0	157.5	158.4	159.6	161.6	162.9
180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0
Up	22.5	22.2	22.2	22.1	22.5	23.1	23.8	25.3	27.0
Dn	60.0	69.6	80.0	96.5	116.5	140.5	152.9	159.2	146.3

## Raw Added Resistance in Waves (kg)

	4	6	8	10	12	14	16	20	25
36.0	2.5	5.0	8.9	13.8	18.7	22.8	26.4	33.1	41.4
40.0	2.4	4.7	8.4	13.1	17.7	21.6	25.0	31.4	39.2
52.0	1.9	3.8	6.8	10.5	14.2	17.4	20.1	25.2	31.5
60.0	1.6	3.1	5.5	8.5	11.5	14.1	16.3	20.5	25.6
70.0	1.1	2.1	3.8	5.8	7.9	9.7	11.2	14.0	17.5
80.0	0.5	1.1	1.9	3.0	4.0	4.9	5.7	7.1	8.9
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.0	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
120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130.0	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
140.0	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
160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170.0	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
Up	2.2	4.5	8.2	13.3	18.5	23.0	26.7	33.6	41.9
Dn	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Course Times

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

	LR	WL	OLYMPIC	CR
	<u>1.00</u>	<u>1.00</u>	<u>1.00</u>	<u>1.00</u>
4.0	843	1213	1125	894
6.0	599	841	781	629
8.0	504	677	632	522
10.0	462	603	570	475
12.0	438	562	536	449
14.0	419	532	513	430
16.0	404	510	495	415
20.0	380	480	469	392
25.0	352	453	446	369

## Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25
36.0	1113.2	740.8	587.2	524.1	494.7	479.1	469.4	458.4	454.1
40.0	987.3	668.1	538.1	487.1	465.3	453.6	445.5	435.5	429.9
52.0	780.0	552.0	461.6	435.0	422.6	414.1	407.8	398.3	391.3
60.0	713.3	513.3	441.7	417.8	406.9	398.5	391.9	382.0	373.7
70.0	668.5	489.6	430.1	403.9	392.1	383.6	376.4	365.0	355.0
80.0	651.8	482.3	426.8	398.4	381.0	371.3	363.3	350.6	339.2
90.0	656.7	474.0	416.0	398.3	378.0	361.7	352.2	338.2	323.3
100.0	645.2	467.2	411.4	391.5	379.0	363.7	347.1	326.8	308.4
110.0	651.5	472.1	415.3	388.1	373.2	361.8	351.9	321.3	294.1
120.0	684.9	492.9	429.6	397.6	373.5	355.9	344.4	323.6	287.6
130.0	768.4	545.4	456.5	416.5	389.5	365.7	345.4	312.1	283.7
135.0	840.5	585.3	475.7	430.3	400.7	377.1	355.5	314.7	276.6
140.0	930.6	634.2	503.7	445.6	414.7	390.2	368.2	327.5	274.3
150.0	1169.3	774.7	597.3	498.7	448.0	417.9	394.9	354.3	300.2
160.0	1408.9	929.2	700.5	571.9	490.6	444.7	415.8	372.8	324.8
