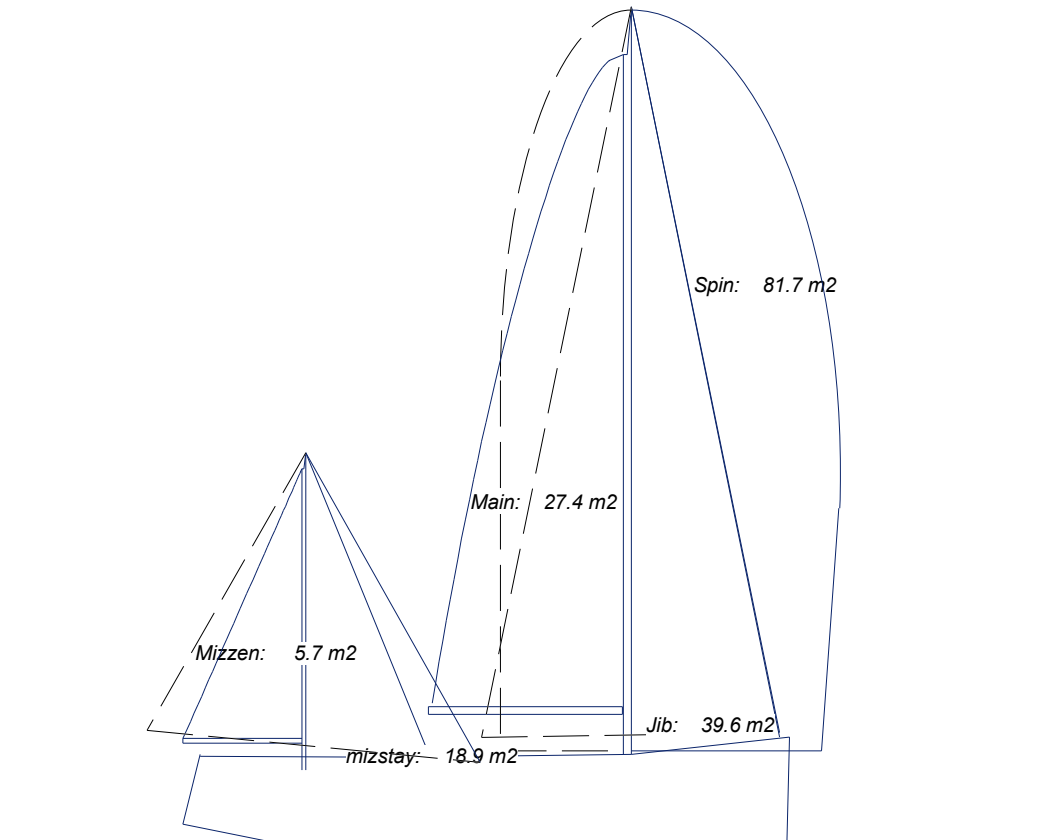


Rig and Sail Plan Cartoon



DELFT Flotation Input Data for Condition Condition 1

Condition 1 [479b.lpp 08/19/11 10:51:06]

Basics		Heel Functions				Appendages			
Dspl	7239.5	Heel	WSc	ra	lwl		ws	cm	tc
Dsplc	7188.5	0	25.531	0.001	9.792	Fin	1.973	0.517	0.120
Lwl	9.792	2	25.499	0.084	9.792	Bulb	0.000	0.000	0.100
Lsunk	9.793	10	24.841	0.393	9.792	Twin Rud	0.791	0.320	0.120
Bwl	3.586	25	23.184	0.814	9.378	Other	0.000	0.000	0.000
Bmax	4.150	40	21.253	1.042	8.987				
Tc	0.494								
Tmax	2.350								
Trud	1.200								
Ax	1.302		Wing/CB Eff	0.333				Twin Rud	
Cp	0.536		Tot Eff Span	1.000					
Awp	24.06		Lift Slope	1.000				Emerge Root	0.000
LCB	-2.60		+ Heel Drag	1.000				Emerge Tip	27.000
LCF	-3.30		- Heel Drag	1.000					
GYR	0.25		Canoe Form	0.100					
Ad+/-	0.000		Vt Grad	0.100				Crew Wt	0.0
PIPA	0.031		RawMeth	Delft				Crew Arm	0.000
HBI,f	1.650		RawFact	1.000				KEEL CANT	0.0
ClxLimit	None		RawOff	0.000					
M,Long	17.008								
KeelVCB	0.734								
KeelTaper	0.448								

