



World Leader in Rating Technology

## 2018 ORC Club Certificate

### Rating Office

EYU  
Regati 1  
11911, Tallinn  
Estonia

### Certificate

Number **EST678**  
Issued On **5/28/2018**  
ORC Ref **EST00000152**  
VPP Ver. **2018 1.00**  
Valid until **12/31/2018**

### Crew Weight

Default 627kg  
Maximum **685kg**  
Minimum\* **514kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

### Special Scoring

	ToD	ToT
Double H.GPH	<b>637.9</b>	<b>0.9406</b>
Double H.OSN	<b>621.3</b>	<b>0.9657</b>
Non Spin GPH	<b>667.3</b>	<b>0.8991</b>
Non Spin OSN	<b>645.1</b>	<b>0.9300</b>

### Sails Limitations

Headsails **5** Spinnakers **3**

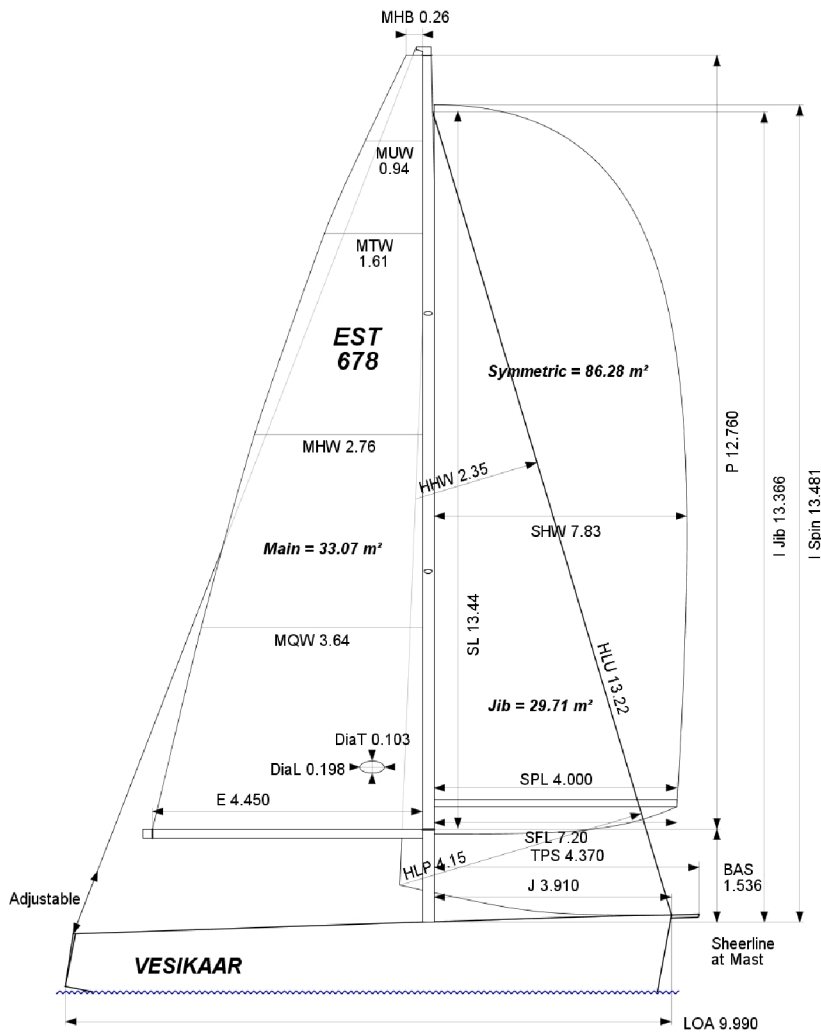
**Spinnaker configuration**  
Symmetric: **Yes** 86.28  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

### Class Division Length

**CDL = 9.033**

### Stability (Measured)

Limit Positive Stab.: **114.0°**  
Stability Index: **114.2**



BOAT		GPH		HULL		
Name	<b>VESIKAAR</b>			Data File	<b>EST0678</b>	
Sail Nr	<b>EST 678</b>			Offset File	<b>T34-VER.OFF</b>	
		<b>631.7</b>		Displacement	<b>4,445kg</b>	
				LOA	<b>9.990m</b>	
				MB	<b>3.296m</b>	
				Draft	<b>2.249m</b>	
<b>CLASS</b>				IMS Division	<b>Cruiser/Racer</b>	
Class	<b>T-34</b>			Dynamic All.	<b>0.189%</b>	
Designer	<b>Lostuzzi design</b>			Fwd Accom.	<b>Yes</b>	
Builder	<b>T-Yachts</b>			Construction	<b>Cored</b>	
Series	<b>04/2009</b>			Fiber Rigging	<b>No</b>	
Age Date	<b>06/2009</b>			Aramid Core	<b>No</b>	
Age Allowance	<b>0.292%</b>			Carbon Rudder	<b>Yes</b>	
				Light Stanchions		
				IMSL	<b>9.535m</b>	
				VCGD	<b>0.166m</b>	
				Sink	<b>17.87kg/mm</b>	
				RL	<b>8.530m</b>	
				VCGM	<b>0.109m</b>	
				WS	<b>23.10m²</b>	
				LSM0	<b>9.371m</b>	
				Displacement/Length ratio	<b>5.4015</b>	
<b>COMMENTS</b>				Water Ballast	<b>0</b>	
				Trim Tab	<b>No</b>	
				BLR Index	<b>0.0000</b>	
<b>PROPELLER</b>				<b>CENTERBOARD</b>		
Installation	<b>Strut</b>	PRD	<b>0.382</b>			
Type	<b>Folding 3 or 4 blades</b>	PBW	<b>0.098</b>			
		PIPA	<b>0.0036</b>			
				<b>N/A</b>		
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>612.1</b>			<b>682.0</b>		
Time on Time	<b>0.9803</b>			<b>0.9898</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>726.7</b>	<b>558.3</b>	<b>498.6</b>	<b>935.8</b>	<b>683.9</b>	<b>595.9</b>
Time on Time	<b>0.9288</b>	<b>1.2090</b>	<b>1.3539</b>	<b>0.7213</b>	<b>0.9870</b>	<b>1.1327</b>