170.0	1561.9	1030.4	772.2	624.9	530.7	469.8	433.7	387.8	341.9
180.0	1653.9	1091.2	816.1	658.1	557.4	488.5	446.5	397.4	352.1
Up	1239.2	858.0	698.0	636.3	607.0	590.6	579.4	566.1	559.9
Dn	1186.2	824.9	656.8	569.6	516.2	472.9	439.8	393.6	345.2

**Performance Numbers for DN**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
4.0	80.0	5.084	0.883	3.1	1.000	1.000	6.99	34.3	1.97	0.19	154	2
4.0	90.0	5.447	0.000	3.2	1.000	1.000	6.76	36.3	1.76	0.17	159	1
4.0	100.0	5.580	-0.969	3.1	1.000	1.000	6.28	38.9	1.60	0.16	152	1
4.0	110.0	5.526	-1.890	2.7	1.000	1.000	5.61	42.1	1.43	0.14	133	1
4.0	120.0	5.257	-2.628	2.1	1.000	1.000	4.75	46.8	1.23	0.12	103	1
4.0	130.0	4.685	-3.011	1.3	1.000	1.000	3.72	55.4	0.97	0.09	64	1
4.0	135.0	4.283	-3.029	0.9	1.000	1.000	3.18	62.8	0.82	0.08	45	1
4.0	140.0	3.868	-2.963	0.6	1.000	1.000	2.69	72.6	0.67	0.06	30	1
4.0	150.0	3.079	-2.666	0.2	1.000	1.000	2.04	100.9	0.37	0.04	10	1
4.0	160.0	2.555	-2.401	0.1	1.000	1.000	1.82	131.3	0.20	0.02	4	1
4.0	170.0	2.305	-2.270	0.0	1.000	1.000	1.78	157.0	0.08	0.01	1	1
4.0	180.0	2.177	-2.177	0.0	1.000	1.000	1.82	180.0	0.01	0.00	0	1
6.0	80.0	7.237	1.257	7.8	1.000	1.000	10.14	35.2	2.05	0.21	340	2
6.0	90.0	7.595	0.000	8.0	1.000	1.000	9.64	38.0	1.88	0.20	347	1
6.0	100.0	7.705	-1.338	7.5	1.000	1.000	8.87	41.3	1.71	0.18	327	1
6.0	110.0	7.626	-2.608	6.4	1.000	1.000	7.90	45.1	1.50	0.15	281	1
6.0	120.0	7.303	-3.652	4.3	1.000	1.000	6.73	50.3	1.24	0.12	212	1
6.0	130.0	6.600	-4.243	2.6	1.000	1.000	5.35	59.2	0.96	0.09	130	1
6.0	135.0	6.150	-4.349	1.9	1.000	1.000	4.65	65.8	0.81	0.08	94	1
6.0	140.0	5.676	-4.348	1.3	1.000	1.000	4.01	74.4	0.65	0.06	65	1
6.0	150.0	4.647	-4.024	0.5	1.000	1.000	3.05	100.4	0.37	0.04	24	1
6.0	160.0	3.874	-3.641	0.2	1.000	1.000	2.71	130.7	0.19	0.02	9	1
6.0	170.0	3.494	-3.441	0.0	1.000	1.000	2.63	156.7	0.07	0.01	3	1
6.0	180.0	3.299	-3.299	0.0	1.000	1.000	2.70	180.0	0.01	0.00	0	1
8.0	80.0	8.435	1.465	16.0	1.000	1.000	12.38	37.5	2.46	0.32	564	2
8.0	90.0	8.654	0.000	16.2	1.000	1.000	11.55	41.5	2.30	0.30	560	1
8.0	100.0	8.751	-1.520	13.9	1.000	1.000	10.60	46.0	2.04	0.25	514	1
8.0	110.0	8.668	-2.965	10.4	1.000	1.000	9.47	51.2	1.69	0.19	423	1
8.0	120.0	8.379	-4.189	7.0	1.000	1.000	8.15	57.5	1.32	0.14	307	1
8.0	130.0	7.885	-5.069	4.0	1.000	1.000	6.71	65.9	0.97	0.09	197	1
8.0	135.0	7.568	-5.351	3.0	1.000	1.000	5.97	71.3	0.80	0.08	149	1
