

<b>BOAT</b> Name <b>OLYMPIC</b> Sail Nr <b>EST 463</b>	<b>GPH</b> <b>572.0</b>	<b>HULL</b> Length Overall <b>12.350m</b> Maximum Beam <b>3.646m</b> Displacement <b>6,896kg</b> Draft <b>2.340m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.042%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>X-41 mod</b> Designer <b>JEPPESEN</b> Builder <b>X YACHTS</b> Series <b>01/2006</b> Age <b>06/2017</b> Age Allowance <b>0.422%</b> Offset File <b>EST463.off - 5/13/2019 10:12:42 PM</b> Measurement by <b>Tetsmann/Tagu - 30/07/2019</b>		IMSL <b>11.103m</b> VCGD <b>-0.140m</b> Sink <b>23.02kg/mm</b> RL <b>10.179m</b> VCGM <b>-0.158m</b> WS <b>31.56m<sup>2</sup></b> LSMO <b>10.999m</b> Displacement/Length ratio <b>5.1825</b>



<b>Rating Office</b> EYU Purje 8 11911, Tallinn Estonia
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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>556.1</b>			<b>621.7</b>		
Time on Time	<b>1.0789</b>			<b>1.0856</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>653.7</b>	<b>507.0</b>	<b>452.9</b>	<b>844.4</b>	<b>623.4</b>	<b>544.0</b>
Time on Time	<b>1.0326</b>	<b>1.3313</b>	<b>1.4905</b>	<b>0.7994</b>	<b>1.0828</b>	<b>1.2408</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>959.5</b>	<b>787.4</b>	<b>695.4</b>	<b>661.9</b>	<b>648.1</b>	<b>641.6</b>	<b>626.8</b>
52°	<b>627.4</b>	<b>524.8</b>	<b>479.8</b>	<b>465.2</b>	<b>459.5</b>	<b>456.7</b>	<b>449.1</b>
60°	<b>592.1</b>	<b>503.3</b>	<b>467.5</b>	<b>453.0</b>	<b>446.9</b>	<b>443.6</b>	<b>436.6</b>
75°	<b>565.4</b>	<b>489.0</b>	<b>458.8</b>	<b>441.0</b>	<b>428.5</b>	<b>421.6</b>	<b>415.5</b>
90°	<b>570.6</b>	<b>490.2</b>	<b>458.2</b>	<b>438.6</b>	<b>420.7</b>	<b>405.1</b>	<b>387.0</b>
110°	<b>585.8</b>	<b>485.7</b>	<b>447.8</b>	<b>424.3</b>	<b>409.7</b>	<b>397.5</b>	<b>375.8</b>
120°	<b>599.6</b>	<b>493.5</b>	<b>451.7</b>	<b>424.5</b>	<b>398.7</b>	<b>380.7</b>	<b>357.1</b>
135°	<b>662.3</b>	<b>534.4</b>	<b>471.1</b>	<b>441.5</b>	<b>415.0</b>	<b>388.7</b>	<b>335.6</b>
150°	<b>784.9</b>	<b>627.2</b>	<b>528.1</b>	<b>472.0</b>	<b>444.1</b>	<b>419.8</b>	<b>371.7</b>
Run VMG	<b>906.3</b>	<b>724.2</b>	<b>609.8</b>	<b>538.9</b>	<b>493.9</b>	<b>459.3</b>	<b>412.3</b>

<b>Certificate</b> Number <b>EST463</b> ORC Ref <b>EST00000822</b> Issued On <b>7/31/2019</b> VPP Ver. <b>2019 1.01</b> Valid until <b>12/31/2019</b>
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<b>Crew Weight</b> Default <b>789kg</b> Maximum <b>840kg</b> Minimum* <b>630kg</b> <i>*when applied by the NoR and SI</i> Non Manual Pwr <b>No</b>
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<b>Special Scoring</b> ToD ToT Double H.GPH <b>581.2 1.0324</b> Double H.OSN <b>566.6 1.0590</b> Non Spin GPH <b>605.9 0.9903</b> Non Spin OSN <b>589.3 1.0181</b>
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<b>Selected Courses</b>							
Windward / Leeward	<b>932.9</b>	<b>755.8</b>	<b>652.6</b>	<b>600.4</b>	<b>571.0</b>	<b>550.4</b>	<b>519.6</b>
Circular Random	<b>786.0</b>	<b>635.2</b>	<b>555.0</b>	<b>508.9</b>	<b>480.4</b>	<b>461.2</b>	<b>434.4</b>
Coastal / Long Distance	<b>930.3</b>	<b>710.3</b>	<b>590.2</b>	<b>525.7</b>	<b>490.9</b>	<b>462.8</b>	<b>416.9</b>
Non Spinnaker	<b>846.9</b>	<b>678.3</b>	<b>587.0</b>	<b>533.5</b>	<b>500.3</b>	<b>478.1</b>	<b>448.8</b>

