

Mainsail: 5000104 Phil Mainsail.des

Design Info
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Design File:
F:\Dropbox (个人)\Fareast Sails\2021\5000104 Phil\5000104 Phil Mainsail.des

Initial Design Date: 16/1/2021
Boat:

Comments:

Client:

Design Data
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Main

Measurements

Luff geodesic: 8.060m
Leech geodesic: 8.485m
Foot geodesic: 2.915m
Head geodesic: 0.115m
Upper width (MUW): 0.567m
Three-quarter width (MTW): 1.028m
Half width (MHW): 1.806m
Quarter width (MQW): 2.407m
Foot median: 8.261m
ORC Mainsail area: 13.609m?
Surface area: 14.011m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	0.895m	0.160m	72.522?	6.440m	6.764m	Full
60.000%	1.564m	0.220m	72.522?	4.826m	5.073m	Full
40.000%	2.087m	0.183m	72.522?	3.212m	3.382m	Full
20.000%	2.525m	0.104m	72.522?	1.598m	1.691m	Full

Reefing Points

1, Luff: 1.500m ; Leech: 1.556m ; Offset: 0.000m ; Number Eyelets: 2

Luff Curve

		Fanned Luff (@ 5.00% [0.145m])	Before BSeam
8.060m,	0.000m	100% (8.060m) :	0.000m
7.055m,	-0.017m	90% (7.254m) :	0.009m
6.045m,	-0.029m	80% (6.448m) :	0.017m
5.032m,	-0.035m	70% (5.642m) :	0.022m
4.030m,	-0.037m	60% (4.836m) :	0.024m
3.003m,	-0.034m	50% (4.030m) :	0.024m
2.015m,	-0.027m	40% (3.224m) :	0.022m
1.004m,	-0.015m	30% (2.418m) :	0.018m
0.000m,	0.000m	20% (1.612m) :	0.013m
		10% (0.806m) :	0.007m
		0% (0.000m) :	0.000m

Section Data

Position	Camber	Draft	Twist	Entry	Exit	Roach	Fwd Camb	Aft Camb
100.00%	6.165%	40.694%	18.989?	28.511?	-10.923?	0.000m	5.192%	4.558%
80.00%	11.039%	41.325%	15.191?	39.315?	-16.808?	0.000m	9.033%	8.059%
60.00%	12.581%	41.957%	11.394?	42.120?	-19.352?	0.000m	10.282%	9.220%
40.00%	11.131%	42.589%	7.596?	38.578?	-16.091?	0.000m	9.168%	8.051%
20.00%	7.870%	43.221%	3.798?	30.264?	-11.389?	0.000m	6.603%	5.658%
10.00%	5.807%	43.537%	1.899?	24.177?	-7.945?	0.000m	4.896%	4.101%
0.00%	3.000%	43.853%	0.000?	16.209?	-4.033?	0.000m	2.652%	2.083%

Chord Data

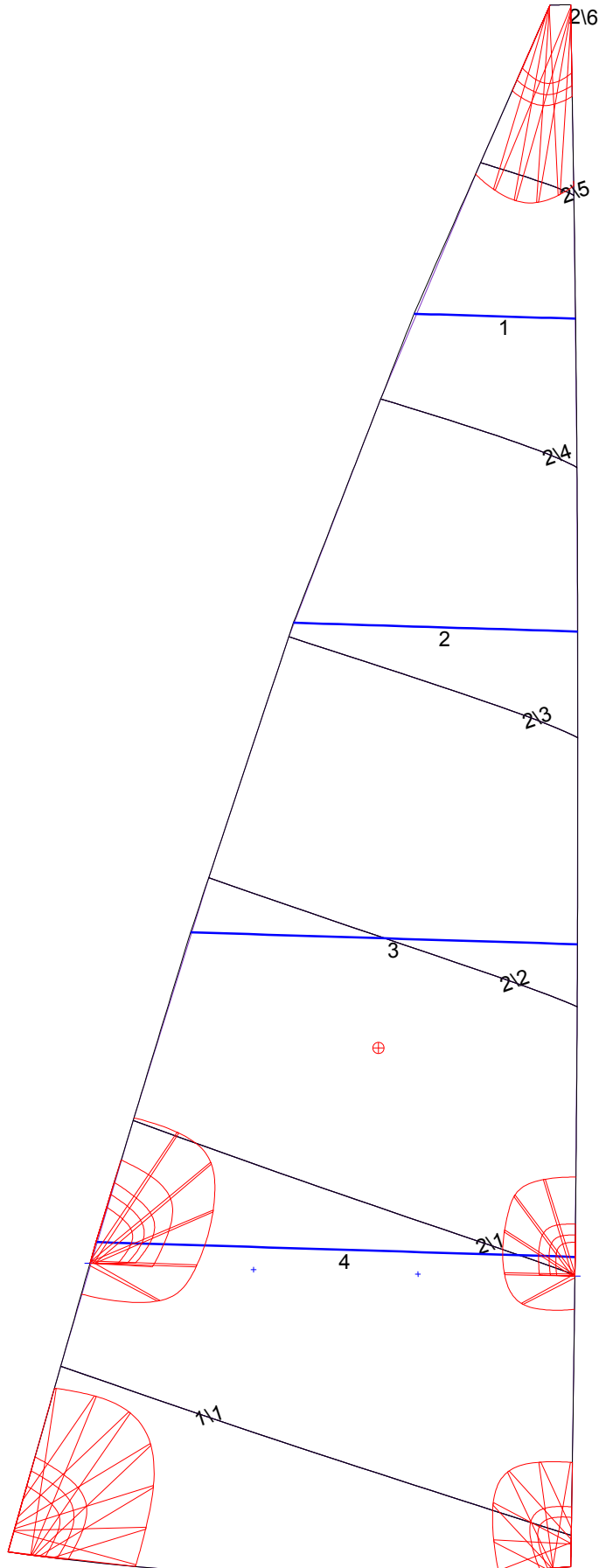
Luff P : 8.0597m
Foot E : 2.9048m
Leech : 8.4166m
Headboard width : 0.1136m

Include Headboard in Diagonal: Diagonal from Outer End of Headboard

Fanned Foot Curve Depths

25.0% 50.0% 75.0%
0.0527m 0.0732m 0.0549m

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Seam Allowances

	Split	Radial	Cross
Zone: 1	0.025m	0.015m	0.025m
Zone: 2	0.025m	0.015m	0.025m

Edge Excesses

Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	10.72
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	14.00	1\1, 2\1, 2\2, 2\3, 2\4, 2\5, 2\6