8.0	140.0	7.147	-5.475	2.1	1.000	1.000	5.24	78.8	0.64	0.06	104	1
8.0	150.0	6.027	-5.219	0.8	1.000	1.000	4.10	102.7	0.36	0.04	41	1
8.0	160.0	5.139	-4.829	0.3	1.000	1.000	3.63	131.0	0.19	0.02	15	1
8.0	170.0	4.662	-4.591	0.1	1.000	1.000	3.50	156.6	0.07	0.01	5	1
8.0	180.0	4.411	-4.411	0.0	1.000	1.000	3.59	180.0	0.01	0.00	1	1
10.0	80.0	8.816	1.531	19.1	0.896	1.000	14.03	41.3	2.68	0.38	672	2
10.0	90.0	9.038	0.000	19.0	0.909	1.000	13.04	46.1	2.47	0.35	658	1
10.0	100.0	9.195	-1.597	19.0	0.960	1.000	11.90	51.1	2.26	0.32	626	1
10.0	110.0	9.277	-3.173	15.4	1.000	1.000	10.77	57.0	1.88	0.24	544	1
10.0	120.0	9.054	-4.527	9.6	1.000	1.000	9.45	64.5	1.43	0.15	398	1
10.0	130.0	8.643	-5.556	5.7	1.000	1.000	7.93	73.8	1.02	0.10	257	1
10.0	135.0	8.367	-5.916	3.9	1.000	1.000	7.19	79.6	0.83	0.08	195	1
10.0	140.0	8.079	-6.189	2.8	1.000	1.000	6.44	86.3	0.65	0.06	140	1
10.0	150.0	7.218	-6.251	1.2	1.000	1.000	5.20	106.1	0.37	0.04	62	1
10.0	160.0	6.294	-5.915	0.4	1.000	1.000	4.62	132.2	0.19	0.02	24	1
10.0	170.0	5.761	-5.674	0.1	1.000	1.000	4.44	157.0	0.07	0.01	7	1
10.0	180.0	5.470	-5.470	0.0	1.000	1.000	4.53	180.0	0.01	0.00	1	1

**DN (continued)**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
12.0	80.0	9.082	1.577	19.1	0.798	1.000	15.74	44.9	2.75	0.39	741	2
12.0	90.0	9.317	0.000	19.0	0.824	1.000	14.63	50.5	2.50	0.35	717	1
12.0	100.0	9.499	-1.650	19.0	0.884	1.000	13.37	56.2	2.25	0.32	676	1
12.0	110.0	9.646	-3.299	19.0	0.970	1.000	11.98	62.3	1.99	0.28	624	1
12.0	120.0	9.640	-4.820	12.9	1.000	1.000	10.74	70.1	1.54	0.18	496	1
12.0	130.0	9.243	-5.941	7.3	1.000	1.000	9.24	80.4	1.09	0.11	321	1
12.0	135.0	8.985	-6.353	5.3	1.000	1.000	8.46	86.6	0.88	0.09	242	1
12.0	140.0	8.680	-6.650	3.4	1.000	1.000	7.73	93.8	0.69	0.07	175	1
12.0	150.0	8.036	-6.960	1.6	1.000	1.000	6.45	111.4	0.40	0.04	85	1
12.0	160.0	7.338	-6.895	0.6	1.000	1.000	5.69	133.8	0.20	0.02	34	1
12.0	170.0	6.783	-6.680	0.2	1.000	1.000	5.45	157.5	0.08	0.01	11	1
12.0	180.0	6.458	-6.458	0.0	1.000	1.000	5.54	180.0	0.01	0.00	1	1
14.0	80.0	9.294	1.614	19.1	0.728	1.000	17.46	47.9	2.82	0.40	803	2
14.0	90.0	9.556	0.000	19.0	0.761	1.000	16.26	54.0	2.53	0.36	771	1
14.0	100.0	9.767	-1.696	19.0	0.821	1.000	14.90	60.5	2.24	0.32	724	1
14.0	110.0	9.951	-3.403	18.9	0.903	1.000	13.42	67.3	1.97	0.28	667	1
14.0	120.0	10.115	-5.058	17.6	1.000	1.000	11.93	74.7	1.65	0.22	589	1
14.0	130.0	9.843	-6.327	9.1	1.000	1.000	10.61	85.4	1.14	0.12	391	1