<b>Sails Limitations</b> Headsails <b>6</b>   Spinnakers <b>4</b>
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<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42.8°</b>	<b>41.6°</b>	<b>40.3°</b>	<b>38.9°</b>	<b>38.6°</b>	<b>38.3°</b>	<b>38.1°</b>
Beat VMG	<b>3.75</b>	<b>4.57</b>	<b>5.18</b>	<b>5.44</b>	<b>5.55</b>	<b>5.61</b>	<b>5.74</b>
52°	<b>5.74</b>	<b>6.86</b>	<b>7.50</b>	<b>7.74</b>	<b>7.83</b>	<b>7.88</b>	<b>8.02</b>
60°	<b>6.08</b>	<b>7.15</b>	<b>7.70</b>	<b>7.95</b>	<b>8.06</b>	<b>8.12</b>	<b>8.25</b>
75°	<b>6.37</b>	<b>7.36</b>	<b>7.85</b>	<b>8.16</b>	<b>8.40</b>	<b>8.54</b>	<b>8.66</b>
90°	<b>6.31</b>	<b>7.34</b>	<b>7.86</b>	<b>8.21</b>	<b>8.56</b>	<b>8.89</b>	<b>9.30</b>
110°	<b>6.15</b>	<b>7.41</b>	<b>8.04</b>	<b>8.48</b>	<b>8.79</b>	<b>9.06</b>	<b>9.58</b>
120°	<b>6.00</b>	<b>7.29</b>	<b>7.97</b>	<b>8.48</b>	<b>9.03</b>	<b>9.46</b>	<b>10.08</b>
135°	<b>5.44</b>	<b>6.74</b>	<b>7.64</b>	<b>8.15</b>	<b>8.67</b>	<b>9.26</b>	<b>10.73</b>
150°	<b>4.59</b>	<b>5.74</b>	<b>6.82</b>	<b>7.63</b>	<b>8.11</b>	<b>8.58</b>	<b>9.69</b>
Run VMG	<b>3.97</b>	<b>4.97</b>	<b>5.90</b>	<b>6.68</b>	<b>7.29</b>	<b>7.84</b>	<b>8.73</b>
Gybe Angles	<b>141.9°</b>	<b>146.9°</b>	<b>148.8°</b>	<b>155.6°</b>	<b>168.6°</b>	<b>180.0°</b>	<b>180.0°</b>

<b>Class Division Length</b> CDL = <b>10.642</b>
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<b>Storm Sails Areas</b> Heavy Weather Jib <b>39.53</b> Storm Jib (JL=11.13) <b>14.64</b> Storm Trysail <b>14.84</b>
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<b>Owner</b> MTÜ X41 Purjetamisklubi Vana-Tartu mt.2 Tallinn, Estonia JK Dago
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I certify that I understand my responsibilities under ORC Rules and Regulations Signature
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<b>BOAT</b>	
Name <b>OLYMPIC</b>	Sail Nr <b>EST 463</b>
File <b>Est0463</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>12/05/2019</b>		SG <b>1.0000</b>	
FFM <b>1.443</b>	FF <b>1.453</b>	SFFP <b>0.200</b>	
FAM <b>1.092</b>	FA <b>1.098</b>	SAFP <b>11.995</b>	
W1 <b>106.7</b>	PD1 <b>546.5</b>	WD <b>13.280</b>	
W2 <b>106.7</b>	PD2 <b>547.7</b>	GSA <b>1.0</b>	
W3 <b>106.7</b>	PD3 <b>567.7</b>	RSA <b>1.0</b>	
W4 <b>106.7</b>	PD4 <b>567.9</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>6.921 / 7.133</b>	
Maximum beam station from stem		<b>8.432</b>	
RM Measured		<b>200.2kg·m</b>	
RM Default		<b>200.4kg·m</b>	
Limit of positive stability / Stab.Index		<b>127.2° / 130.8</b>	
Freeboard at mast at 5.190		<b>1.212</b>	



