

Mainsail: 8000607 Dorian-1 Trans World 41 fullbattmain.des

Fareast Sails

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000607 Dorian T

Initial Design Date: 15/6/2024
Boat:
Trans World 41
Client:
Fareast Sails

Comments:
tack angle 88.5deg

Design Data
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Main

Measurements

Luff geodesic: 38.609Ft
Leech geodesic: 41.789Ft
Foot geodesic: 16.493Ft
Head geodesic: 0.443Ft
Upper width (MUW): 3.145Ft
Three-quarter width (MTW): 5.814Ft
Half width (MHW): 10.251Ft
Quarter width (MQW): 13.783Ft
Foot median: 39.574Ft
ORC Mainsail area: 369.885Ft?
Surface area: 379.929Ft?
Clew height: 0.651Ft
Mast rake: 0.000Ft

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	5.155Ft	1.133Ft	68.753?	30.868Ft	33.254Ft	Full
60.000%	8.919Ft	1.472Ft	68.753?	23.148Ft	24.940Ft	Full
40.000%	12.001Ft	1.298Ft	68.753?	15.429Ft	16.627Ft	Full
20.000%	14.474Ft	0.749Ft	68.753?	7.712Ft	8.313Ft	Full

Reefing Points

1, Luff: 4.709Ft ; Leech: 5.045Ft ; Offset: 0.000Ft ; Number Eyelets: 4
2, Luff: 10.228Ft ; Leech: 10.740Ft ; Offset: 0.000Ft ; Number Eyelets: 3
3, Luff: 16.405Ft ; Leech: 17.343Ft ; Offset: 0.000Ft ; Number Eyelets: 2

Draft Stripes

1, Luff: 9.649Ft ; Leech: 9.753Ft ;
2, Luff: 19.300Ft ; Leech: 20.052Ft ;
3, Luff: 28.952Ft ; Leech: 30.545Ft ;

Luff Slides

1, Position: 2.571Ft
2, Position: 5.957Ft
3, Position: 9.686Ft
4, Position: 12.857Ft
5, Position: 18.002Ft
6, Position: 20.575Ft
7, Position: 25.721Ft
8, Position: 28.294Ft
9, Position: 33.448Ft
10, Position: 36.029Ft

Luff Curve

		Fanned Luff (@ 5.00% [0.822Ft])	Before BSeam
38.608Ft,	0.000Ft	100% (38.609Ft) :	0.000Ft -0.000Ft
33.797Ft,	-0.089Ft	90% (34.749Ft) :	0.054Ft 0.173Ft
28.956Ft,	-0.153Ft	80% (30.887Ft) :	-0.098Ft 0.320Ft
24.103Ft,	-0.180Ft	70% (27.027Ft) :	0.122Ft 0.418Ft
19.303Ft,	-0.183Ft	60% (23.166Ft) :	0.129Ft 0.474Ft
14.386Ft,	-0.170Ft	50% (19.305Ft) :	0.126Ft 0.490Ft
9.652Ft,	-0.136Ft	40% (15.444Ft) :	0.115Ft 0.474Ft
4.811Ft,	-0.077Ft	30% (11.583Ft) :	0.095Ft 0.412Ft
0.000Ft,	0.000Ft	20% (7.722Ft) :	0.067Ft 0.302Ft
		10% (3.861Ft) :	0.031Ft 0.152Ft
		0% (0.000Ft) :	0.000Ft 0.000Ft

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Seam Allowances			
Zone: 1	Split	Radial	Cross
	0.115Ft	0.115Ft	0.115Ft

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

Total Seam Lengths (Ft)

Horizontal	109.90
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (Ft ²)	Panels
Material 1	380.04	1,2,3,4,5 6,7,8,9,10 11