14.0	135.0	9.546	-6.750	6.5	1.000	1.000	9.84	92.0	0.92	0.09	296	1
14.0	140.0	9.225	-7.067	4.2	1.000	1.000	9.10	99.5	0.73	0.07	217	1
14.0	150.0	8.614	-7.460	2.1	1.000	1.000	7.83	116.6	0.44	0.04	110	1
14.0	160.0	8.095	-7.607	0.8	1.000	1.000	6.97	136.6	0.21	0.02	46	1
14.0	170.0	7.663	-7.546	0.2	1.000	1.000	6.59	158.4	0.08	0.01	15	1
14.0	180.0	7.369	-7.369	0.0	1.000	1.000	6.63	180.0	0.01	0.00	2	1
16.0	80.0	9.476	1.645	19.2	0.673	1.000	19.20	50.4	2.88	0.41	861	2
16.0	90.0	9.767	0.000	19.1	0.710	1.000	17.93	57.0	2.55	0.36	823	1
16.0	100.0	10.008	-1.738	19.0	0.768	1.000	16.49	63.9	2.25	0.32	772	1
16.0	110.0	10.229	-3.499	19.0	0.846	1.000	14.92	71.3	1.96	0.28	712	1
16.0	120.0	10.453	-5.226	19.0	0.958	1.000	13.26	79.1	1.67	0.24	640	1
16.0	130.0	10.424	-6.700	11.5	1.000	1.000	11.99	89.2	1.18	0.13	468	1
16.0	135.0	10.126	-7.160	8.0	1.000	1.000	11.25	96.0	0.97	0.10	358	1
16.0	140.0	9.777	-7.489	5.7	1.000	1.000	10.52	103.6	0.78	0.08	267	1
16.0	150.0	9.117	-7.896	2.6	1.000	1.000	9.30	120.6	0.49	0.05	140	1
16.0	160.0	8.658	-8.136	1.1	1.000	1.000	8.40	139.4	0.24	0.02	61	1
16.0	170.0	8.301	-8.175	0.3	1.000	1.000	7.96	159.6	0.09	0.01	21	1
16.0	180.0	8.062	-8.062	0.1	1.000	1.000	7.94	180.0	0.01	0.00	3	1
20.0	80.0	9.778	1.698	19.3	0.591	1.000	22.73	54.4	3.01	0.43	973	2
20.0	90.0	10.123	0.000	19.2	0.628	1.000	21.33	61.7	2.63	0.37	928	1
20.0	100.0	10.419	-1.809	19.2	0.680	1.000	19.76	69.4	2.29	0.33	872	1
20.0	110.0	10.738	-3.673	19.2	0.753	1.000	18.08	77.4	1.94	0.28	802	1
20.0	120.0	11.124	-5.562	19.1	0.858	1.000	16.31	85.8	1.58	0.22	719	1
20.0	130.0	11.536	-7.415	18.5	1.000	1.000	14.50	94.9	1.23	0.17	622	1
20.0	135.0	11.439	-8.088	12.5	1.000	1.000	14.03	101.0	1.00	0.12	506	1
20.0	140.0	10.993	-8.421	8.7	1.000	1.000	13.41	108.8	0.85	0.09	391	1
20.0	150.0	10.161	-8.799	3.8	1.000	1.000	12.30	125.6	0.56	0.05	211	1
20.0	160.0	9.656	-9.074	1.7	1.000	1.000	11.41	143.2	0.29	0.03	97	1
20.0	170.0	9.284	-9.143	0.6	1.000	1.000	10.98	161.6	0.12	0.01	35	1
20.0	180.0	9.058	-9.058	0.1	1.000	1.000	10.94	180.0	0.02	0.00	5	1

**DN (continued)**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
25.0	80.0	10.063	1.747	19.7	0.516	1.000	27.16	58.0	3.20	0.46	1111	2
25.0	90.0	10.466	0.000	19.6	0.550	1.000	25.64	65.9	2.77	0.40	1063	1
25.0	100.0	10.871	-1.888	19.5	0.596	1.000	23.99	74.1	2.35	0.34	999	1