Rig and Sail Plan Dimensions

	Main		Fore		Spin		Mizzen		MizStay
P	12.260	IG	14.060	SPL	3.600	PY	5.100	YSF	4.000
E	3.610	J	2.800	SMW	7.000	EY	2.250	YSMG	3.000
BAD	0.900	LP	5.520	SLU	14.000	BADY	0.600	YSD	6.000
EB	6.000	HBI	1.650	SLE	14.000	HBIY	1.350	HBIYS	1.500
				ISP	14.000				

Sail Inventory

Name	Area	Span	BaseHt	AFx	Aero	Base
Spin	81.667	14.000	0.000	0.750	Spin_0	SPIN
Mizzen	5.737	5.100	0.300	1.000	Main_0	MIZZEN
Main	27.423	12.260	0.900	1.000	Main_0	MAIN
mizstay	18.900	5.700	-0.150	0.750	MizStay_0	MIZSTAY
Jib	39.568	14.060	0.000	1.000	Jib_0	HEAD

Windage Elements

Name	Ax	Ay	Cdx	Cdy	Ht	Type
MizzenMastSail	1.375	1.090	0.400	1.000	2.394	mast w/sail
MainRigging	1.178	1.178	1.000	1.000	5.527	other
MizzenMastBare	1.375	1.090	0.800	1.100	2.394	mast bare
MastSail	1.964	3.240	0.400	1.000	5.527	mast w/sail
MastBare	1.964	3.240	0.800	1.100	5.527	mast bare
Hull	5.917	16.157	0.400	0.900	-0.660	hull
MizMastRig	0.825	0.825	1.000	1.000	2.394	other

Sail Sets and Member Sails

Upwind [Up]	Downwind [Dn]	Reaching [Rch]
Mizzen Jib Main	Mizzen MizStay Spin Main	Mizzen MizStay Jib Main

Opsets

Name	Flotation	SailSet	VtLo	VtHi	BtLo	BtHi	VaLim	UpOpt	DnOpt
Ops_UpwinCondition 1		Upwind	4.0	25.0	0.0	130.0	99.0	*	
Ops_DowCondition 1		Downwind	4.0	25.0	80.0	180.0	99.0		*

Notes

Volgens de berekeningen kan er laat gereefd worden en is de heling relatief klein. Punt van zorg is met licht weer he
Mogelijk zwaardkast achter door romp steken zodat zwaard onder wat groter kan.

Best Boatspeeds (kt)

	4	5	6	7	8	9	10	12	14	16	20
32.0	1.61	1.79	2.09	2.25	2.19	2.98	3.34	3.78	4.06	4.25	4.43
36.0	1.74	2.01	2.16	1.85	3.27	3.64	3.91	4.33	4.68	5.07	5.56
40.0	1.83	2.00	1.70	3.34	3.76	4.10	4.39	4.99	5.60	5.90	6.16
45.0	2.02	2.57	3.35	3.82	4.21	4.58	5.03	5.84	6.18	6.38	6.51
52.0	2.35	3.30	3.87	4.31	4.78	5.39	5.86	6.37	6.66	6.82	7.01
60.0	3.07	3.75	4.27	4.79	5.47	5.96	6.28	6.73	7.04	7.24	7.46
70.0	3.47	4.08	4.63	5.33	5.90	6.27	6.56	7.01	7.35	7.61	7.88
80.0	3.67	4.25	4.86	5.61	6.08	6.41	6.69	7.15	7.52	7.81	8.19
90.0	3.70	4.33	5.01	5.73	6.21	6.55	6.83	7.27	7.56	7.88	8.36
100.0	3.77	4.39	5.10	5.81	6.26	6.60	6.89	7.38	7.73	7.96	8.38
110.0	3.72	4.32	4.98	5.74	6.21	6.56	6.87	7.39	7.80	8.11	8.51
120.0	3.56	4.16	4.74	5.49	6.05	6.45	6.75	7.31	7.77	8.13	8.69
135.0	3.19	3.79	4.31	4.86	5.53	6.04	6.41	7.01	7.51	7.92	8.58
150.0	2.64	3.25	3.75	4.20	4.64	5.18	5.70	6.41	6.94	7.41	8.16
160.0	2.24	2.83	3.34	3.79	4.20	4.60	5.07	5.96	6.55	7.04	7.85
170.0	1.99	2.56	3.06	3.50	3.90	4.27	4.65	5.53	6.22	6.73	7.57
180.0	1.77	2.35	2.84	3.28	3.66	4.00	4.33	5.07	5.85	6.39	7.22
Up.Vs	2.44	2.99	3.41	3.77	4.14	5.03	5.46	5.80	5.97	6.08	6.23
Up.Bt	58.6	50.7	47.1	45.1	44.3	49.6	48.5	44.9	43.0	41.8	40.8
Up.Vmg	1.27	1.89	2.32	2.66	2.96	3.26	3.62	4.10	4.36	4.53	4.72
Dn.Vs	2.89	3.41	3.86	4.29	5.02	5.54	5.80	6.05	6.43	6.87	7.63
Dn.Bt	143.9	146.2	147.6	148.0	143.8	145.0	148.5	157.7	163.6	165.5	167.7
Dn.Vmg	2.33	2.84	3.26	3.64	4.05	4.54	4.94	5.60	6.17	6.65	7.46

