



<b>BOAT</b>	
Name <b>Matilda 3</b>	Sail Nr <b>EST 462</b>
File <b>Est0462</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>03/07/2007</b>		SG <b>1.0020</b>	
FFM <b>1.295</b>	FF <b>1.306</b>	SFFP <b>0.172</b>	
FAM <b>1.029</b>	FA <b>1.035</b>	SAFP <b>9.530</b>	
W1 <b>62.4</b>	PD1 <b>203.0</b>	WD <b>9.780</b>	
W2 <b>62.4</b>	PD2 <b>204.0</b>	GSA <b>12.6</b>	
W3 <b>62.4</b>	PD3 <b>203.0</b>	RSA <b>4298.7</b>	
W4 <b>62.4</b>	PD4 <b>204.0</b>	PLM <b>2005.0</b>	
LCF from stem on CL / on sheer		<b>5.409 / 5.642</b>	
Maximum beam station from stem		<b>6.642</b>	
RM Measured		<b>104.9kg·m</b>	
RM Default		<b>99.7kg·m</b>	
Limit of positive stability / Stab.Index		<b>128.7° / 128.3</b>	
Freeboard at mast at 3.660		<b>1.165</b>	



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**2019**  
**Measurements**  
**Datasheet**

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>		
Inner Stay <b>None Fitted</b>	Runners <b>0</b>		
Carbon Mast <b>Yes</b>	Jumper Struts <b>None</b>		
Taper Hollows <b>No</b>	Jib Furler <b>No</b>		
Fiber Rigging <b>No</b>	Main Furler <b>No</b>		
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>		
Articulated Bowsprit <b>No</b>			
P <b>12.800</b>	E <b>4.470</b>	MDT1 <b>0.103</b>	MW <b>0.172</b>
IG <b>13.160</b>	J <b>3.660</b>	MDL1 <b>0.172</b>	GO <b>0.197</b>
ISP <b>13.300</b>	SFJ <b>0.000</b>	MDT2 <b>0.103</b>	BD <b>0.132</b>
BAS <b>1.505</b>	SPL <b>3.700</b>	MDL2 <b>0.140</b>	MWT <b>106.00</b>
FSP <b>0.066</b>	TPS	TL <b>1.000</b>	MCG <b>4.740</b>

<b>MIZZEN RIG AND SAILS</b>	
N/A	

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.410</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.118</b>		
Twin Screw <b>No</b>	PIPA <b>0.0030</b>		
ST1 <b>0.035</b>	ST3 <b>0.185</b>	ST5 <b>0.280</b>	
ST2 <b>0.185</b>	ST4 <b>0.100</b>	EDL <b>1.790</b>	

<b>Certificate</b>	
Number <b>EST462</b>	
ORC Ref <b>EST00000539</b>	
Issued On <b>5/13/2019</b>	
VPP Ver. <b>2019 1.01</b>	
Valid until <b>12/31/2019</b>	

<b>COMMENTS</b>	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
4a	0.17	0.94	1.67	2.85	3.72	33.83	EST 1	10/10/2016	NorthSails	Unknown						
<b>HEADSAILS (5)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
9a	0.12	0.65	1.18	2.12	2.99	3.76	13.16	103%	26.85			EST 7	06/06/2018		Unknown	Jib Light
8a	0.10	0.58	1.09	2.05	2.94	3.75	13.00	102%	25.84			EST 1	10/10/2016	NorthSails	Unknown	Medium 2016
7a	0.11	0.58	1.09	2.06	2.94	3.75	12.93	102%	25.73			EST 1	13/06/2017		Unknown	Blast reacher
5b	0.10	0.58	1.08	2.02	2.90	3.72	12.95	102%	25.45			EST 1	13/06/2017		Unknown	Light 2013
3	0.10	0.48	0.89	1.74	2.62	3.55	12.54	97%	22.17			D206	14/12/2007		Unknown	
<b>SYMMETRIC SPINNAKERS (6)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
3	13.40	13.40	13.40	6.95	6.60	76.83				Unknown	S2					
5	13.34	13.34	13.34	6.92	6.86	76.80	Hemamali	01/11/2017		Unknown	S1,5					
4	13.24	13.24	13.24	6.46	6.90	72.25	Hemamali	06/11/2017		Unknown	S3					
1	13.10	13.10	13.10	6.63	6.28	71.62	D206	04/06/2014	NorthSails	Unknown						
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>A.Tetsmann EST 1</b>				
Date <b>03/07/2007</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	40.0	4.40	Anchor, starb.
2	Anchor	5.0	4.40	Anchor, ports.
4	Tools	44.0	5.70	Toolbox, center
Id	Item	Maker	Model	
1	Engine	Yanmar	3YM20	
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condn	Description
1	Tank	Water	Plastic	100.0	4.00		0-0	Water tank
2	Tank	Fuel	Plastic	60.0	7.55		0-0	Diesel tank
Id	Item	Weight	Distance	VCG Description				
1	Battery		3.75	Battery 70Ah ports.				
2	Battery		2.95	Battery 70Ah ports.				

