



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club**  
**Certificate**

**Rating Office**

**Estonian Yachting Union**  
Purje 8, maja 3  
11911 Tallinn  
Estonia



**ESTONIAN**  
**YACHTING**  
**UNION**

**Certificate**

Number **012/20**  
Issued On **05/06/2020**  
ORC Ref **03880000JVE**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 611kg  
Maximum **609kg**  
Minimum\* **457kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **672.0 0.8929**  
Non Spin OSN **651.2 0.9213**

**Sails Limitations**

Headsails **5** Spinnakers **4**

**Spinnaker configuration**

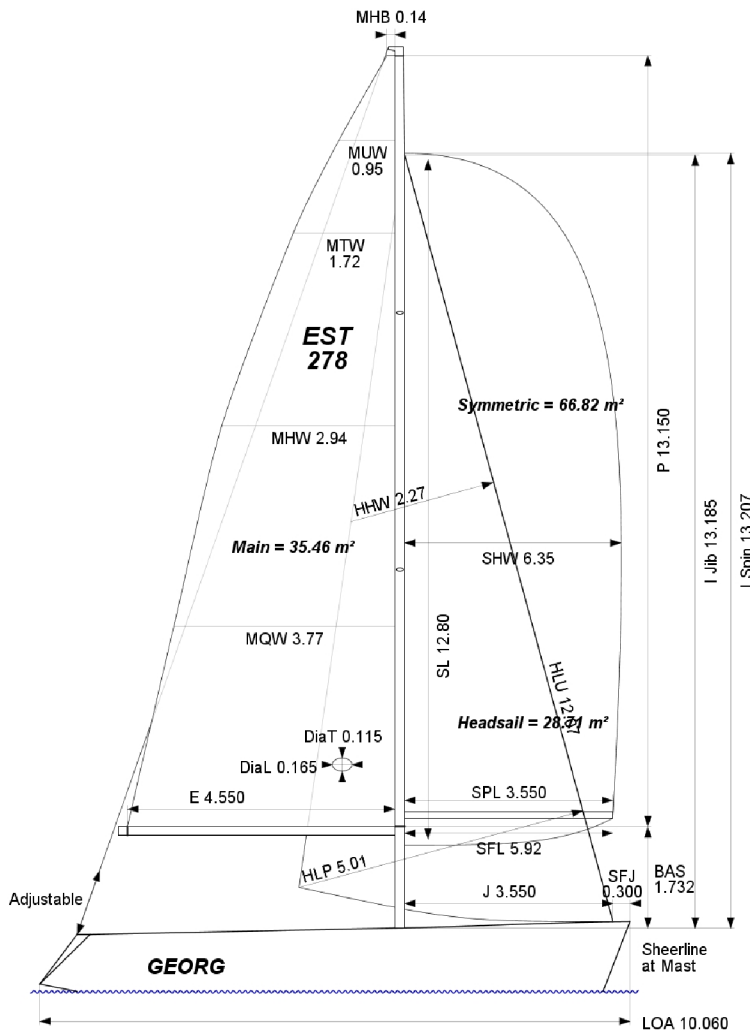
Symmetric: **Yes 66.82**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**

**CDL = 8.718**

**Stability (Estimated)**

Limit Positive Stab.: **121.7°**  
Stability Index: **122.4**



<b>BOAT</b> Name <b>GEORG</b> Sail Nr <b>EST-278</b>		<b>GPH</b> <b>645.7</b>	<b>HULL</b> Data File <b>EST278</b> LOA <b>10.060m</b> Offset File <b>IX332.BOF</b> MB <b>3.284m</b> Displacement <b>4,599kg</b> Draft <b>1.825m</b>		
<b>CLASS</b> Class <b>X-332</b> Designer <b>JEPPESEN</b> Builder <b>X YACHTS</b> Series <b>01/1994</b> Age Date <b>01/2000</b> Age Allowance <b>0.487%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.213%</b> Plan Review Construction <b>Cored</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>			
<b>COMMENTS</b>		IMSL <b>9.196m</b> VCGD <b>-0.150m</b> Sink <b>17.13kg/mm</b> RL <b>8.246m</b> VCGM <b>-0.094m</b> WS <b>22.89m²</b> LSM0 <b>9.196m</b> Displacement/Length ratio <b>5.9138</b>			
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.380</b> Type <b>Folding 2 blades</b> PIPA <b>0.0032</b>		<b>CENTERBOARD</b>  <b>N/A</b>			
<b>SCORING OPTIONS</b>					
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>			
Time on Distance	<b>627.3</b>	<b>698.1</b>			
Time on Time	<b>0.9564</b>	<b>0.9669</b>			
Triple Number	Low Medium High	Low Medium High			
Time on Distance	<b>740.9 571.6 510.5</b>	<b>958.7 701.2 610.0</b>			
Time on Time	<b>0.9110 1.1808 1.3223</b>	<b>0.7041 0.9627 1.1065</b>			