25.0	110.0	11.394	-3.897	19.4	0.663	1.000	22.22	82.5	1.90	0.27	919	1
25.0	120.0	12.008	-6.004	19.5	0.759	1.000	20.29	91.2	1.47	0.21	826	1
25.0	130.0	12.690	-8.157	19.6	0.891	1.000	18.23	100.4	1.10	0.16	724	1
25.0	135.0	13.017	-9.205	19.7	0.974	1.000	17.16	105.4	0.94	0.14	671	1
25.0	140.0	13.126	-10.055	15.0	1.000	1.000	16.58	111.1	0.77	0.10	574	1
25.0	150.0	11.991	-10.385	6.5	1.000	1.000	15.72	127.9	0.55	0.06	321	1
25.0	160.0	11.085	-10.417	2.6	1.000	1.000	15.07	145.4	0.32	0.03	155	1
25.0	170.0	10.530	-10.370	0.9	1.000	1.000	14.74	162.9	0.14	0.01	59	1
25.0	180.0	10.226	-10.226	0.2	1.000	1.000	14.77	180.0	0.02	0.00	9	1

**Optimum Downwind Numbers for DN**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
4.0	133.3	4.426	-3.035	1.1	1.000	1.000	3.36	60.0	0.87	0.08	51	1
6.0	137.4	5.928	-4.364	1.7	1.000	1.000	4.33	69.6	0.73	0.07	79	1
8.0	140.7	7.082	-5.481	2.1	1.000	1.000	5.14	80.0	0.62	0.06	99	1
10.0	145.8	7.638	-6.320	1.8	1.000	1.000	5.65	96.5	0.47	0.05	88	1
12.0	152.4	7.869	-6.974	1.4	1.000	1.000	6.21	116.5	0.34	0.03	69	1
14.0	161.8	8.013	-7.613	0.7	1.000	1.000	6.86	140.5	0.18	0.02	39	1
16.0	166.7	8.410	-8.186	0.5	1.000	1.000	8.05	152.9	0.13	0.01	31	1
20.0	168.7	9.326	-9.147	0.7	1.000	1.000	11.01	159.2	0.13	0.01	41	1
25.0	160.5	11.063	-10.428	2.7	1.000	1.000	15.03	146.3	0.31	0.03	148	1



**Performance Numbers for UP**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
4.0	36.0	3.234	2.616	2.4	1.000	1.000	6.88	20.0	4.54	0.44	141	3
4.0	40.0	3.646	2.793	2.6	1.000	1.000	7.19	21.0	3.93	0.38	155	3
4.0	52.0	4.615	2.841	3.1	1.000	1.000	7.75	24.0	2.89	0.28	185	3
4.0	60.0	5.047	2.523	3.2	1.000	1.000	7.85	26.2	2.48	0.24	191	2
4.0	70.0	5.385	1.842	3.0	1.000	1.000	7.73	29.1	2.09	0.20	185	2
4.0	80.0	5.523	0.959	2.7	1.000	1.000	7.36	32.4	1.78	0.17	165	2
4.0	90.0	5.482	0.000	2.2	1.000	1.000	6.79	36.1	1.50	0.15	138	1
4.0	100.0	5.241	-0.910	1.7	1.000	1.000	6.02	40.9	1.26	0.12	105	1
4.0	110.0	4.827	-1.651	1.1	1.000	1.000	5.11	47.4	1.02	0.10	72	1
4.0	120.0	4.242	-2.121	0.6	1.000	1.000	4.13	57.1	0.79	0.08	42	1
4.0	130.0	3.527	-2.267	0.3	1.000	1.000	3.21	72.7	0.57	0.06	21	1
4.0	135.0	3.180	-2.248	0.2	1.000	1.000	2.85	82.9	0.48	0.05	14	1
6.0	36.0	4.860	3.931	6.0	1.000	1.000	10.32	19.8	4.46	0.45	316	3
6.0	40.0	5.388	4.128	6.5	1.000	1.000	10.69	21.0	3.92	0.40	344	3
6.0	52.0	6.522	4.015	7.5	1.000	1.000	11.24	24.6	2.96	0.31	390	2
