



**2020**  
ORC Club  
Certificate

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



**Certificate**  
Number **01035**  
Issued On **11/09/2020**  
ORC Ref **03420000Q6P**  
VPP Ver. **2020 1.02**  
Valid until **28/02/2021**

**Crew Weight**

Default	506kg
Maximum	300kg
Minimum*	215kg

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

**Special Scoring**

ToD	ToT
Non Spin GPH <b>779.9</b>	<b>0.7693</b>
Non Spin OSN <b>753.0</b>	<b>0.7969</b>

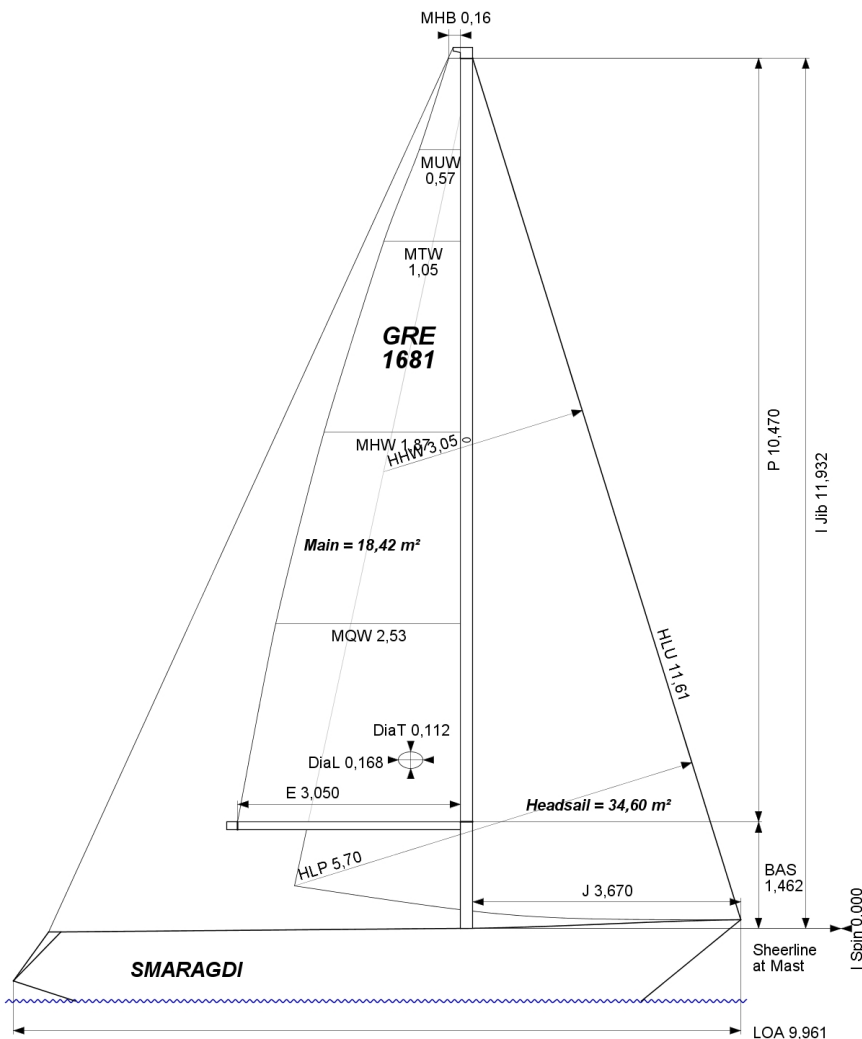
**Sails Limitations**  
Headsails **5** Spinnakers **0**