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**IMS Measurement Certificate**

<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>15.550</b>	E <b>5.450</b>	MDT1 <b>0.132</b>	MW <b>0.250</b>
IG <b>17.030</b>	J <b>4.910</b>	MDL1 <b>0.250</b>	GO <b>0.273</b>
ISP <b>17.070</b>	SFJ <b>0.280</b>	MDT2 <b>0.123</b>	BD <b>0.270</b>
BAS <b>1.885</b>	SPL <b>5.160</b>	MDL2 <b>0.192</b>	MWT <b>205.00</b>
FSP <b>0.076</b>	TPS	TL <b>0.230</b>	MCG <b>5.730</b>

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.430</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.125</b>		
Twin Screw <b>No</b>	PIPA <b>0.0032</b>		
ST1 <b>0.060</b>	ST3	ST5 <b>0.325</b>	
ST2	ST4 <b>0.092</b>	EDL <b>1.540</b>	

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<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>									
<b>Mainsail</b>	<b>MHB</b>	<b>MUW</b>	<b>MTW</b>	<b>MHW</b>	<b>MQW</b>	<b>Area</b>	<b>Area (r)</b>	<b>Formula</b>	
	0.360	1.25	2.11	3.52	4.55	50.90	51.96	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
<b>Symmetric</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>				
	17.20	17.20	17.20	9.56	9.58	137.08		SL · (SFL + 4·SHW) / 6	
<b>Asymmetric</b>									
Not Available									

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.12	0.77	1.45	2.74	3.99	5.24	17.02	46.02			30/07/2019	Unknow	Light2019
0.12	0.76	1.42	2.68	3.94	5.20	16.68	44.48			25/06/2019	Unknow	Medium 2019
0.13	0.58	1.10	2.20	3.38	4.66	15.20	34.52			30/07/2015	Carbon	Heavy
0.06					4.10	16.10	33.44			02/10/2016	Unknow	Staysail

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Grubiša, Pindozi EST 7</b>				
Date <b>12/05/2019</b>				
Comment <b>Pirita</b>				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
1	Engine	Volvo-Penta	D2	
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

