

Mainsail: 5001004-1.des

Design Info
=====

Design File:
E:\Dropbox\Fareast Sails\2021\5001004 Alastair\5001004-1.des

Initial Design Date: 9/10/2021
Boat:

Comments:

Client:

Design Data
=====

Main

Measurements

Luff geodesic: 12.390m
 Leech geodesic: 13.057m
 Foot geodesic: 4.480m
 Head geodesic: 0.200m
 Upper width (MUW): 0.882m
 Three-quarter width (MTW): 1.582m
 Half width (MHW): 2.781m
 Quarter width (MQW): 3.702m
 Foot median: 12.674m
 ORC Mainsail area: 32.216m?
 Surface area: 32.979m?
 Clew height: 0.100m
 Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.381m	0.244m	72.134?	9.905m	10.405m	Full
60.000%	2.407m	0.330m	72.134?	7.428m	7.804m	Full
40.000%	3.212m	0.275m	72.134?	4.952m	5.202m	Full
20.000%	3.879m	0.151m	72.134?	2.476m	2.601m	Full

Reefing Points

1, Luff: 1.858m ; Leech: 1.934m ; Offset: 0.000m ; Number Eyelets: 2
 2, Luff: 3.716m ; Leech: 3.866m ; Offset: 0.000m ; Number Eyelets: 2

Luff Curve

Position	Depth	Fanned Luff (@ 5.00% [0.223m])	Before BSeam
12.389m,	0.000m	100% (12.390m) :	0.000m
9.292m,	-0.046m	90% (11.151m) :	0.014m
6.195m,	-0.062m	80% (9.912m) :	0.081m
3.097m,	-0.046m	70% (8.673m) :	0.117m
0.000m,	0.000m	60% (7.434m) :	0.140m
		50% (6.195m) :	0.144m
		40% (4.956m) :	0.131m
		30% (3.717m) :	0.108m
		20% (2.478m) :	0.074m
		10% (1.239m) :	0.034m
		0% (0.000m) :	0.000m

Section Data

Position	Camber	Draft	Twist	Entry	Exit	Roach	Fwd Camb	Aft Camb
100.00%	2.366%	40.694%	19.969?	24.769?	-7.857?	0.000m	2.302%	2.116%
80.00%	8.951%	41.325%	15.975?	44.141?	-16.691?	0.000m	7.306%	6.962%
60.00%	11.827%	41.957%	11.982?	52.762?	-20.982?	0.000m	9.439%	9.013%
40.00%	10.628%	42.589%	7.988?	51.239?	-19.071?	0.000m	8.487%	8.062%
20.00%	7.588%	43.221%	3.994?	44.917?	-14.686?	0.000m	6.171%	5.794%
10.00%	5.285%	43.537%	1.997?	38.590?	-10.999?	0.000m	4.423%	4.077%
0.00%	2.300%	43.853%	0.000?	28.142?	-7.132?	0.000m	2.148%	1.899%

Chord Data

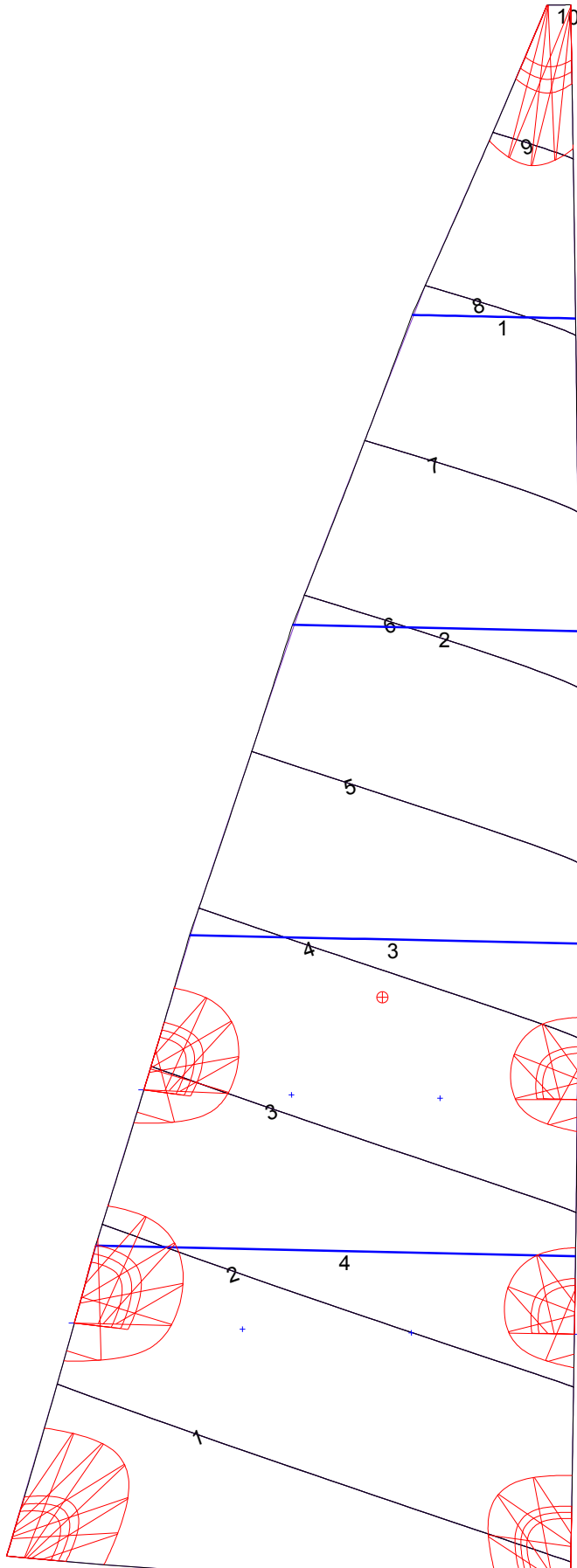
Luff P : 12.3895m
 Foot E : 4.4668m
 Leech : 13.0061m
 Headboard width : 0.1994m

Include Headboard in Diagonal: Diagonal from Outer End of Headboard

Fanned Foot Curve Depths

25.0% 50.0% 75.0%
 0.0591m 0.0795m 0.0580m

Mainsail: 5001004-1.des



Seam Allowances			
Zone: 1	Split	Radial	Cross
	0.000m	0.000m	0.025m

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

Total Seam Lengths (m)

Horizontal	24.51
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	33.01	1,2,3,4,5 6,7,8,9,10