



## 2020 ORC Club Certificate

**Rating Office**  
**Hellenic Sailing Federation**  
**Offshore Committee**  
**Επιτροπή**  
**Ανοικτής Θαλάσσης**  
**Ελληνικής**  
**Ιστιοπλοϊκής Ομοσπονδίας**



**Certificate**  
 Number **00767**  
 Issued On **26/06/2020**  
 ORC Ref **03420000LIR**  
 VPP Ver. **2020 1.02**  
 Valid until **28/02/2021**

**Crew Weight**

Default	518kg
Maximum	480kg
Minimum*	360kg

*\*when applied by the NoR and SI*  
 Non Manual Pwr **No**

**Special Scoring**

ToD	ToT
Non Spin GPH <b>783.6</b>	<b>0.7657</b>
Non Spin OSN <b>753.8</b>	<b>0.7960</b>

**Sails Limitations**

Headsails **1** Spinnakers **4**  
**Woven Polyester**

**Spinnaker configuration**

Symmetric: **Yes** **57.75**  
 Asymmetric: **No**  
 Flying H/S: **No**  
 Spin. Pole: **Yes**

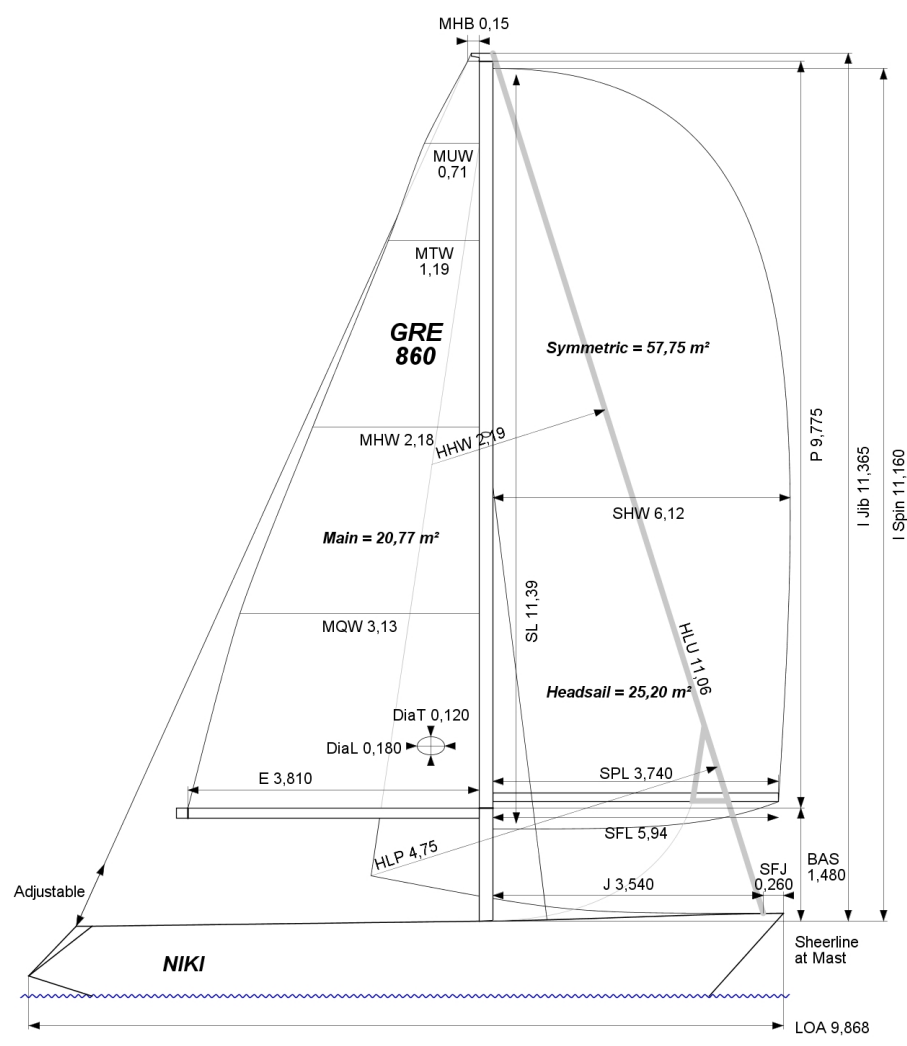
**Class Division Length**

**CDL = 6.939**

**Stability (Estimated)**

Limit Positive Stab.: **118.7°**  
 Stability Index: **120.3**

**Owner**



<b>BOAT</b> Name <b>NIKI</b> Sail Nr <b>GRE-860</b>		<b>GPH</b> <b>745.9</b>	<b>HULL</b> Data File <b>GR860</b> LOA <b>9.868m</b> Offset File <b>K14780.BOF</b> MB <b>3.214m</b> Displacement <b>4,707kg</b> Draft <b>1.822m</b>					
<b>CLASS</b> Class <b>SIGMA 33</b> Designer <b>DAVID THOMAS</b> Builder <b>MARINE PROJECTS</b> Series <b>01/1978</b> Age Date <b>04/1982</b> Age Allowance <b>0.487%</b>			IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.529%</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> ex "EVNOSTOS".			IMSL <b>8.216m</b> VCGD <b>0.008m</b> Sink <b>13.94kg/mm</b> RL <b>5.662m</b> VCGM <b>-0.011m</b> WS <b>20.21m²</b> LSM0 <b>8.195m</b> Displacement/Length ratio <b>8.5526</b> Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>					
<b>PROPELLER</b> Installation <b>Shaft exposed</b> PRD <b>0.360</b> Type <b>Solid 2 blades</b> PBW <b>0.095</b> PIPA <b>0.0151</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>720.2</b>			<b>804.6</b>				
Time on Time	<b>0.8331</b>			<b>0.8389</b>				
Triple Number	Low	Medium	High	Low	Medium	High		
Time on Distance	<b>882.1</b>	<b>654.9</b>	<b>566.6</b>	<b>1139.0</b>	<b>817.9</b>	<b>677.8</b>		
Time on Time	<b>0.7652</b>	<b>1.0307</b>	<b>1.1914</b>	<b>0.5926</b>	<b>0.8253</b>	<b>0.9958</b>		

<b>BOAT</b>	
Name <b>NIKI</b>	Sail Nr <b>GRE-860</b>
File <b>GR860</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>1</b>
Inner Stay <b>Fixed</b>	Runners/Checkstays <b>0</b>
