

Mainsail: 7001004 Paul-1 Custom Catamaran Mainsail.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2023 Order\Need to be Confirmed\7001004 Paul\7001

Initial Design Date: 10/10/2023
Boat:

Comments:

Client:

Design Data
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Main

Measurements

| | |
|----------------------------|----------|
| Luff geodesic: | 18.560m |
| Leech geodesic: | 19.675m |
| Foot geodesic: | 6.560m |
| Head geodesic: | 0.100m |
| Upper width (MUW): | 2.166m |
| Three-quarter width (MTW): | 3.589m |
| Half width (MHW): | 4.979m |
| Quarter width (MQW): | 5.872m |
| Foot median: | 18.985m |
| ORC Mainsail area: | 83.200m? |
| Surface area: | 87.735m? |
| Clew height: | 0.100m |
| Mast rake: | 0.000m |

Battens

| Position | Length | Roach | Angle | Luff | Leech | Full |
|----------|--------|--------|---------|---------|---------|------|
| 91.030% | 2.080m | 1.292m | 88.508? | 16.675m | 17.795m | Full |
| 80.995% | 3.430m | 1.904m | 78.838? | 14.854m | 15.834m | Full |
| 70.209% | 4.210m | 1.880m | 72.149? | 13.009m | 13.725m | Full |
| 57.847% | 4.790m | 1.641m | 72.149? | 10.707m | 11.309m | Full |
| 46.455% | 5.200m | 1.324m | 72.149? | 8.587m | 9.082m | Full |
| 34.330% | 5.610m | 0.981m | 72.149? | 6.330m | 6.711m | Full |
| 22.117% | 5.998m | 0.648m | 72.149? | 4.057m | 4.324m | Full |
| 11.189% | 6.287m | 0.332m | 72.149? | 2.024m | 2.187m | Full |

Reefing Points

- 1, Luff: 2.691m ; Leech: 2.746m ; Offset: 0.000m ; Number Eyelets: 0
- 2, Luff: 5.289m ; Leech: 5.396m ; Offset: 0.000m ; Number Eyelets: 0
- 3, Luff: 9.279m ; Leech: 9.460m ; Offset: 0.000m ; Number Eyelets: 0