<b>BOAT</b>	
Name <b>VESIKAAR</b>	Sail Nr <b>EST 678</b>
File <b>EST0678</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>03/07/2015</b>		SG <b>1.0020</b>	
FFM <b>1.259</b>	FF <b>1.267</b>	SFFP <b>0.550</b>	
FAM <b>0.960</b>	FA <b>0.965</b>	SAFP <b>9.820</b>	
W1 <b>62.0</b>	PD1 <b>545.1</b>	WD <b>11.260</b>	
W2 <b>62.0</b>	PD2 <b>544.2</b>	GSA <b>1.0</b>	
W3 <b>62.0</b>	PD3 <b>548.5</b>	RSA <b>1.0</b>	
W4 <b>62.0</b>	PD4 <b>549.4</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>5.610 / 5.840</b>	
Maximum beam station from stem		<b>6.400</b>	
RM Measured		<b>100.5kg·m</b>	
RM Default		<b>110.4kg·m</b>	
Limit of positive stability / Stab.Index		<b>114.0° / 114.2</b>	
Freeboard at mast at 3.910		<b>1.153</b>	



**2018**  
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>No</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>12.760</b>	E <b>4.450</b>	MDT1 <b>0.103</b>	MW <b>0.185</b>
IG <b>13.366</b>	J <b>3.910</b>	MDL1 <b>0.198</b>	GO <b>0.207</b>
ISP <b>13.481</b>	SFJ <b>0.000</b>	MDT2 <b>0.103</b>	BD <b>0.150</b>
BAS <b>1.536</b>	SPL <b>4.000</b>	MDL2 <b>0.155</b>	MWT <b>132.50</b>
FSP <b>0.080</b>	TPS <b>4.370</b>	TL <b>2.060</b>	MCG <b>4.900</b>

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.382</b>		
Type <b>Folding 3 or 4 blades</b>	PBW <b>0.098</b>		
Twin Screw <b>No</b>	PIPA <b>0.0036</b>		
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.224</b>	
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>1.580</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					
4	0.260	0.94	1.61	2.76	3.64	33.07	EST 1	29/06/2016	North	Carbon	2016					
<b>HEADSAILS (6)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
9	0.10	0.71	1.32	2.35	3.27	4.15	13.22	106%	29.71	Y		EST 1	24/05/2018		Unknown	Unknow
7	0.11	0.69	1.31	2.36	3.27	4.13	13.20	106%	29.61	Y		EST 1	13/04/2017		Carbon	Carbon
4	0.10	0.69	1.28	2.32	3.32	4.25	12.97	109%	29.30	Y		EST 1	18/04/2015		Unknown	Unknow
8	0.10	0.67	1.25	2.28	3.22	4.11	13.16	105%	28.92	Y		EST 1	15/06/2016		Unknown	Unknow
5	0.09	0.66	1.25	2.24	3.22	4.20	12.98	107%	28.58	Y		EST 1	18/04/2015		Unknown	Unknow
6	0.09	0.51	0.95	1.90	2.98	4.11	12.97	105%	25.80	Y		EST 1	18/04/2015		Unknown	Unknow
<b>SYMMETRIC SPINNAKERS (5)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
5	13.44	13.44	13.44	7.83	7.20	86.28			North	Unknown	S2 2016					
6	13.50	13.50	13.50	7.78	7.22	86.27			North	Unknown	S1,5 2016					
7	13.60	13.60	13.60	7.20	7.60	82.51	Hemamali	16/06/2016	North	Unknown	S3 2016					
3	13.44	13.44	13.44	7.27	7.27	81.42	EST 2	24/07/2011		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>Veiko Rosme EST 2</b>				
Date <b>03/07/2015</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
1	Engine			Volvo-Penta D1-20
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn Description
1	Tank	Diesel	PVC	61.0	4.90		40-0 ports.
3	Tank	Water	PVC	61.0	4.30		0-0 stb.
Id	Item	Weight	Distance	VCG Description			
1	Battery	4.85		100 Ah, stb.			
2	Battery	4.85		100 Ah, stb.			
1	Misc	9.60		Autopilot Nexus ML40			