6.0	60.0	7.013	3.506	7.5	1.000	1.000	11.26	27.2	2.54	0.26	393	3
6.0	70.0	7.353	2.515	6.9	1.000	1.000	10.94	30.7	2.14	0.22	368	2
6.0	80.0	7.464	1.296	5.9	1.000	1.000	10.34	34.6	1.81	0.18	323	2
6.0	90.0	7.406	0.000	4.3	1.000	1.000	9.52	38.9	1.51	0.15	266	1
6.0	100.0	7.157	-1.243	3.2	1.000	1.000	8.50	44.0	1.25	0.12	204	1
6.0	110.0	6.711	-2.295	2.2	1.000	1.000	7.31	50.4	1.01	0.10	143	1
6.0	120.0	6.064	-3.032	1.3	1.000	1.000	6.03	59.5	0.78	0.08	88	1
6.0	130.0	5.238	-3.367	0.7	1.000	1.000	4.80	73.3	0.56	0.05	47	1
6.0	135.0	4.789	-3.386	0.5	1.000	1.000	4.28	82.7	0.47	0.05	32	1
8.0	36.0	6.131	4.960	11.2	1.000	1.000	13.41	20.1	4.68	0.53	534	3
8.0	40.0	6.691	5.125	12.3	1.000	1.000	13.75	21.4	4.16	0.48	571	3
8.0	52.0	7.800	4.802	13.7	1.000	1.000	14.10	25.7	3.20	0.38	617	3
8.0	60.0	8.150	4.075	12.9	1.000	1.000	13.88	29.0	2.78	0.33	597	2
8.0	70.0	8.371	2.863	11.0	1.000	1.000	13.32	33.6	2.35	0.26	539	2
8.0	80.0	8.432	1.464	8.9	1.000	1.000	12.52	38.4	1.97	0.21	463	2
8.0	90.0	8.375	0.000	6.9	1.000	1.000	11.54	43.5	1.63	0.17	378	1
8.0	100.0	8.202	-1.424	5.1	1.000	1.000	10.39	49.0	1.31	0.13	292	1
8.0	110.0	7.893	-2.700	3.2	1.000	1.000	9.12	55.5	1.03	0.10	210	1
8.0	120.0	7.428	-3.714	2.1	1.000	1.000	7.73	63.7	0.77	0.08	137	1
8.0	130.0	6.617	-4.254	1.1	1.000	1.000	6.30	76.5	0.56	0.05	77	1
8.0	135.0	6.148	-4.348	0.8	1.000	1.000	5.68	85.0	0.47	0.05	55	1
10.0	36.0	6.868	5.557	16.8	1.000	0.898	15.94	20.6	4.80	0.63	684	3
10.0	40.0	7.390	5.661	17.9	1.000	0.884	16.20	22.1	4.24	0.58	708	3
10.0	52.0	8.276	5.095	19.1	1.000	0.905	16.19	27.2	3.43	0.49	738	3
10.0	60.0	8.616	4.308	19.2	1.000	0.963	15.83	30.9	3.14	0.45	744	2
10.0	70.0	8.914	3.049	16.6	1.000	1.000	15.24	36.0	2.67	0.35	697	2
10.0	80.0	9.036	1.569	12.5	1.000	1.000	14.42	41.7	2.18	0.25	600	2
10.0	90.0	8.999	0.000	9.3	1.000	1.000	13.35	47.6	1.78	0.19	488	1
10.0	100.0	8.829	-1.533	6.7	1.000	1.000	12.08	54.0	1.42	0.15	375	1
10.0	110.0	8.566	-2.930	4.6	1.000	1.000	10.68	61.2	1.10	0.11	271	1
10.0	120.0	8.185	-4.093	2.7	1.000	1.000	9.23	69.8	0.81	0.08	181	1
10.0	130.0	7.657	-4.922	1.6	1.000	1.000	7.76	80.9	0.57	0.06	109	1
10.0	135.0	7.287	-5.153	1.2	1.000	1.000	7.07	88.2	0.48	0.05	82	1

**UP (continued)**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
12.0	36.0	7.277	5.887	19.2	1.000	0.733	18.18	21.4	4.61	0.65	737	3
12.0	40.0	7.736	5.926	19.8	1.000	0.722	18.35	23.1	4.11	0.60	753	3