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

**Class Division Length**  
CDL = **6.863**

**Stability (Estimated)**  
Limit Positive Stab.: **115.8°**  
Stability Index: **116.4**

**Owner**



<b>BOAT</b> Name <b>SMARAGDI</b> Sail Nr <b>GRE-1681</b>		<b>GPH</b> <b>779.9</b>	<b>HULL</b> Data File <b>GR1681</b> LOA <b>9.961m</b> Offset File <b>US12626.off</b> MB <b>3.328m</b> Displacement <b>4,805kg</b> Draft <b>1.794m</b>			
<b>CLASS</b> Class <b>CARTER 33</b> Designer <b>DICK CARTER</b> Builder <b>OLYMPIC MARINE</b> Series <b>05/1974</b> Age Date <b>05/1974</b> Age Allowance <b>0.487%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.605%</b> Plan Review Construction <b>Solid</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex Carbon Rudder <b>No</b> Light Stanchions <b>No</b>		IMSL <b>7.943m</b> VCGD <b>0.070m</b> Sink <b>14.02kg/mm</b> RL <b>5.782m</b> VCGM <b>0.029m</b> WS <b>20.56m²</b> LSM0 <b>8.056m</b> Displacement/Length ratio <b>9.1904</b>		
<b>COMMENTS</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>0.378</b> Type <b>Solid 3 blades</b> PBW <b>0.170</b> PIPA <b>0.0182</b>		<b>CENTERBOARD</b> <b>NA</b>				
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>753.0</b>			<b>840.3</b>		
Time on Time	<b>0.7969</b>			<b>0.8033</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>923.5</b>	<b>683.3</b>	<b>596.0</b>	<b>1196.8</b>	<b>849.6</b>	<b>715.1</b>
Time on Time	<b>0.7309</b>	<b>0.9879</b>	<b>1.1325</b>	<b>0.5640</b>	<b>0.7945</b>	<b>0.9439</b>

<b>BOAT</b>	
Name <b>SMARAGDI</b>	Sail Nr <b>GRE-1681</b>
File <b>GR1681</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Fixed</b>	Spreaders <b>1</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>10.470</b>	E <b>3.050</b> MDT1 <b>0.112</b> MW
IG <b>11.932</b>	J <b>3.670</b> MDL1 <b>0.168</b> GO
ISP	SFJ <b>0.000</b> MDT2
BAS <b>1.462</b>	SPL MDL2
FSD <b>0.030</b>	TPS TL <b>-3.000</b> MCG

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Club Estimated VCG</b>		
Flotation date <b>13/05/2018</b>		SG
FFM <b>1.100</b>	FF <b>1.100</b>	SFFP <b>0.908</b>
FAM <b>0.945</b>	FA <b>0.945</b>	SAFP <b>9.313</b>
LCF from stem on CL / on sheer		<b>5.481 / 5.702</b>
Maximum beam station from stem		<b>5.733</b>
RM Measured		<b>69.3kg-m</b>
RM Default		<b>67.3kg-m</b>
Limit of positive stability / Stab.Index		<b>115.8° / 116.4</b>
Freeboard at mast at 3.670		<b>0.994</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>0.378</b>	
Type <b>Solid 3 blades</b>	PBW <b>0.170</b>	
Twin Screw <b>No</b>	PIPA <b>0.0182</b>	
PSA <b>14.500</b>	PHL <b>0.048</b> ST3 <b>0.098</b> ESL <b>0.612</b>	
PSD <b>0.025</b>	ST1 <b>0.015</b> ST4 <b>0.046</b>	
PHD <b>0.046</b>	ST2 <b>0.069</b> ST5 <b>0.105</b>	

