

Mainsail: 5000112 Frank -1 Main.des

Design Info

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Design File:

F:\Dropbox (个人)\Fareast Sails\2021\5000112 Frank\5000112 Frank -1 Main.des

Initial Design Date: 29/1/2021

Boat:

Comments:

Client:

Design Data

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Main

Measurements

Luff geodesic: 14.070m
 Leech geodesic: 14.704m
 Foot geodesic: 4.670m
 Head geodesic: 0.115m
 Upper width (MUW): 0.834m
 Three-quarter width (MTW): 1.552m
 Half width (MHW): 2.818m
 Quarter width (MQW): 3.825m
 Foot median: 14.402m
 ORC Mainsail area: 37.240m?
 Surface area: 38.119m?
 Clew height: 88.500m
 Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	0.978m	0.181m	73.490?	11.251m	11.732m	
60.000%	1.397m	0.250m	73.490?	8.437m	8.799m	
40.000%	1.397m	0.226m	73.490?	5.624m	5.866m	
20.000%	1.400m	0.131m	73.490?	2.812m	2.933m	

Reefing Points

1, Luff: 2.110m ; Leech: 2.186m ; Offset: 0.000m ; Number Eyelets: 3
 2, Luff: 4.220m ; Leech: 4.372m ; Offset: 0.000m ; Number Eyelets: 3
 3, Luff: 6.330m ; Leech: 6.560m ; Offset: 0.000m ; Number Eyelets: 3

Luff Curve

Position	Depth	Fanned Luff (@ 5.00% [0.232m])	Before BSeam
14.070m,	0.000m	100% (14.070m) :	0.000m
12.316m,	-0.030m	90% (12.663m) :	0.054m
10.552m,	-0.051m	80% (11.256m) :	0.107m
8.784m,	-0.062m	70% (9.849m) :	0.149m
7.035m,	-0.064m	60% (8.442m) :	0.175m
5.242m,	-0.059m	50% (7.035m) :	0.180m
3.517m,	-0.047m	40% (5.628m) :	0.166m
1.753m,	-0.027m	30% (4.221m) :	0.135m
0.000m,	0.000m	20% (2.814m) :	0.094m
		10% (1.407m) :	0.045m
		0% (0.000m) :	0.000m

Section Data

Position	Camber	Draft	Twist	Entry	Exit	Roach	Fwd Camb	Aft Camb
100.00%	7.351%	40.694%	18.989?	28.511?	-10.923?	0.000m	5.961%	5.317%
80.00%	13.162%	41.326%	15.191?	39.314?	-16.808?	0.000m	10.378%	9.359%
60.00%	15.000%	41.957%	11.394?	42.120?	-19.352?	0.000m	11.807%	10.669%
40.00%	13.272%	42.589%	7.596?	38.578?	-16.091?	0.000m	10.501%	9.316%
20.00%	9.383%	43.221%	3.798?	30.264?	-11.389?	0.000m	7.532%	6.547%
10.00%	6.924%	43.537%	1.899?	24.177?	-7.945?	0.000m	5.575%	4.751%
0.00%	3.577%	43.853%	0.000?	16.209?	-4.033?	0.000m	3.001%	2.413%

Chord Data

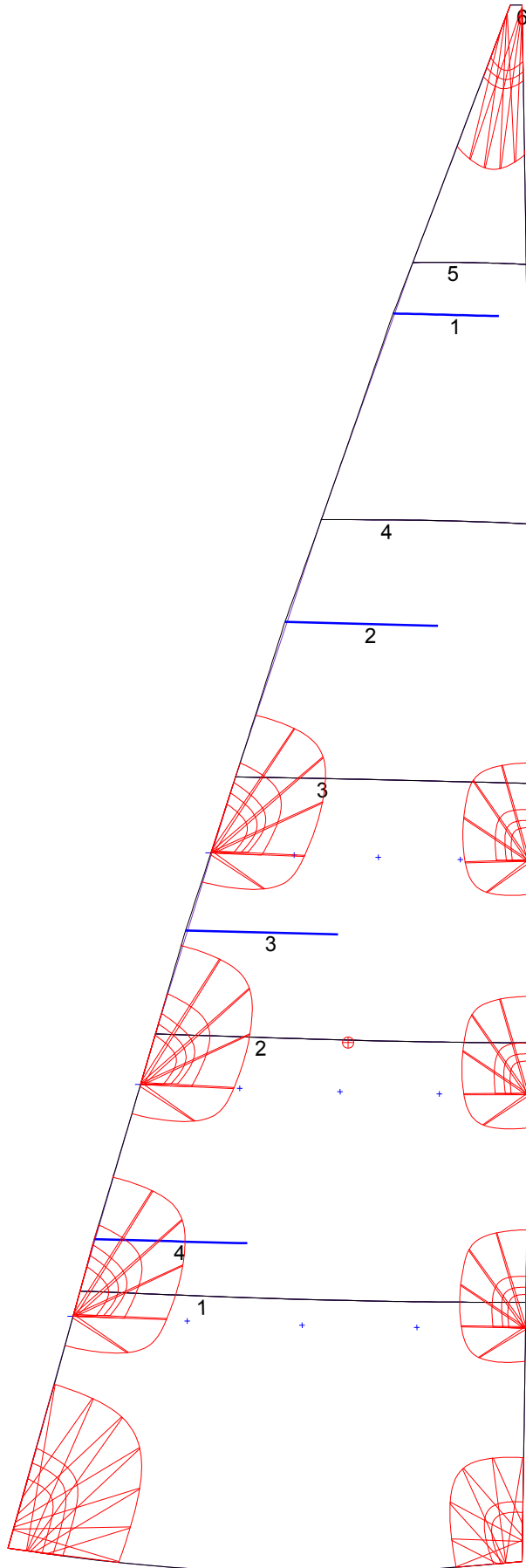
Luff P : 14.0696m
 Foot E : 4.6489m
 Leech : 21474.7668m
 Headboard width : 0.1132m

Include Headboard in Diagonal: Diagonal from Outer End of Headboard

Fanned Foot Curve Depths

25.0%	50.0%	75.0%
0.0982m	0.1365m	0.1028m

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Seam Allowances			
Zone: 1	Split	Radial	Cross
	0.000m	0.000m	0.060m

Edge Excesses			
Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	13.64
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	38.10	1,2,3,4,5 6