12.0	52.0	8.518	5.244	19.9	0.963	0.820	18.16	29.1	3.42	0.50	784	3
12.0	60.0	8.848	4.424	19.5	0.914	1.000	17.73	33.3	3.22	0.46	811	2
12.0	70.0	9.181	3.140	19.5	0.958	1.000	16.96	38.6	2.85	0.41	787	2
12.0	80.0	9.449	1.641	17.7	1.000	1.000	16.07	44.2	2.45	0.33	732	2
12.0	90.0	9.525	0.000	12.3	1.000	1.000	15.08	50.8	1.94	0.22	606	1
12.0	100.0	9.366	-1.626	8.5	1.000	1.000	13.76	58.0	1.53	0.16	466	1
12.0	110.0	9.085	-3.107	5.7	1.000	1.000	12.27	66.0	1.18	0.12	336	1
12.0	120.0	8.705	-4.353	3.3	1.000	1.000	10.74	75.4	0.88	0.09	226	1
12.0	130.0	8.281	-5.323	2.0	1.000	1.000	9.21	86.5	0.62	0.06	142	1
12.0	135.0	8.027	-5.676	1.5	1.000	1.000	8.50	93.1	0.52	0.05	110	1
14.0	36.0	7.514	6.079	20.6	0.989	0.625	20.27	22.2	4.56	0.68	778	3
14.0	40.0	7.936	6.079	20.4	0.950	0.680	20.39	24.3	4.15	0.62	803	3
14.0	52.0	8.695	5.353	19.9	0.883	0.849	20.11	30.8	3.51	0.51	846	3
14.0	60.0	9.034	4.517	19.6	0.852	1.000	19.61	35.4	3.27	0.47	866	2
14.0	70.0	9.386	3.210	19.5	0.896	1.000	18.76	41.1	2.88	0.41	839	2
14.0	80.0	9.696	1.684	19.3	0.954	1.000	17.72	46.9	2.53	0.36	801	2
14.0	90.0	9.954	0.000	16.6	1.000	1.000	16.66	53.3	2.11	0.27	723	1
14.0	100.0	9.899	-1.719	10.9	1.000	1.000	15.44	61.1	1.64	0.18	567	1
14.0	110.0	9.595	-3.282	7.1	1.000	1.000	13.90	69.8	1.27	0.13	410	1
14.0	120.0	9.196	-4.598	4.5	1.000	1.000	12.28	79.7	0.95	0.09	278	1
14.0	130.0	8.760	-5.631	2.5	1.000	1.000	10.73	91.3	0.69	0.07	179	1
14.0	135.0	8.547	-6.043	2.0	1.000	1.000	9.99	97.8	0.58	0.06	143	1
16.0	36.0	7.669	6.204	20.7	0.914	0.636	22.31	23.1	4.68	0.70	835	3
16.0	40.0	8.081	6.190	20.5	0.878	0.694	22.40	25.3	4.27	0.64	861	3
16.0	52.0	8.828	5.435	19.8	0.775	1.000	22.04	32.3	3.74	0.54	934	3
16.0	60.0	9.186	4.593	19.7	0.800	1.000	21.49	37.1	3.34	0.48	920	2
16.0	70.0	9.564	3.271	19.5	0.842	1.000	20.58	43.2	2.92	0.42	891	2
16.0	80.0	9.910	1.721	19.3	0.898	1.000	19.47	49.4	2.55	0.36	851	2
16.0	90.0	10.222	0.000	19.2	0.973	1.000	18.17	55.8	2.21	0.31	801	1
16.0	100.0	10.372	-1.801	13.9	1.000	1.000	17.04	63.5	1.74	0.21	671	1
16.0	110.0	10.116	-3.460	8.8	1.000	1.000	15.55	72.6	1.34	0.14	494	1
16.0	120.0	9.681	-4.841	5.6	1.000	1.000	13.89	83.0	1.02	0.10	339	1
16.0	130.0	9.199	-5.913	3.1	1.000	1.000	12.30	95.1	0.76	0.07	224	1
16.0	135.0	8.993	-6.359	2.5	1.000	1.000	11.55	101.6	0.65	0.06	181	1
20.0	36.0	7.854	6.354	21.0	0.801	0.649	26.29	24.5	5.01	0.76	943	3
