

Mainsail: 5000924-1 Mike V4.des

Design Info
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Design File:
E:\Dropbox\Fareast Sails\2021\5000924 Mike\5000924-1 Mike V4.des

Initial Design Date: 2/11/2021
Boat:

Comments:

Client:

Design Data
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Main

Measurements

Luff geodesic: 17.250m
 Leech geodesic: 17.958m
 Foot geodesic: 6.530m
 Head geodesic: 0.200m
 Upper width (MUW): 1.568m
 Three-quarter width (MTW): 2.850m
 Half width (MHW): 4.642m
 Quarter width (MQW): 5.660m
 Foot median: 17.480m
 ORC Mainsail area: 71.323m?
 Surface area: 74.103m?
 Clew height: 0.100m
 Mast rake: 1.207m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
83.333%	2.352m	0.968m	74.241?	14.358m	14.864m	Full
66.667%	3.813m	1.248m	74.241?	11.486m	11.892m	Full
50.000%	4.765m	1.104m	74.241?	8.614m	8.919m	Full
33.333%	5.428m	0.765m	74.241?	5.742m	5.946m	Full
16.667%	5.952m	0.346m	74.241?	2.871m	2.973m	Full

Reefing Points

- 1, Luff: 2.584m ; Leech: 2.630m ; Offset: 0.000m ; Number Eyelets: 3
- 2, Luff: 5.169m ; Leech: 5.246m ; Offset: 0.000m ; Number Eyelets: 3
- 3, Luff: 7.755m ; Leech: 7.864m ; Offset: 0.000m ; Number Eyelets: 3

Luff Curve

		Fanned Luff (@ 5.00% [0.325m])	Before BSeam
17.249m,	0.000m	100% (17.250m) :	0.000m
12.937m,	-0.063m	90% (15.526m) :	0.019m
8.625m,	-0.085m	80% (13.800m) :	0.037m
4.312m,	-0.063m	70% (12.075m) :	0.051m
0.000m,	0.000m	60% (10.350m) :	0.058m
		50% (8.625m) :	0.059m
		40% (6.900m) :	0.056m
		30% (5.175m) :	0.048m
		20% (3.450m) :	0.034m
		10% (1.726m) :	0.016m
		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	7.308%	6.964%
60.00%	11.827%	41.957%	11.982?	52.762?	-20.982?	0.000m	9.440%	9.012%
40.00%	10.628%	42.589%	7.988?	51.239?	-19.071?	0.000m	8.488%	8.063%
20.00%	7.588%	43.221%	3.994?	44.917?	-14.686?	0.000m	6.172%	5.795%
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%	1.898%

Chord Data

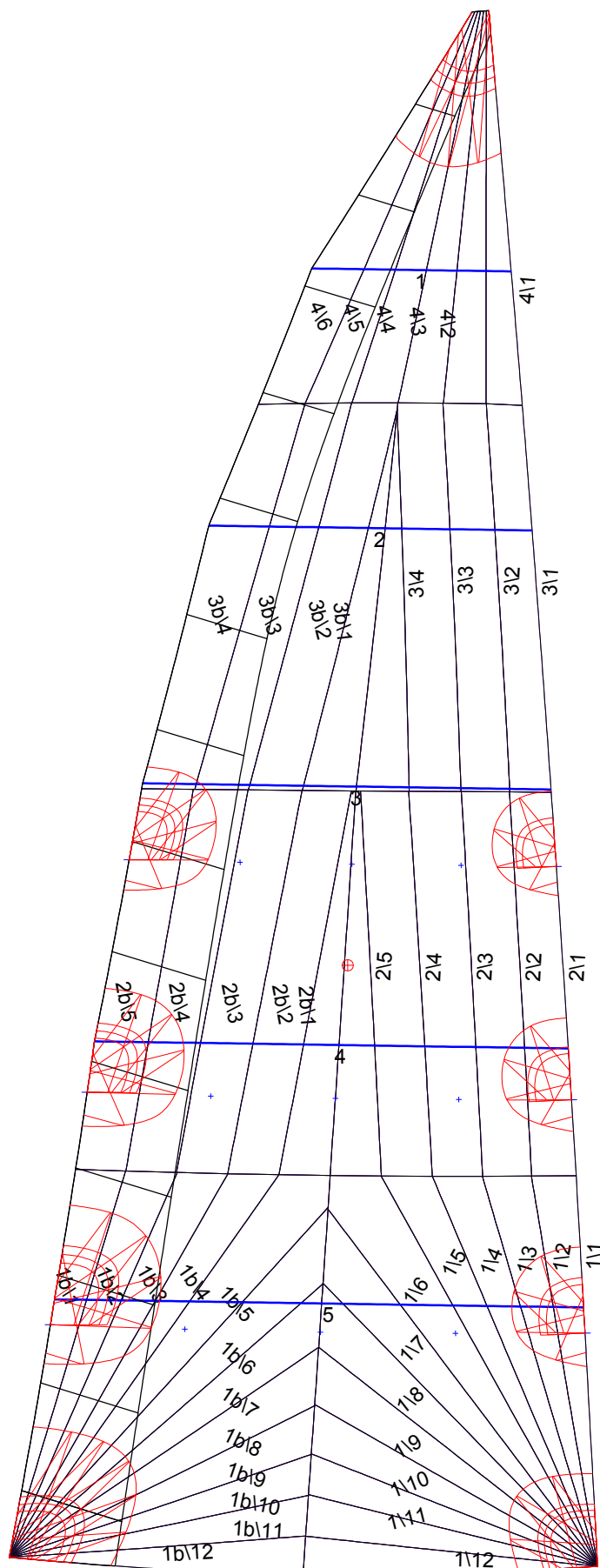
Luff P : 17.2493m
 Foot E : 6.5104m
 Leech : 17.8373m
 Headboard width : 0.1994m

Include Headboard in Diagonal: Diagonal from Outer End of Headboard

Fanned Foot Curve Depths

25.0% 50.0% 75.0%
 0.0859m 0.1153m 0.0837m

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Seam Allowances

	Split	Radial	Cross
Zone: 1/a	0.038m	0.015m	0.038m
Zone: 1/b	0.038m	0.015m	0.038m
Zone: 2/a	0.038m	0.015m	0.038m
Zone: 2/b	0.038m	0.015m	0.038m
Zone: 3/a	0.038m	0.015m	0.038m
Zone: 3/b	0.038m	0.015m	0.038m
Zone: 4	0.038m	0.015m	0.038m
Cover 1	0.025m	0.025m	0.025m

Edge Excesses

	Luff	Leech	Foot
Sail:	0.000m	0.000m	0.000m
Cover 0	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	13.57
Radial/Vertical	176.90
Bi-Radial Split	13.39

Materials

Material	Area (m ²)	Panels
Material 1	74.21	1\1, 1\2, 1\3, 1\4, 1\5 1\6, 1\7, 1\8, 1\9, 1\10 1\11, 1\12, 1b\1, 1b\2, 1b\3 1b\4, 1b\5, 1b\6, 1b\7, 1b\8 1b\9, 1b\10, 1b\11, 1b\12, 2\1 2\2, 2\3, 2\4, 2\5, 2b\1 2b\2, 2b\3, 2b\4, 2b\5, 3\1 3\2, 3\3, 3\4, 3b\1, 3b\2 3b\3, 3b\4, 4\1, 4\2, 4\3 4\4, 4\5, 4\6