

Mainsail: 4001029 Scott main.des

Design Info
=====

Design File:
F:\Dropbox (个人)\Fareast Sails\2020\4001029 Scott\4001029 Scott main.des

Initial Design Date: 3/11/2020
Boat:

Comments:

Client:

Design Data
=====

Main

Measurements

Luff geodesic: 14.180m
Leech geodesic: 14.607m
Foot geodesic: 4.650m
Head geodesic: 0.115m
Upper width (MUW): 0.813m
Three-quarter width (MTW): 1.508m
Half width (MHW): 2.739m
Quarter width (MQW): 3.756m
Foot median: 14.373m
ORC Mainsail area: 36.820m?
Surface area: 37.445m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.275m	0.163m	75.972?	11.333m	11.656m	Full
60.000%	2.318m	0.225m	75.972?	8.498m	8.742m	Full
40.000%	3.191m	0.187m	75.972?	5.664m	5.828m	Full
20.000%	3.953m	0.107m	75.972?	2.831m	2.914m	Full

Reefing Points

1, Luff: 1.983m ; Leech: 2.035m ; Offset: 0.000m ; Number Eyelets: 2
2, Luff: 3.542m ; Leech: 3.632m ; Offset: 0.000m ; Number Eyelets: 2

Luff Curve

		Fanned Luff (@ 5.00% [0.231m])	Before BSeam
14.180m,	0.000m	100% (14.180m) :	0.000m
12.413m,	-0.030m	90% (12.763m) :	0.016m
10.635m,	-0.051m	80% (11.344m) :	0.093m
8.852m,	-0.062m	70% (9.926m) :	0.129m
7.090m,	-0.064m	60% (8.508m) :	0.150m
5.283m,	-0.060m	50% (7.090m) :	0.153m
3.545m,	-0.048m	40% (5.672m) :	0.141m
1.767m,	-0.027m	30% (4.254m) :	0.116m
0.000m,	0.000m	20% (2.836m) :	0.081m
		10% (1.418m) :	0.040m
		0% (0.000m) :	0.000m

Section Data

Position	Camber	Draft	Twist	Entry	Exit	Roach	Fwd Camb	Aft Camb
100.00%	6.165%	40.694%	18.989?	28.511?	-10.923?	0.000m	5.192%	4.558%
80.00%	11.039%	41.325%	15.191?	39.315?	-16.808?	0.000m	9.033%	8.058%
60.00%	12.581%	41.957%	11.394?	42.120?	-19.352?	0.225m	10.282%	9.221%
40.00%	11.131%	42.589%	7.596?	38.578?	-16.091?	0.187m	9.168%	8.051%
20.00%	7.870%	43.221%	3.798?	30.264?	-11.389?	0.107m	6.604%	5.659%
10.00%	5.807%	43.537%	1.899?	24.177?	-7.945?	0.055m	4.896%	4.101%
0.00%	3.000%	43.853%	0.000?	16.209?	-4.033?	0.000m	2.655%	2.088%

Chord Data

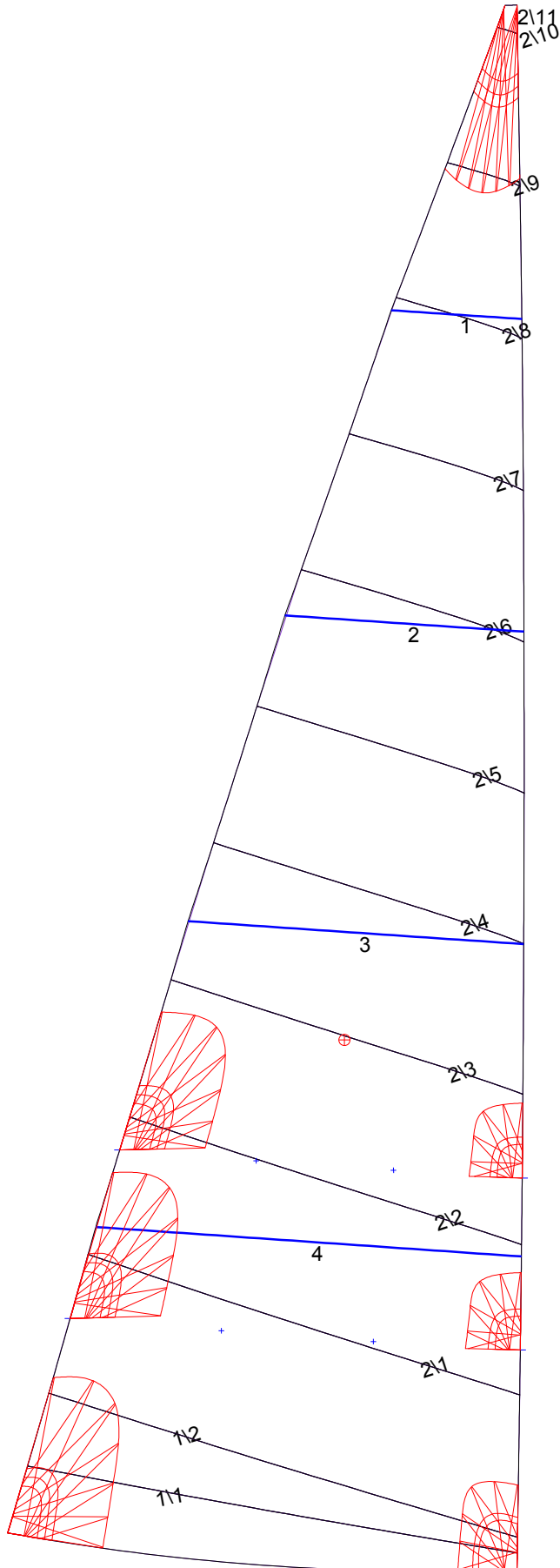
Luff P : 14.1796m
Foot E : 4.6339m
Leech : 14.7290m
Headboard width : 0.1136m

Include Headboard in Diagonal: Diagonal from Outer End of Headboard

Fanned Foot Curve Depths

25.0%	50.0%	75.0%
0.0831m	0.1151m	0.0861m

Mainsail: 4001029 Scott main.des



Seam Allowances

	Split	Radial	Cross
Zone: 1	0.038m	0.038m	0.038m
Zone: 2	0.038m	0.038m	0.038m

Edge Excesses

Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	32.53
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	37.49	1\1, 1\2, 2\1, 2\2, 2\3 2\4, 2\5, 2\6, 2\7, 2\8 2\9, 2\10, 2\11