

Mainsail: 8000240 Elie-1 fullbattMaisailV4.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000240 Elie main

Initial Design Date: 26/3/2024
Boat:

Client:

Comments:
tack angle 88.5deg

luff=13.365m, leech=13.965m, foot=4.27m
4 full batten from top length:
@1=1.210m, @2=2.210m, @3=3.057m, @4=3.720m.
foot total 10 sliders, even space 390mm

Design Data
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Main

Measurements

Luff geodesic:	13.365m
Leech geodesic:	13.965m
Foot geodesic:	4.270m
Head geodesic:	0.135m
Upper width (MUW):	0.791m
Three-quarter width (MTW):	1.446m
Half width (MHW):	2.621m
Quarter width (MQW):	3.555m
Foot median:	13.547m
ORC Mainsail area:	32.828m?
Surface area:	33.316m?
Clew height:	0.175m
Mast rake:	0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.282%	1.209m	0.172m	74.207?	10.724m	11.175m	Full
60.381%	2.210m	0.290m	74.207?	8.065m	8.405m	Full
40.244%	3.057m	0.285m	74.207?	5.375m	5.602m	Full
20.117%	3.720m	0.161m	74.207?	2.686m	2.800m	Full

Reefing Points

- 1, Luff: 1.530m ; Leech: 1.577m ; Offset: 0.000m ; Number Eyelets: 3
- 2, Luff: 3.290m ; Leech: 3.389m ; Offset: 0.000m ; Number Eyelets: 3
- 3, Luff: 5.980m ; Leech: 6.164m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

- 1, Luff: 4.409m ; Leech: 4.457m ;
- 2, Luff: 8.819m ; Leech: 9.067m ;

Luff Slides

- 1, Position: 0.895m
- 2, Position: 1.900m
- 3, Position: 3.678m
- 4, Position: 4.479m
- 5, Position: 6.405m
- 6, Position: 7.168m
- 7, Position: 8.951m
- 8, Position: 9.837m
- 9, Position: 11.604m
- 10, Position: 12.485m

Foot Slides

- 1, Position: 0.376m
- 2, Position: 0.767m
- 3, Position: 1.158m
- 4, Position: 1.549m
- 5, Position: 1.940m
- 6, Position: 2.330m
- 7, Position: 2.721m
- 8, Position: 3.112m
- 9, Position: 3.503m
- 10, Position: 3.894m

Luff Curve

13.365m,	0.000m
11.699m,	-0.031m
10.023m,	-0.053m
8.344m,	-0.062m
6.682m,	-0.064m
4.980m,	-0.059m
3.341m,	-0.047m
1.665m,	-0.027m
0.000m,	0.000m

Fanned Luff (@ 5.00% [0.213m])

100% (13.365m) :	0.000m
90% (12.029m) :	0.019m
80% (10.692m) :	0.034m
70% (9.356m) :	0.043m
60% (8.019m) :	0.046m
50% (6.683m) :	0.045m
40% (5.346m) :	0.042m
30% (4.009m) :	0.036m
20% (2.673m) :	0.025m
10% (1.337m) :	0.012m
0% (0.000m) :	0.000m

Before BSeam

-0.000m
0.049m
0.091m
0.120m
0.137m
0.142m
0.139m
0.122m
0.090m
0.044m
0.000m

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Seam Allowances			
Zone:	Split	Radial	Cross
1	0.035m	0.035m	0.035m

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

Total Seam Lengths (m)

Horizontal	28.97
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	33.32	1,2,3,4,5 6,7,8,9,10 11,12

