

Mainsail: 8000616 Ed Catalina 42 MainsailV1.des

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

Initial Design Date: 6/7/2024
Boat:
Catalina 42
Client:

Comments:

Design Data
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Main

Measurements

| | |
|----------------------------|----------------------|
| Luff geodesic: | 14.107m |
| Leech geodesic: | 14.782m |
| Foot geodesic: | 4.677m |
| Head geodesic: | 0.135m |
| Foot(Inc Luff Rope): | 4.717m |
| Head(Inc Luff Rope): | 0.175m |
| Upper width (MUW): | 0.939m |
| Three-quarter width (MTW): | 1.681m |
| Half width (MHW): | 2.931m |
| Quarter width (MQW): | 3.926m |
| Foot median: | 14.405m |
| ORC Mainsail area: | 38.645m ² |
| Surface area: | 39.067m ² |
| Clew height: | 0.100m |
| Mast rake: | 0.000m |

Battens

| Position | Length | Roach | Angle | Luff | Leech | Full |
|----------|--------|--------|---------|---------|---------|------|
| 80.000% | 1.416m | 0.270m | 73.302? | 11.284m | 11.793m | Full |
| 60.000% | 2.483m | 0.364m | 73.302? | 8.468m | 8.844m | Full |
| 40.000% | 1.450m | 0.320m | 73.302? | 5.651m | 5.896m | |
| 20.000% | 1.300m | 0.178m | 73.302? | 2.836m | 2.948m | |

Reefing Points

1, Luff: 2.115m ; Leech: 2.181m ; Offset: 0.000m ; Number Eyelets: 3

Draft Stripes

1, Luff: 4.654m ; Leech: 4.704m ;
2, Luff: 9.309m ; Leech: 9.576m ;

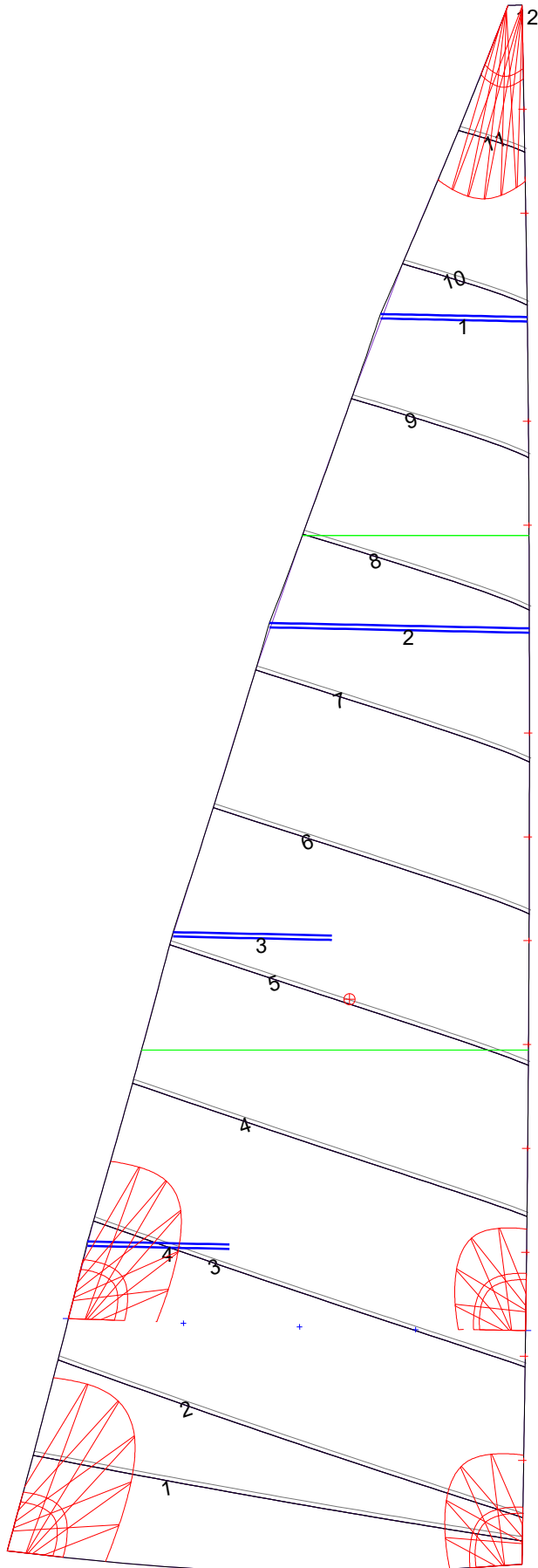
Luff Slides

- 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% [0.233m]) | Before BSeam |
|----------|---------|--------------------------------|--------------|
| 14.107m, | 0.000m | 100% (14.107m) : | 0.000m |
| 12.349m, | -0.033m | 90% (12.697m) : | 0.053m |
| 10.580m, | -0.056m | 80% (11.286m) : | 0.099m |
| 8.807m, | -0.066m | 70% (9.875m) : | 0.130m |
| 7.053m, | -0.067m | 60% (8.464m) : | 0.148m |
| 5.256m, | -0.062m | 50% (7.054m) : | 0.153m |
| 3.527m, | -0.050m | 40% (5.643m) : | 0.148m |
| 1.758m, | -0.028m | 30% (4.232m) : | 0.128m |
| 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: 1 | Split | Radial | Cross |
| | 0.038m | 0.038m | 0.038m |

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

Total Seam Lengths (m)

| | |
|-----------------|-------|
| Horizontal | 32.51 |
| Radial/Vertical | 0.00 |
| Bi-Radial Split | 0.00 |

Materials

| Material | Area (m ²) | Panels |
|------------|------------------------|----------------------------------|
| Material 1 | 39.07 | 1,2,3,4,5 6,7,8,9,10 11,12 |