Best Heel Angles (deg)

	4	5	6	7	8	9	10	12	14	16	20
32.0	1.20	1.77	2.51	3.30	4.02	6.27	7.57	9.84	11.87	13.65	16.33
36.0	1.25	1.86	2.53	2.99	5.46	6.96	8.56	11.39	13.67	15.88	19.06
40.0	1.26	1.81	2.20	4.52	5.84	7.33	8.97	13.05	15.87	17.79	20.26
45.0	1.29	2.04	3.11	4.62	6.06	7.59	9.45	13.95	17.20	18.82	20.84
52.0	1.34	2.29	3.24	4.63	6.20	7.99	9.86	13.71	18.17	20.61	21.10
60.0	1.52	2.32	3.19	4.52	6.28	7.82	9.36	12.71	16.63	21.25	21.56
70.0	1.48	2.17	2.96	4.12	5.75	6.97	8.22	10.99	14.20	17.89	22.22
80.0	1.32	1.90	2.59	3.48	4.33	5.86	6.86	9.07	11.59	14.44	21.30
90.0	1.67	2.58	3.68	5.54	7.16	8.93	10.85	15.23	9.04	11.19	16.27
100.0	1.55	2.33	3.30	4.44	6.24	7.65	9.19	12.69	16.81	21.56	12.08
110.0	1.28	1.88	2.63	3.55	4.46	6.03	7.20	9.87	12.98	16.57	22.71
120.0	0.94	1.38	1.90	2.58	3.27	3.97	5.23	7.13	9.32	11.83	17.94
135.0	0.47	0.70	0.96	1.28	1.66	2.06	2.46	3.33	4.31	6.04	8.95
150.0	0.16	0.24	0.34	0.45	0.57	0.72	0.89	1.27	1.72	2.26	3.62
160.0	0.07	0.11	0.16	0.23	0.30	0.39	0.48	0.70	0.98	1.32	2.17
170.0	0.03	0.05	0.07	0.10	0.13	0.17	0.21	0.31	0.43	0.58	0.95
180.0	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.06	0.10
Up	1.41	2.39	3.47	4.66	6.03	7.77	9.71	13.89	16.78	18.23	20.41
Dn	0.29	0.37	0.45	0.58	1.03	1.18	1.10	0.88	0.84	0.98	1.33

Best Flat

	4	5	6	7	8	9	10	12	14	16	20
32.0	1.000	1.000	1.000	1.000	1.000	0.993	0.958	0.872	0.787	0.705	0.561
36.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.940	0.843	0.752	0.591
40.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.890	0.783	0.609
45.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.932	0.819	0.758
52.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.909	0.904
60.0	1.000	1.000	1.000	1.000	1.000	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
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
100.0	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
160.0	1.000	1.000	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	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	1.000	0.917	0.797	0.613
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