<b>BOAT</b>	
Name <b>GEORG</b>	Sail Nr <b>EST-278</b>
File <b>EST278</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>	
Inclining Test <b>Enter VCG directly</b>	
Flotation date <b>05/06/2020</b>	SG <b>1.0020</b>
VCGDe <b>-0.150</b>	
FFM <b>1.181</b>	FF <b>1.189</b> SFFP <b>0.513</b>
FAM <b>0.967</b>	FA <b>0.972</b> SAFFP <b>9.213</b>
LCF from stem on CL / on sheer <b>5.614 / 5.842</b>	
Maximum beam station from stem <b>6.331</b>	
RM Measured <b>115.0kg·m</b>	
RM Default <b>102.2kg·m</b>	
Limit of positive stability / Stab.Index <b>121.7° / 122.4</b>	
Freeboard at mast at 3.850 <b>1.080</b>	



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Measurements  
Datasheet

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>
Inner Stay <b>None Fitted</b>	Runners/Checkstays <b>0</b>
Carbon Mast <b>No</b>	Jib Furler <b>No</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Non-Circular Rigging <b>No</b>	
Articulated Bowsprit <b>No</b>	
P <b>13.150</b>	E <b>4.550</b> MDT1 <b>0.115</b> MW <b>0.165</b>
IG <b>13.185</b>	J <b>3.550</b> MDL1 <b>0.165</b> GO <b>0.179</b>
ISP <b>13.207</b>	SFJ <b>0.300</b> MDT2 <b>0.097</b> BD <b>0.150</b>
BAS <b>1.732</b>	SPL <b>3.550</b> MDL2 <b>0.140</b> MWT <b>106.00</b>
FSD <b>0.033</b>	TPS <b></b> TL <b>1.550</b> MCG <b>4.850</b>

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

<b>PROPELLER</b>	
Installation <b>Strut</b>	PRD <b>0.380</b>
Type <b>Folding 2 blades</b>	PBW
Twin Screw <b>No</b>	PIPA <b>0.0032</b>
ST1 <b>0.041</b>	ST3 <b>0.260</b>
ST2 <b>0.112</b>	ST4 <b>0.112</b> EDL <b>2.020</b>

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<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	