20.0	40.0	8.267	6.333	20.7	0.770	0.714	26.35	27.0	4.57	0.69	970	3
20.0	52.0	9.038	5.564	20.0	0.690	1.000	25.87	34.7	3.94	0.58	1042	3
20.0	60.0	9.424	4.712	19.9	0.714	1.000	25.24	39.9	3.50	0.51	1027	2
20.0	70.0	9.862	3.373	19.7	0.753	1.000	24.23	46.6	3.02	0.44	995	2
20.0	80.0	10.267	1.783	19.5	0.806	1.000	22.99	53.4	2.60	0.37	952	2
20.0	90.0	10.645	0.000	19.4	0.876	1.000	21.56	60.4	2.23	0.32	897	1
20.0	100.0	11.017	-1.913	19.2	0.966	1.000	19.98	67.8	1.88	0.27	830	1
20.0	110.0	11.203	-3.832	13.6	1.000	1.000	18.73	76.5	1.43	0.17	682	1
20.0	120.0	10.717	-5.359	8.2	1.000	1.000	17.14	87.6	1.12	0.12	483	1
20.0	130.0	10.167	-6.535	5.3	1.000	1.000	15.48	100.0	0.88	0.09	333	1
20.0	135.0	9.901	-7.001	3.9	1.000	1.000	14.76	106.7	0.79	0.08	278	1

**UP (continued)**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
25.0	36.0	7.927	6.413	21.5	0.703	0.656	31.12	25.9	5.57	0.86	1069	3
25.0	40.0	8.373	6.414	21.2	0.675	0.725	31.17	28.5	5.03	0.77	1099	3
25.0	52.0	9.201	5.665	20.5	0.609	1.000	30.60	36.8	4.26	0.63	1174	3
25.0	60.0	9.634	4.817	20.3	0.630	1.000	29.89	42.5	3.75	0.55	1159	2
25.0	70.0	10.141	3.468	20.0	0.666	1.000	28.79	49.6	3.19	0.47	1127	2
25.0	80.0	10.615	1.843	19.9	0.715	1.000	27.43	57.0	2.71	0.40	1081	2
25.0	90.0	11.134	0.000	19.6	0.776	1.000	25.92	64.6	2.25	0.32	1020	1
25.0	100.0	11.672	-2.027	19.6	0.857	1.000	24.21	72.3	1.83	0.26	948	1
25.0	110.0	12.240	-4.186	19.5	0.959	1.000	22.33	80.4	1.46	0.21	865	1
25.0	120.0	12.515	-6.258	13.7	1.000	1.000	20.97	89.9	1.08	0.13	705	1
25.0	130.0	11.728	-7.539	8.5	1.000	1.000	19.41	102.9	0.92	0.10	505	1
25.0	135.0	11.337	-8.016	6.9	1.000	1.000	18.64	109.8	0.85	0.09	427	1

**Optimum Upwind Numbers for UP**

Vt	Bt	Vs	Vmg	Heel	Rf/Tw	Flat	Va	Ba	Lee	Rud	Fh	n
4.0	46.4	4.216	2.905	3.2	1.000	1.000	7.55	22.5	3.28	0.32	174	2
6.0	44.1	5.843	4.196	7.0	1.000	1.000	10.96	22.2	3.51	0.36	366	2
8.0	42.6	7.003	5.158	12.9	1.000	1.000	13.91	22.2	3.89	0.46	590	3
10.0	40.1	7.399	5.658	17.9	1.000	0.884	16.20	22.1	4.23	0.57	708	3
12.0	38.5	7.581	5.930	19.6	1.000	0.725	18.30	22.5	4.27	0.62	748	3
14.0	37.7	7.707	6.096	20.5	0.971	0.648	20.34	23.1	4.37	0.65	789	3
16.0	37.4	7.822	6.214	20.6	0.901	0.656	22.35	23.8	4.52	0.68	845	3
20.0	37.3	7.990	6.360	20.9	0.791	0.669	26.32	25.3	4.86	0.73	952	4
25.0	37.7	8.126	6.429	21.4	0.690	0.685	31.16	27.0	5.33	0.82	1083	3