Carbon Mast <b>No</b>	Jib Furler <b>Yes</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Non-Circular Rigging <b>No</b>	
Articulated Bowsprit <b>No</b>	
P <b>9.775</b>	E <b>3.810</b> MDT1 <b>0.120</b> MW
IG <b>11.365</b>	J <b>3.540</b> MDL1 <b>0.180</b> GO
ISP <b>11.160</b>	SFJ <b>0.260</b> MDT2 <b>0.000</b> BD
BAS <b>1.480</b>	SPL <b>3.740</b> MDL2 <b>0.000</b> MWT
FSD <b>-3.000</b>	TPS <b>0.000</b> TL <b>0.000</b> MCG

<b>INCLINING TEST AND FREEBOARDS</b>	
Inclining Test <b>Club Estimated VCG</b>	
Flotation date <b>22/04/2013</b>	SG <b>1.0310</b>
FFM <b>1.076</b>	FF <b>1.074</b> SFFP <b>0.623</b>
FAM <b>0.920</b>	FA <b>0.918</b> SAFF <b>9.043</b>
LCF from stem on CL / on sheer	<b>5.393 / 5.612</b>
Maximum beam station from stem	<b>5.728</b>
RM Measured	<b>70.6kg-m</b>
RM Default	<b>68.6kg-m</b>
Limit of positive stability / Stab.Index	<b>118.7° / 120.3</b>
Freeboard at mast at 3.800	<b>0.986</b>



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

**2020**  
Measurements  
Datasheet

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

<b>PROPELLER</b>	
Installation <b>Shaft exposed</b>	PRD <b>0.360</b>
Type <b>Solid 2 blades</b>	PBW <b>0.095</b>
Twin Screw <b>No</b>	PIPA <b>0.0151</b>
PSA <b>24.600</b>	PHL <b>0.036</b> ST3 <b>0.105</b> ESL <b>0.582</b>
PSD <b>0.025</b>	ST1 <b>0.025</b> ST4 <b>0.052</b>
PHD <b>0.049</b>	ST2 <b>0.100</b> ST5 <b>0.128</b>

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<b>COMMENTS</b>	
ex "EVNOSTOS".	

<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					
1	0.15	0.71	1.19	2.18	3.13	20.78		28/06/2018	Kakitsis	Dacron						
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.06	0.52	1.04	2.19	3.45	4.75	11.06	134%	25.20		No		26/03/2019	KAKITSIS	Dacron	
<b>SYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	11.39	11.39	11.39	6.12	5.94	57.75		12/03/2011		Nylon						
<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>GRE-147</b>				
Date <b>22/04/2013</b>				
Comment				
<b>Internal Ballast total = 0.0</b>				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight	Distance	Description

<b>MEASUREMENT INVENTORY</b>									
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description	
3	Tank	Water	PVC	60.0	5.38		0-0	Empty	
2	Tank	Water	PVC	60.0	5.38		0-0	Empty	
1	Tank	Diesel	INOX	40.0	7.18		0-0	Empty	
Id	Item	Weight	Distance	VCG Description					
1	Battery		4.18	3x100Ah					

