

# Mainsail: 8000616 Ed Catalina 42 Mainsail.des

## Design Info

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Initial Design Date: 28/6/2024

Boat:

Catalina 42

Client:

## Design File:

\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000616 Ed Catalina

Comments:

## Design Data

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### Main

#### Measurements

Luff geodesic:	14.107m
Leech geodesic:	14.796m
Foot geodesic:	4.724m
Head geodesic:	0.135m
Foot(Inc Luff Rope):	4.764m
Head(Inc Luff Rope):	0.175m
Upper width (MUW):	0.944m
Three-quarter width (MTW):	1.692m
Half width (MHW):	2.955m
Quarter width (MQW):	3.961m
Foot median:	14.409m
ORC Mainsail area:	38.979m <sup>2</sup>
Surface area:	39.414m <sup>2</sup>
Clew height:	0.100m
Mast rake:	0.000m

### Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.426m	0.270m	73.302?	11.281m	11.803m	Full
60.000%	2.503m	0.364m	73.302?	8.462m	8.853m	Full
40.000%	1.450m	0.320m	73.302?	5.643m	5.902m	
20.000%	1.300m	0.178m	73.302?	2.824m	2.951m	

### Reefing Points

1, Luff: 2.115m ; Leech: 2.183m ; Offset: 0.000m ; Number Eyelets: 3

### Draft Stripes

1, Luff: 4.654m ; Leech: 4.707m ;  
2, Luff: 9.309m ; Leech: 9.584m ;

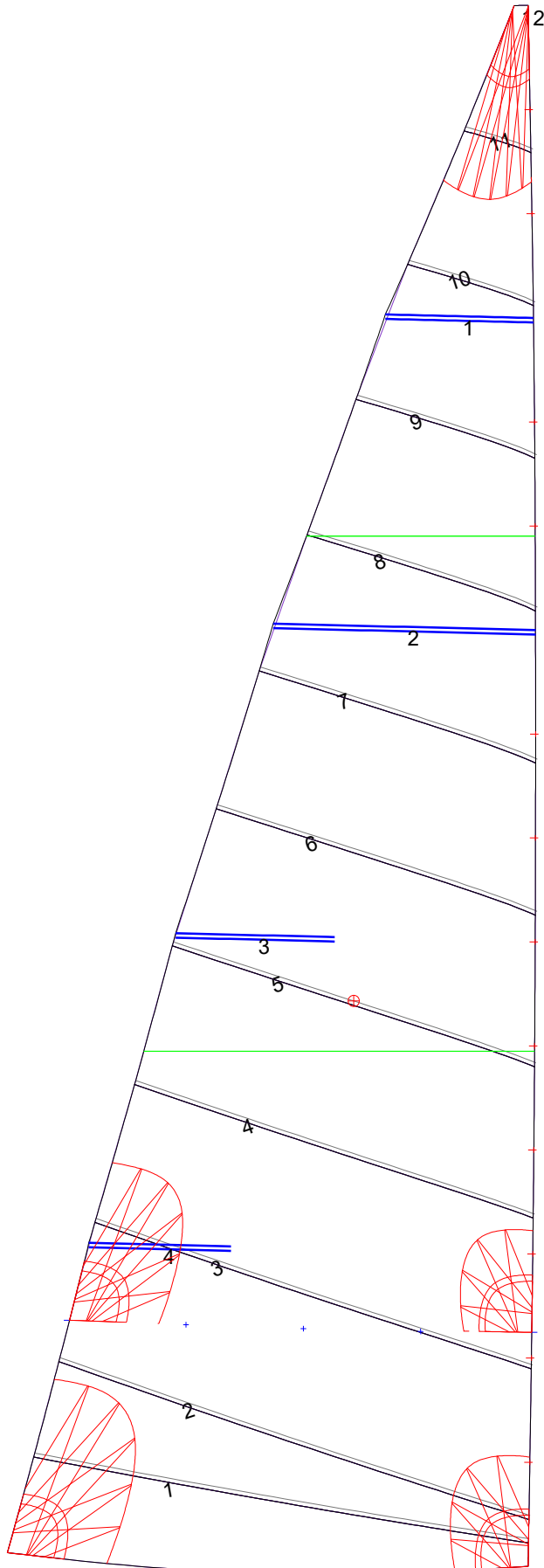
### Luff Slides

1, Position: 0.941m  
2, Position: 1.883m  
3, Position: 2.824m  
4, Position: 3.764m  
5, Position: 4.703m  
6, Position: 5.643m  
7, Position: 6.582m  
8, Position: 7.522m  
9, Position: 9.401m  
10, Position: 10.341m  
11, Position: 12.223m  
12, Position: 13.165m

### Luff Curve

		Fanned Luff (@ 5.00% [0.235m])	Before BSeam
14.107m,	0.000m	100% (14.107m) :	0.000m
12.349m,	-0.033m	90% (12.697m) :	0.020m
10.580m,	-0.056m	80% (11.286m) :	0.099m
8.807m,	-0.066m	70% (9.875m) :	0.131m
7.053m,	-0.067m	60% (8.464m) :	0.149m
5.256m,	-0.062m	50% (7.054m) :	0.154m
3.527m,	-0.050m	40% (5.643m) :	0.149m
1.758m,	-0.028m	30% (4.232m) :	0.129m
0.000m,	0.000m	20% (2.821m) :	0.095m
		10% (1.411m) :	0.048m
		0% (0.000m) :	0.000m

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Seam Allowances			
Zone:	Split	Radial	Cross
1	0.038m	0.038m	0.038m

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

### Total Seam Lengths (m)

Horizontal	32.78
Radial/Vertical	0.00
Bi-Radial Split	0.00

### Materials

Material	Area (m <sup>2</sup> )	Panels
Material 1	39.42	1,2,3,4,5 6,7,8,9,10 11,12