	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>12</u>	<u>14</u>	<u>16</u>	<u>20</u>
32.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
36.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
40.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
45.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.931
52.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.888
60.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.885
70.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.944
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
100.0	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	0.966
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
160.0	1.000	1.000	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	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	1.000	1.000	1.000	1.000
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	5	6	7	8	9	10	12	14	16	20
32.0	4.08	4.88	5.05	5.73	7.41	5.77	5.57	5.73	6.11	6.57	7.65
36.0	3.63	4.08	4.80	7.76	4.18	4.31	4.60	5.11	5.40	5.54	5.95
40.0	3.32	4.05	6.79	3.27	3.38	3.60	3.87	4.46	4.51	4.73	5.30
45.0	2.82	2.76	2.47	2.65	2.82	3.00	3.12	3.54	4.10	4.38	5.19
52.0	2.18	1.89	1.94	2.14	2.26	2.29	2.42	2.94	3.81	4.37	4.74
60.0	1.46	1.50	1.58	1.72	1.75	1.85	2.01	2.44	3.07	4.07	4.35
70.0	1.12	1.19	1.26	1.33	1.39	1.50	1.63	1.95	2.36	2.94	3.95
80.0	0.90	0.97	1.02	1.03	1.13	1.22	1.32	1.55	1.83	2.18	3.32
90.0	0.93	1.05	1.11	1.20	1.33	1.50	1.70	2.20	1.42	1.64	2.26
100.0	0.83	0.92	0.97	1.04	1.14	1.27	1.41	1.74	2.22	2.95	1.63
110.0	0.71	0.78	0.82	0.83	0.92	1.01	1.11	1.33	1.61	1.99	2.91
120.0	0.57	0.62	0.66	0.66	0.69	0.74	0.84	0.98	1.15	1.35	1.96
135.0	0.36	0.38	0.41	0.43	0.43	0.45	0.48	0.54	0.64	0.73	0.94
150.0	0.18	0.19	0.20	0.21	0.22	0.22	0.23	0.26	0.30	0.35	0.46
160.0	0.12	0.12	0.12	0.13	0.14	0.15	0.16	0.16	0.19	0.22	0.30
170.0	0.07	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.11	0.14
180.0	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Up	1.95	2.20	2.44	2.69	2.89	2.55	2.73	3.57	4.25	4.60	5.25
Dn	0.25	0.23	0.23	0.24	0.30	0.29	0.25	0.18	0.16	0.16	0.18

Best SailSet

	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>12</u>	<u>14</u>	<u>16</u>	<u>20</u>
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
80.0	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up	Up
90.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up	Up	Up
100.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Up
110.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
120.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
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
160.0	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn	Dn
170.0	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

Condition 1 - Hydrodynamic Forces**Heel: 0.00**

Vs kt	Fn	Rw kg	Rvc kg	Rva kg	Rtu kg	Cr	Rh22.5 kg	Te,upr m	zceb0 m
4.00	0.210	4.9	16.5	10.2	31.6	15.4	0.2	2.639	0.891
4.50	0.236	8.6	20.4	12.8	41.9	21.3	0.8	2.592	0.891
5.00	0.263	12.9	24.8	15.7	53.3	25.8	1.6	2.545	0.891
5.50	0.289	18.5	29.5	18.9	66.8	30.6	2.8	2.499	0.891
6.00	0.315	28.1	34.6	22.3	85.0	39.0	4.7	2.452	0.891
6.50	0.341	46.7	40.1	26.1	112.9	55.3	8.1	2.405	0.891
7.00	0.368	81.0	45.9	30.1	157.0	82.7	14.2	2.359	0.891
7.50	0.394	134.1	52.1	34.4	220.6	119.3	21.9	2.312	0.891
8.00	0.420	207.5	58.7	39.0	305.1	162.3	29.2	2.266	0.891
8.50	0.447	303.0	65.6	43.8	412.4	209.9	35.9	2.219	0.891
9.00	0.473	420.3	72.9	49.0	542.1	259.7	42.6	2.172	0.891
9.50	0.499	542.8	80.5	54.4	677.6	301.0	50.2	2.126	0.891
10.00	0.525	650.1	88.5	60.1	798.6	325.4	59.1	2.079	0.891
10.50	0.552	732.4	96.8	66.0	895.2	332.5	68.8	2.032	0.891
11.00	0.578	788.1	105.4	72.3	965.8	326.0	78.5	1.986	0.891
11.50	0.604	834.4	114.4	78.8	1027.6	315.8	87.3	1.939	0.891
12.00	0.630	885.5	123.8	85.6	1094.9	307.8	94.4	1.892	0.891