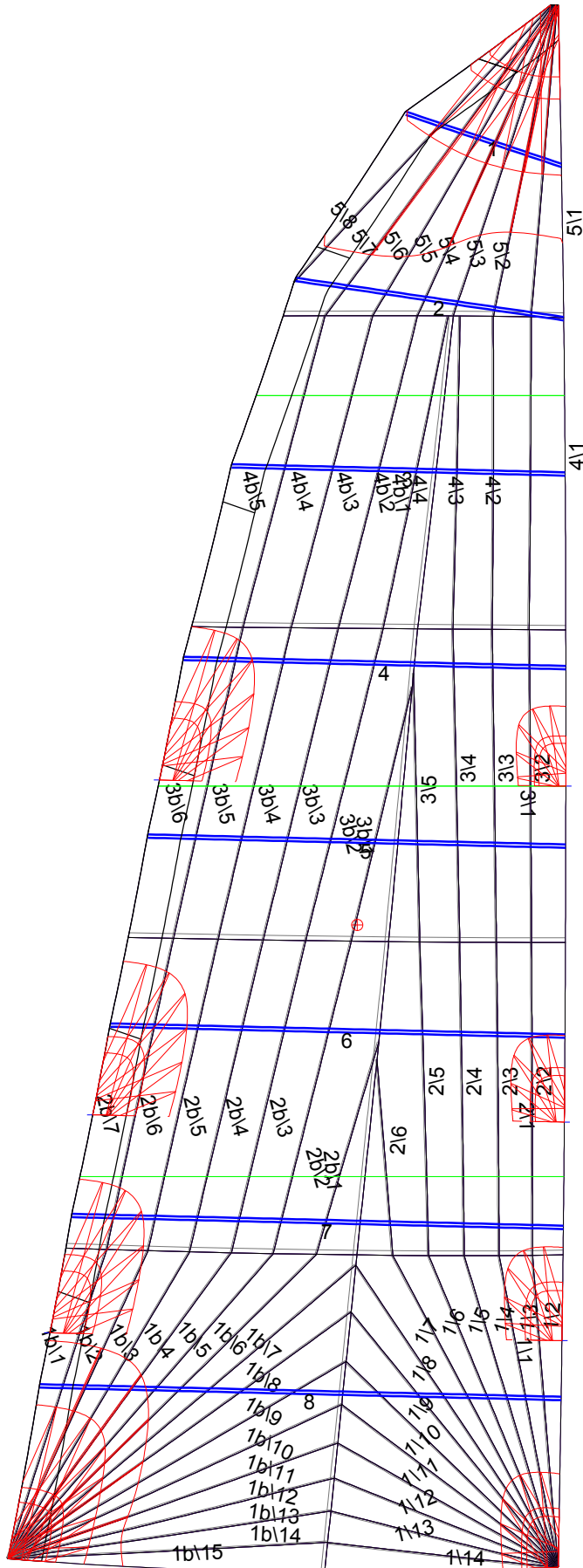
Draft Stripes

- 1, Luff: 4.639m ; Leech: 4.643m ;
- 2, Luff: 9.279m ; Leech: 9.385m ;
- 3, Luff: 13.919m ; Leech: 14.160m ;

Luff Curve

| | | Fanned Luff (@ 5.00% [0.327m]) | Before BSeam |
|----------|---------|--------------------------------|--------------|
| 18.559m, | 0.000m | 100% (18.560m) : | 0.000m |
| 16.247m, | -0.043m | 90% (16.704m) : | 0.024m |
| 13.920m, | -0.074m | 80% (14.848m) : | 0.045m |
| 11.587m, | -0.087m | 70% (12.992m) : | 0.057m |
| 9.280m, | -0.088m | 60% (11.136m) : | 0.062m |
| 6.915m, | -0.082m | 50% (9.280m) : | 0.062m |
| 4.640m, | -0.065m | 40% (7.424m) : | 0.058m |
| 2.313m, | -0.037m | 30% (5.568m) : | 0.050m |
| 0.000m, | 0.000m | 20% (3.712m) : | 0.036m |
| | | 10% (1.856m) : | 0.018m |
| | | 0% (0.000m) : | 0.000m |

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Seam Allowances

| | Split | Radial | Cross |
|-----------|--------|--------|--------|
| Zone: 1/a | 0.045m | 0.016m | 0.055m |
| Zone: 1/b | 0.045m | 0.016m | 0.055m |
| Zone: 2/a | 0.045m | 0.016m | 0.055m |
| Zone: 2/b | 0.045m | 0.016m | 0.055m |
| Zone: 3/a | 0.045m | 0.016m | 0.055m |
| Zone: 3/b | 0.045m | 0.016m | 0.055m |
| Zone: 4/a | 0.045m | 0.016m | 0.055m |
| Zone: 4/b | 0.045m | 0.016m | 0.055m |
| Zone: 5 | 0.045m | 0.016m | 0.055m |
| Cover 1 | 0.250m | 0.250m | 0.250m |

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 | 19.71 |
| Radial/Vertical | 237.95 |
| Bi-Radial Split | 15.65 |

Materials

| Material | Area (m ²) | Panels |
|------------|------------------------|--|
| Material 1 | 87.80 | 1\1,1\2,1\3,1\4,1\5 1\6,1\7,1\8,1\9,1\10 1\11,1\12,1\13,1\14,1b\1 1b\2,1b\3,1b\4,1b\5,1b\6 1b\7,1b\8,1b\9,1b\10,1b\11 1b\12,1b\13,1b\14,1b\15,2\1 2\2,2\3,2\4,2\5,2\6 2b\1,2b\2,2b\3,2b\4,2b\5 2b\6,2b\7,3\1,3\2,3\3 3\4,3\5,3b\1,3b\2,3b\3 3b\4,3b\5,3b\6,4\1,4\2 4\3,4\4,4b\1,4b\2,4b\3 4b\4,4b\5,5\1,5\2,5\3 5\4,5\5,5\6,5\7,5\8 |