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# 2018

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>VESIKAAR</b>	Certificate Number	<b>EST678</b>
Sail Nr	<b>EST 678</b>	Issued On	<b>5/28/2018</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1068.4</b>	<b>881.2</b>	<b>774.0</b>	<b>723.0</b>	<b>708.5</b>	<b>704.0</b>	<b>694.3</b>
52°	<b>705.4</b>	<b>591.4</b>	<b>533.5</b>	<b>511.3</b>	<b>504.2</b>	<b>501.4</b>	<b>496.6</b>
60°	<b>670.1</b>	<b>565.7</b>	<b>519.2</b>	<b>499.5</b>	<b>490.8</b>	<b>487.2</b>	<b>483.5</b>
75°	<b>644.2</b>	<b>548.6</b>	<b>509.3</b>	<b>488.7</b>	<b>474.1</b>	<b>464.8</b>	<b>458.8</b>
90°	<b>652.2</b>	<b>541.2</b>	<b>500.4</b>	<b>486.0</b>	<b>469.0</b>	<b>451.5</b>	<b>428.8</b>
110°	<b>642.5</b>	<b>533.1</b>	<b>491.8</b>	<b>465.7</b>	<b>444.1</b>	<b>431.1</b>	<b>409.3</b>
120°	<b>659.7</b>	<b>544.2</b>	<b>497.6</b>	<b>469.2</b>	<b>441.3</b>	<b>416.5</b>	<b>387.5</b>
135°	<b>727.0</b>	<b>590.3</b>	<b>519.3</b>	<b>487.4</b>	<b>461.0</b>	<b>433.4</b>	<b>379.2</b>
150°	<b>866.7</b>	<b>686.6</b>	<b>578.7</b>	<b>517.3</b>	<b>488.1</b>	<b>463.6</b>	<b>413.9</b>
Run VMG	<b>1000.8</b>	<b>792.8</b>	<b>668.1</b>	<b>587.5</b>	<b>534.4</b>	<b>499.5</b>	<b>451.9</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1034.6</b>	<b>837.0</b>	<b>721.1</b>	<b>655.3</b>	<b>621.4</b>	<b>601.8</b>	<b>573.1</b>
Circular Random	<b>872.2</b>	<b>703.0</b>	<b>612.5</b>	<b>560.5</b>	<b>528.7</b>	<b>507.9</b>	<b>480.4</b>
Coastal / Long Distance	<b>1031.2</b>	<b>786.5</b>	<b>651.7</b>	<b>576.5</b>	<b>538.9</b>	<b>508.8</b>	<b>459.5</b>
Non Spinnaker	<b>935.7</b>	<b>748.0</b>	<b>646.1</b>	<b>586.5</b>	<b>550.1</b>	<b>526.5</b>	<b>496.7</b>

<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>42.3°</b>	<b>40.9°</b>	<b>40.2°</b>	<b>38.6°</b>	<b>38.0°</b>	<b>37.9°</b>	<b>37.9°</b>
Beat VMG	<b>3.37</b>	<b>4.09</b>	<b>4.65</b>	<b>4.98</b>	<b>5.08</b>	<b>5.11</b>	<b>5.19</b>
52°	<b>5.10</b>	<b>6.09</b>	<b>6.75</b>	<b>7.04</b>	<b>7.14</b>	<b>7.18</b>	<b>7.25</b>
60°	<b>5.37</b>	<b>6.36</b>	<b>6.93</b>	<b>7.21</b>	<b>7.33</b>	<b>7.39</b>	<b>7.45</b>
75°	<b>5.59</b>	<b>6.56</b>	<b>7.07</b>	<b>7.37</b>	<b>7.59</b>	<b>7.75</b>	<b>7.85</b>
90°	<b>5.52</b>	<b>6.65</b>	<b>7.19</b>	<b>7.41</b>	<b>7.68</b>	<b>7.97</b>	<b>8.40</b>
110°	<b>5.60</b>	<b>6.75</b>	<b>7.32</b>	<b>7.73</b>	<b>8.11</b>	<b>8.35</b>	<b>8.80</b>
120°	<b>5.46</b>	<b>6.61</b>	<b>7.24</b>	<b>7.67</b>	<b>8.16</b>	<b>8.64</b>	<b>9.29</b>
135°	<b>4.95</b>	<b>6.10</b>	<b>6.93</b>	<b>7.39</b>	<b>7.81</b>	<b>8.31</b>	<b>9.49</b>
150°	<b>4.15</b>	<b>5.24</b>	<b>6.22</b>	<b>6.96</b>	<b>7.38</b>	<b>7.76</b>	<b>8.70</b>
Run VMG	<b>3.60</b>	<b>4.54</b>	<b>5.39</b>	<b>6.13</b>	<b>6.74</b>	<b>7.21</b>	<b>7.97</b>
Gybe Angles	<b>145.2°</b>	<b>149.4°</b>	<b>150.1°</b>	<b>157.5°</b>	<b>175.3°</b>	<b>180.0°</b>	<b>180.0°</b>