# 2019

## ORC Club Certificate Appendix

### BOAT

Name	<b>Matilda 3</b>	Certificate Number	<b>EST462</b>
Sail Nr	<b>EST 462</b>	Issued On	<b>5/13/2019</b>

### TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1089.5</b>	<b>904.5</b>	<b>793.8</b>	<b>734.0</b>	<b>713.2</b>	<b>705.3</b>	<b>697.8</b>
52°	<b>711.1</b>	<b>600.0</b>	<b>543.1</b>	<b>518.6</b>	<b>507.6</b>	<b>503.5</b>	<b>500.8</b>
60°	<b>671.8</b>	<b>571.2</b>	<b>527.9</b>	<b>507.0</b>	<b>495.0</b>	<b>489.3</b>	<b>486.1</b>
75°	<b>644.4</b>	<b>551.9</b>	<b>516.6</b>	<b>497.0</b>	<b>481.3</b>	<b>468.9</b>	<b>457.2</b>
90°	<b>653.2</b>	<b>547.9</b>	<b>506.9</b>	<b>487.0</b>	<b>477.6</b>	<b>460.9</b>	<b>433.8</b>
110°	<b>649.7</b>	<b>540.6</b>	<b>500.9</b>	<b>475.3</b>	<b>451.4</b>	<b>433.6</b>	<b>414.5</b>
120°	<b>669.9</b>	<b>553.0</b>	<b>506.6</b>	<b>480.1</b>	<b>454.6</b>	<b>430.4</b>	<b>393.5</b>
135°	<b>740.6</b>	<b>602.8</b>	<b>529.9</b>	<b>497.8</b>	<b>473.3</b>	<b>448.2</b>	<b>401.7</b>
150°	<b>875.6</b>	<b>696.8</b>	<b>589.6</b>	<b>527.9</b>	<b>498.4</b>	<b>475.5</b>	<b>430.1</b>
Run VMG	<b>1011.0</b>	<b>804.6</b>	<b>680.0</b>	<b>599.0</b>	<b>542.7</b>	<b>508.0</b>	<b>462.8</b>

  

Selected Courses							
Windward / Leeward	<b>1050.3</b>	<b>854.5</b>	<b>736.9</b>	<b>666.5</b>	<b>627.9</b>	<b>606.6</b>	<b>580.3</b>
Circular Random	<b>884.7</b>	<b>713.9</b>	<b>622.2</b>	<b>569.0</b>	<b>536.3</b>	<b>514.9</b>	<b>487.5</b>
Coastal / Long Distance	<b>1046.3</b>	<b>802.1</b>	<b>665.2</b>	<b>586.0</b>	<b>546.8</b>	<b>516.3</b>	<b>465.7</b>
Non Spinnaker	<b>945.1</b>	<b>756.6</b>	<b>654.0</b>	<b>593.7</b>	<b>556.5</b>	<b>532.5</b>	<b>503.1</b>

### Velocity Prediction in Knots for True Wind Speeds

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42.6°</b>	<b>41.3°</b>	<b>40.9°</b>	<b>39.0°</b>	<b>38.6°</b>	<b>38.4°</b>	<b>38.3°</b>
Beat VMG	<b>3.30</b>	<b>3.98</b>	<b>4.54</b>	<b>4.90</b>	<b>5.05</b>	<b>5.10</b>	<b>5.16</b>
52°	<b>5.06</b>	<b>6.00</b>	<b>6.63</b>	<b>6.94</b>	<b>7.09</b>	<b>7.15</b>	<b>7.19</b>
60°	<b>5.36</b>	<b>6.30</b>	<b>6.82</b>	<b>7.10</b>	<b>7.27</b>	<b>7.36</b>	<b>7.41</b>
75°	<b>5.59</b>	<b>6.52</b>	<b>6.97</b>	<b>7.24</b>	<b>7.48</b>	<b>7.68</b>	<b>7.87</b>
90°	<b>5.51</b>	<b>6.57</b>	<b>7.10</b>	<b>7.39</b>	<b>7.54</b>	<b>7.81</b>	<b>8.30</b>
110°	<b>5.54</b>	<b>6.66</b>	<b>7.19</b>	<b>7.57</b>	<b>7.98</b>	<b>8.30</b>	<b>8.69</b>
120°	<b>5.37</b>	<b>6.51</b>	<b>7.11</b>	<b>7.50</b>	<b>7.92</b>	<b>8.36</b>	<b>9.15</b>
135°	<b>4.86</b>	<b>5.97</b>	<b>6.79</b>	<b>7.23</b>	<b>7.61</b>	<b>8.03</b>	<b>8.96</b>
150°	<b>4.11</b>	<b>5.17</b>	<b>6.11</b>	<b>6.82</b>	<b>7.22</b>	<b>7.57</b>	<b>8.37</b>
Run VMG	<b>3.56</b>	<b>4.47</b>	<b>5.29</b>	<b>6.01</b>	<b>6.63</b>	<b>7.09</b>	<b>7.78</b>
Gybe Angles	<b>145.3°</b>	<b>149.8°</b>	<b>151.1°</b>	<b>158.2°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>