

Mainsail: 7000407 Andrew MainsailV3.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2023 Order\Need Confrim Order\7000407 Andrew\700

Initial Design Date: 12/4/2023
Boat:

Comments:

Client:

Design Data
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Main

Measurements

Luff geodesic:	34.314Ft
Leech geodesic:	36.896Ft
Foot geodesic:	14.583Ft
Head geodesic:	0.377Ft
Upper width (MUW):	2.599Ft
Three-quarter width (MTW):	4.749Ft
Half width (MHW):	8.250Ft
Quarter width (MQW):	11.505Ft
Foot median:	35.416Ft
ORC Mainsail area:	274.516Ft?
Surface area:	280.163Ft?
Clew height:	-0.451Ft
Mast rake:	0.000Ft

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	4.165Ft	0.639Ft	68.849?	27.433Ft	29.408Ft	Full
60.000%	4.360Ft	0.427Ft	68.849?	20.573Ft	22.056Ft	
40.000%	4.360Ft	0.235Ft	68.849?	13.714Ft	14.704Ft	
20.000%	3.633Ft	0.121Ft	68.849?	6.857Ft	7.352Ft	

Reefing Points

1, Luff: 5.146Ft ; Leech: 5.535Ft ; Offset: 0.000Ft ; Number Eyelets: 2

Draft Stripes

1, Luff: 11.320Ft ; Leech: 11.864Ft ;
2, Luff: 22.643Ft ; Leech: 24.021Ft ;

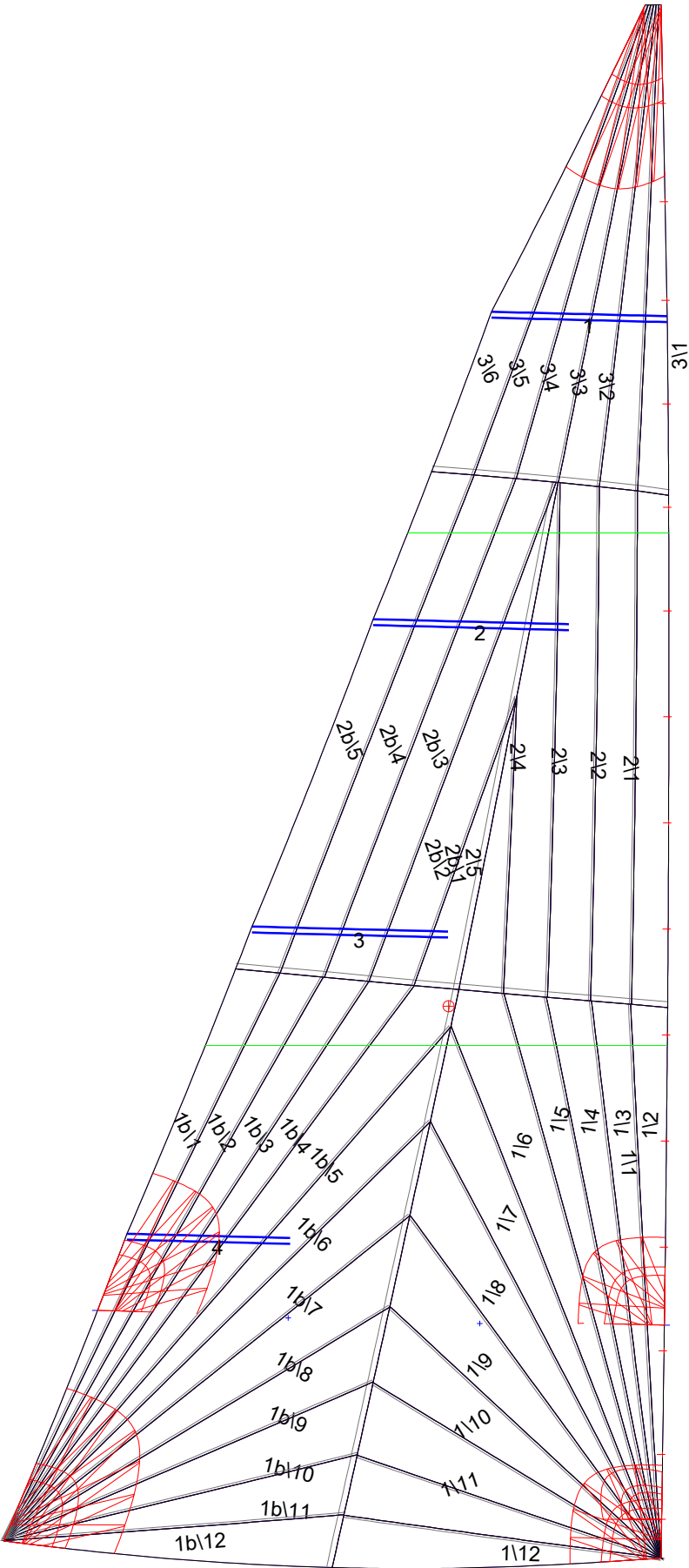
Luff Slides

1, Position: 2.290Ft
2, Position: 4.580Ft
3, Position: 6.870Ft
4, Position: 9.212Ft
5, Position: 11.555Ft
6, Position: 13.897Ft
7, Position: 16.239Ft
8, Position: 18.582Ft
9, Position: 20.924Ft
10, Position: 23.210Ft
11, Position: 25.496Ft
12, Position: 27.782Ft
13, Position: 29.959Ft
14, Position: 32.137Ft

Luff Curve

		Fanned Luff (@ 5.00% [0.726Ft])	Before BSeam
34.313Ft,	0.000Ft	100% (34.314Ft) :	0.000Ft
30.037Ft,	-0.092Ft	90% (30.883Ft) :	0.051Ft
25.734Ft,	-0.152Ft	80% (27.451Ft) :	0.096Ft
21.421Ft,	-0.172Ft	70% (24.020Ft) :	0.117Ft
17.156Ft,	-0.169Ft	60% (20.589Ft) :	0.119Ft
12.785Ft,	-0.149Ft	50% (17.157Ft) :	0.113Ft
8.578Ft,	-0.113Ft	40% (13.726Ft) :	0.100Ft
4.276Ft,	-0.061Ft	30% (10.294Ft) :	0.080Ft
0.000Ft,	0.000Ft	20% (6.863Ft) :	0.054Ft
		10% (3.432Ft) :	0.025Ft
		0% (0.000Ft) :	0.000Ft

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Seam Allowances			
	Split	Radial	Cross
Zone: 1/a	0.125Ft	0.049Ft	0.125Ft
Zone: 1/b	0.125Ft	0.049Ft	0.125Ft
Zone: 2/a	0.125Ft	0.049Ft	0.125Ft
Zone: 2/b	0.125Ft	0.049Ft	0.125Ft
Zone: 3	0.125Ft	0.049Ft	0.125Ft

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

Total Seam Lengths (Ft)

Horizontal	15.61
Radial/Vertical	386.16
Bi-Radial Split	25.57

Materials

Material	Area (Ft²)	Panels
Material 1	280.69	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\4,3\5,3\6