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name <b>NIKI</b>	Certificate Number <b>00767</b>
Sail Nr <b>GRE-860</b>	Issued On <b>26/06/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1348.9</b>	<b>1104.0</b>	<b>975.3</b>	<b>887.4</b>	<b>826.5</b>	<b>796.4</b>	<b>787.1</b>
52°	<b>868.8</b>	<b>726.7</b>	<b>644.5</b>	<b>591.7</b>	<b>565.5</b>	<b>552.0</b>	<b>544.2</b>
60°	<b>817.0</b>	<b>687.5</b>	<b>609.7</b>	<b>570.1</b>	<b>549.6</b>	<b>537.2</b>	<b>526.6</b>
75°	<b>782.5</b>	<b>659.0</b>	<b>585.8</b>	<b>554.0</b>	<b>535.8</b>	<b>522.3</b>	<b>502.8</b>
90°	<b>787.1</b>	<b>647.3</b>	<b>569.8</b>	<b>538.2</b>	<b>521.3</b>	<b>513.5</b>	<b>491.5</b>
110°	<b>769.3</b>	<b>629.8</b>	<b>558.9</b>	<b>529.0</b>	<b>507.2</b>	<b>487.6</b>	<b>463.0</b>
120°	<b>791.0</b>	<b>647.3</b>	<b>566.3</b>	<b>533.1</b>	<b>510.9</b>	<b>489.8</b>	<b>453.8</b>
135°	<b>875.6</b>	<b>708.5</b>	<b>602.9</b>	<b>552.1</b>	<b>525.9</b>	<b>504.4</b>	<b>463.5</b>
150°	<b>1020.6</b>	<b>802.1</b>	<b>678.8</b>	<b>593.4</b>	<b>550.8</b>	<b>526.7</b>	<b>487.0</b>
Run VMG	<b>1178.5</b>	<b>925.2</b>	<b>781.7</b>	<b>679.9</b>	<b>607.9</b>	<b>560.8</b>	<b>514.5</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1263.7</b>	<b>1014.6</b>	<b>878.5</b>	<b>783.7</b>	<b>717.2</b>	<b>678.6</b>	<b>650.8</b>
Circular Random	<b>1051.0</b>	<b>839.3</b>	<b>722.6</b>	<b>652.6</b>	<b>608.6</b>	<b>580.2</b>	<b>548.2</b>
Coastal / Long Distance	<b>1255.2</b>	<b>950.9</b>	<b>784.5</b>	<b>676.5</b>	<b>616.0</b>	<b>576.8</b>	<b>522.3</b>
Non Spinnaker	<b>1118.0</b>	<b>887.1</b>	<b>758.4</b>	<b>680.2</b>	<b>630.4</b>	<b>597.9</b>	<b>560.7</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>44.6°</b>	<b>42.8°</b>	<b>41.8°</b>	<b>42.0°</b>	<b>41.3°</b>	<b>40.5°</b>	<b>40.5°</b>
Beat VMG	<b>2.67</b>	<b>3.26</b>	<b>3.69</b>	<b>4.06</b>	<b>4.36</b>	<b>4.52</b>	<b>4.57</b>
52°	<b>4.14</b>	<b>4.95</b>	<b>5.59</b>	<b>6.08</b>	<b>6.37</b>	<b>6.52</b>	<b>6.62</b>
60°	<b>4.41</b>	<b>5.24</b>	<b>5.91</b>	<b>6.31</b>	<b>6.55</b>	<b>6.70</b>	<b>6.84</b>
75°	<b>4.60</b>	<b>5.46</b>	<b>6.15</b>	<b>6.50</b>	<b>6.72</b>	<b>6.89</b>	<b>7.16</b>
90°	<b>4.57</b>	<b>5.56</b>	<b>6.32</b>	<b>6.69</b>	<b>6.91</b>	<b>7.01</b>	<b>7.32</b>
110°	<b>4.68</b>	<b>5.72</b>	<b>6.44</b>	<b>6.81</b>	<b>7.10</b>	<b>7.38</b>	<b>7.78</b>
120°	<b>4.55</b>	<b>5.56</b>	<b>6.36</b>	<b>6.75</b>	<b>7.05</b>	<b>7.35</b>	<b>7.93</b>
135°	<b>4.11</b>	<b>5.08</b>	<b>5.97</b>	<b>6.52</b>	<b>6.85</b>	<b>7.14</b>	<b>7.77</b>
150°	<b>3.53</b>	<b>4.49</b>	<b>5.30</b>	<b>6.07</b>	<b>6.54</b>	<b>6.84</b>	<b>7.39</b>
Run VMG	<b>3.05</b>	<b>3.89</b>	<b>4.61</b>	<b>5.29</b>	<b>5.92</b>	<b>6.42</b>	<b>7.00</b>
Gybe Angles	<b>148.0°</b>	<b>151.5°</b>	<b>154.0°</b>	<b>156.0°</b>	<b>174.0°</b>	<b>180.0°</b>	<b>180.0°</b>