**EJL**  
ESTONIAN  
YACHTING  
UNION

<b>SAILS INVENTORY</b>																
<b>MAINSAIL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1a	0.14	0.95	1.72	2.94	3.77	35.46	EST7	01/04/2020	North Sails	Unknown						
<b>HEADSAILS (2)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.05	0.58	1.12	2.27	3.54	5.01	12.07	141%	28.71		No				Unknown	
4	0.10	0.50	0.98	2.07	3.37	4.80	12.83	135%	28.63		No	EST7	01/04/2020	North Sails	Unknown	
<b>SYMMETRIC SPINNAKERS (2)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1a	12.80	12.80	12.80	6.35	5.92	66.82	EST7	01/04/2020	North Sails	Nylon	valge					
3	12.72	12.72	12.72	6.36	5.93	66.51				Unknown	hall					
<b>ASYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>GEORG</b>
Certificate Number	<b>012/20</b>
Sail Nr	<b>EST-278</b>
Issued On	<b>05/06/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1082.2</b>	<b>896.6</b>	<b>787.9</b>	<b>735.3</b>	<b>718.3</b>	<b>712.0</b>	<b>715.1</b>
52°	<b>703.6</b>	<b>595.1</b>	<b>541.2</b>	<b>519.7</b>	<b>511.1</b>	<b>507.3</b>	<b>506.1</b>
60°	<b>664.0</b>	<b>568.2</b>	<b>527.1</b>	<b>508.0</b>	<b>497.5</b>	<b>492.9</b>	<b>490.2</b>
75°	<b>636.1</b>	<b>550.4</b>	<b>516.7</b>	<b>497.3</b>	<b>482.2</b>	<b>470.5</b>	<b>461.0</b>
90°	<b>644.4</b>	<b>551.8</b>	<b>510.3</b>	<b>489.4</b>	<b>477.8</b>	<b>460.4</b>	<b>434.9</b>
110°	<b>658.0</b>	<b>548.3</b>	<b>506.7</b>	<b>481.0</b>	<b>456.3</b>	<b>435.8</b>	<b>414.5</b>
120°	<b>681.0</b>	<b>562.7</b>	<b>513.4</b>	<b>486.8</b>	<b>461.6</b>	<b>437.2</b>	<b>396.3</b>
135°	<b>757.1</b>	<b>618.0</b>	<b>540.6</b>	<b>505.9</b>	<b>481.4</b>	<b>456.3</b>	<b>408.8</b>
150°	<b>896.4</b>	<b>710.6</b>	<b>602.8</b>	<b>537.5</b>	<b>505.8</b>	<b>482.7</b>	<b>436.4</b>
Run VMG	<b>1035.1</b>	<b>820.6</b>	<b>694.1</b>	<b>609.5</b>	<b>549.3</b>	<b>513.6</b>	<b>467.8</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1058.7</b>	<b>858.6</b>	<b>741.0</b>	<b>672.4</b>	<b>633.8</b>	<b>612.8</b>	<b>591.4</b>
Circular Random	<b>889.2</b>	<b>718.1</b>	<b>626.4</b>	<b>573.4</b>	<b>541.1</b>	<b>520.2</b>	<b>494.6</b>
Coastal / Long Distance	<b>1056.3</b>	<b>806.5</b>	<b>669.2</b>	<b>590.8</b>	<b>551.7</b>	<b>521.2</b>	<b>470.5</b>
Non Spinnaker	<b>936.6</b>	<b>751.4</b>	<b>651.2</b>	<b>592.7</b>	<b>556.9</b>	<b>533.9</b>	<b>505.9</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>43.5°</b>	<b>42.0°</b>	<b>40.9°</b>	<b>39.0°</b>	<b>38.3°</b>	<b>38.3°</b>	<b>38.6°</b>
Beat VMG	<b>3.33</b>	<b>4.02</b>	<b>4.57</b>	<b>4.90</b>	<b>5.01</b>	<b>5.06</b>	<b>5.03</b>
52°	<b>5.12</b>	<b>6.05</b>	<b>6.65</b>	<b>6.93</b>	<b>7.04</b>	<b>7.10</b>	<b>7.11</b>
60°	<b>5.42</b>	<b>6.34</b>	<b>6.83</b>	<b>7.09</b>	<b>7.24</b>	<b>7.30</b>	<b>7.34</b>
75°	<b>5.66</b>	<b>6.54</b>	<b>6.97</b>	<b>7.24</b>	<b>7.47</b>	<b>7.65</b>	<b>7.81</b>
90°	<b>5.59</b>	<b>6.52</b>	<b>7.05</b>	<b>7.36</b>	<b>7.54</b>	<b>7.82</b>	<b>8.28</b>
110°	<b>5.47</b>	<b>6.57</b>	<b>7.10</b>	<b>7.49</b>	<b>7.89</b>	<b>8.26</b>	<b>8.69</b>
120°	<b>5.29</b>	<b>6.40</b>	<b>7.01</b>	<b>7.40</b>	<b>7.80</b>	<b>8.23</b>	<b>9.08</b>
135°	<b>4.75</b>	<b>5.83</b>	<b>6.66</b>	<b>7.12</b>	<b>7.48</b>	<b>7.89</b>	<b>8.81</b>
150°	<b>4.02</b>	<b>5.07</b>	<b>5.97</b>	<b>6.70</b>	<b>7.12</b>	<b>7.46</b>	<b>8.25</b>
Run VMG	<b>3.48</b>	<b>4.39</b>	<b>5.19</b>	<b>5.91</b>	<b>6.55</b>	<b>7.01</b>	<b>7.70</b>
Gybe Angles	<b>145.5°</b>	<b>150.5°</b>	<b>153.0°</b>	<b>159.0°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>