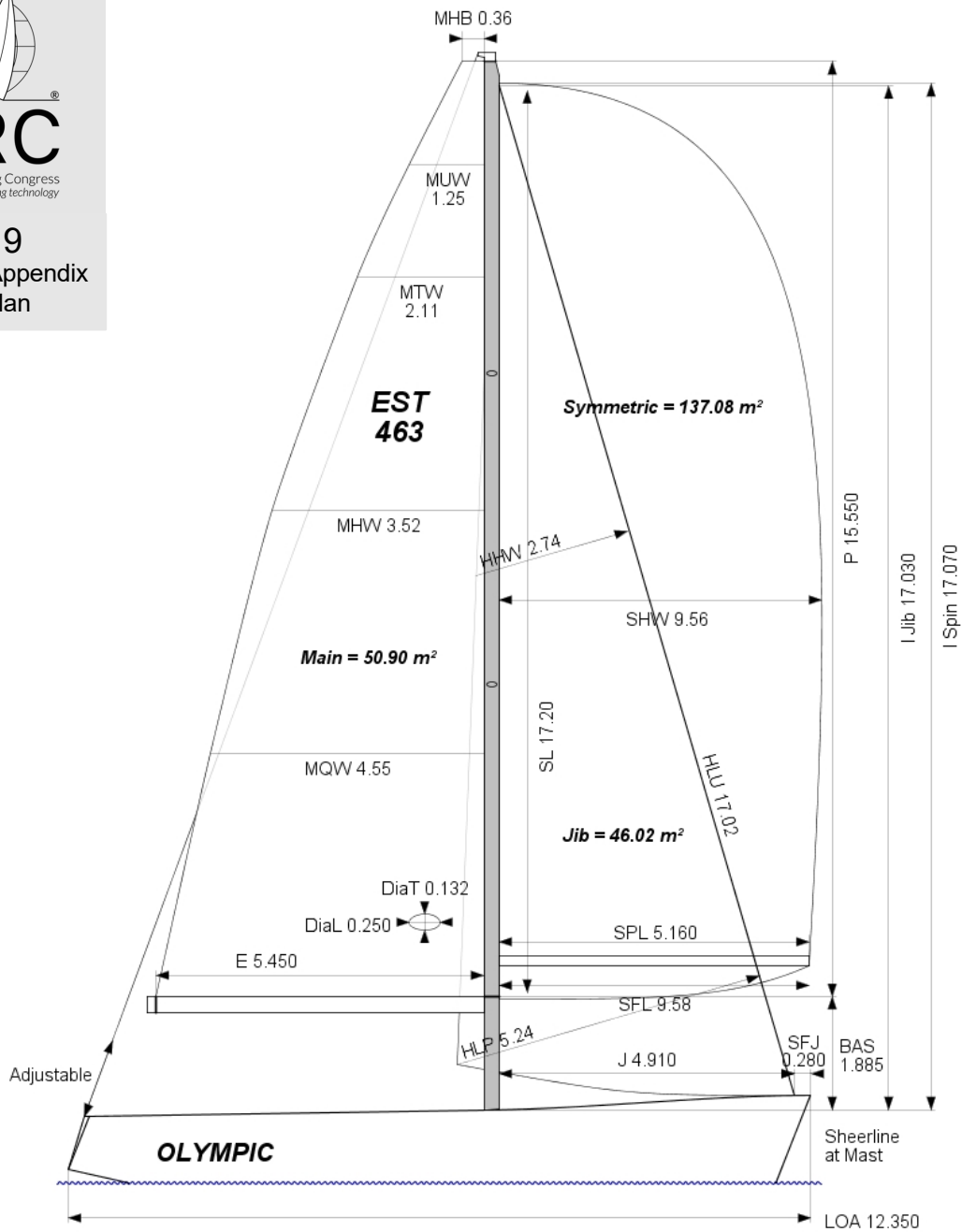
<b>MEASUREMENT INVENTORY</b>							
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG</b>	<b>Condtn Description</b>
1	Tank Fuel		metal	90.0	5.90		40.0 Stb.
2	Tank Water		plastic	180.0	6.00		0.0 Ports.
3	Tank Waste		plastic	15.0	3.00		0.0
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>			
1	Battery	5.20		Service batteries 2x115Ah			
2	Battery	8.00		Engine battery 60Ah			
-	Misc			Removed sofa backboards in saloon			
-	Misc			Removed decorative wall panels			
-	Misc			Removed hammock in back cabin			



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Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.36	1.25	2.11	3.52	4.55	50.90	EST 7	06/05/2019	Millenium	Unknown	

**HEADSAILS (4)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
16	0.12	0.77	1.45	2.74	3.99	5.24	17.02	107%	46.02			EST 2	30/07/2019	NS	Unknown	Light2019
17	0.12	0.76	1.42	2.68	3.94	5.20	16.68	106%	44.48			EST 7	25/06/2019	Millenium	Unknown	Medium 2019
3	0.13	0.58	1.10	2.20	3.38	4.66	15.20	95%	34.52			EST 1	30/07/2015	NS	Carbon	Heavy
6	0.06					4.10	16.10	84%	33.44			Hemamali	02/10/2016	NS	Unknown	Staysail

**SYMMETRIC SPINNAKERS (4)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
12	17.20	17.20	17.20	9.56	9.58	137.09	Hemamali	10/03/2018	NS	Unknown	S1,5_2018
10	17.02	17.02	17.02	9.61	9.32	135.48	SLO 03	26/06/2017	OneSails	Unknown	S2_2017
3	17.55	17.55	17.55	9.26	8.82	134.15		19/06/2018	NS	Unknown	S4_2016
9	16.95	16.95	16.95	6.49	8.54	97.47			NS	Unknown	Reacher

**ASYMMETRIC SPINNAKERS (0)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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