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<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					
1	0.16	0.57	1.05	1.87	2.53	18.43		29/05/2019		Dacron						
<b>HEADSAILS (2)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	OvrI/p	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.12	0.89	1.64	3.05	4.37	5.70	11.61	155%	34.60	N	No		08/03/2014		Polyest	
1	0.04	0.62	1.22	2.48	3.89	5.33	10.99	145%	28.33		No		29/05/2016		Dacron	
<b>SYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
<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>SMARAGDI</b>	Certificate Number <b>01035</b>
Sail Nr <b>GRE-1681</b>	Issued On <b>11/09/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1286.9</b>	<b>1064.6</b>	<b>948.6</b>	<b>878.2</b>	<b>841.9</b>	<b>827.8</b>	<b>831.0</b>
52°	<b>836.7</b>	<b>709.8</b>	<b>631.8</b>	<b>590.6</b>	<b>572.5</b>	<b>565.6</b>	<b>563.8</b>
60°	<b>791.1</b>	<b>674.2</b>	<b>603.7</b>	<b>571.3</b>	<b>556.0</b>	<b>548.3</b>	<b>544.6</b>
75°	<b>759.0</b>	<b>645.5</b>	<b>583.3</b>	<b>556.5</b>	<b>541.3</b>	<b>530.2</b>	<b>517.5</b>
90°	<b>768.8</b>	<b>650.3</b>	<b>582.4</b>	<b>553.2</b>	<b>536.3</b>	<b>521.6</b>	<b>500.0</b>
110°	<b>844.7</b>	<b>696.9</b>	<b>605.8</b>	<b>561.4</b>	<b>539.0</b>	<b>521.7</b>	<b>489.4</b>
120°	<b>904.1</b>	<b>736.6</b>	<b>633.8</b>	<b>573.7</b>	<b>546.0</b>	<b>527.5</b>	<b>493.7</b>
135°	<b>1033.1</b>	<b>816.4</b>	<b>699.3</b>	<b>616.7</b>	<b>569.2</b>	<b>544.8</b>	<b>510.9</b>
150°	<b>1216.9</b>	<b>935.4</b>	<b>782.3</b>	<b>685.2</b>	<b>613.0</b>	<b>569.4</b>	<b>528.8</b>
Run VMG	<b>1385.4</b>	<b>1050.6</b>	<b>863.4</b>	<b>748.4</b>	<b>665.2</b>	<b>604.4</b>	<b>545.9</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1336.1</b>	<b>1057.6</b>	<b>906.0</b>	<b>813.3</b>	<b>753.5</b>	<b>716.1</b>	<b>688.4</b>
Circular Random	<b>1100.0</b>	<b>877.3</b>	<b>755.0</b>	<b>682.4</b>	<b>637.8</b>	<b>609.8</b>	<b>579.8</b>
Coastal / Long Distance	<b>1341.0</b>	<b>995.9</b>	<b>815.1</b>	<b>705.6</b>	<b>645.5</b>	<b>604.8</b>	<b>550.1</b>
Non Spinnaker	<b>1100.0</b>	<b>877.3</b>	<b>755.0</b>	<b>682.4</b>	<b>637.8</b>	<b>609.8</b>	<b>579.8</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>44.3°</b>	<b>41.6°</b>	<b>41.3°</b>	<b>42.0°</b>	<b>41.6°</b>	<b>41.3°</b>	<b>41.6°</b>
Beat VMG	<b>2.80</b>	<b>3.38</b>	<b>3.79</b>	<b>4.10</b>	<b>4.28</b>	<b>4.35</b>	<b>4.33</b>
52°	<b>4.30</b>	<b>5.07</b>	<b>5.70</b>	<b>6.10</b>	<b>6.29</b>	<b>6.36</b>	<b>6.39</b>
60°	<b>4.55</b>	<b>5.34</b>	<b>5.96</b>	<b>6.30</b>	<b>6.47</b>	<b>6.57</b>	<b>6.61</b>
75°	<b>4.74</b>	<b>5.58</b>	<b>6.17</b>	<b>6.47</b>	<b>6.65</b>	<b>6.79</b>	<b>6.96</b>
90°	<b>4.68</b>	<b>5.54</b>	<b>6.18</b>	<b>6.51</b>	<b>6.71</b>	<b>6.90</b>	<b>7.20</b>
110°	<b>4.26</b>	<b>5.17</b>	<b>5.94</b>	<b>6.41</b>	<b>6.68</b>	<b>6.90</b>	<b>7.36</b>
120°	<b>3.98</b>	<b>4.89</b>	<b>5.68</b>	<b>6.27</b>	<b>6.59</b>	<b>6.82</b>	<b>7.29</b>
135°	<b>3.48</b>	<b>4.41</b>	<b>5.15</b>	<b>5.84</b>	<b>6.33</b>	<b>6.61</b>	<b>7.05</b>
150°	<b>2.96</b>	<b>3.85</b>	<b>4.60</b>	<b>5.25</b>	<b>5.87</b>	<b>6.32</b>	<b>6.81</b>
Run VMG	<b>2.60</b>	<b>3.43</b>	<b>4.17</b>	<b>4.81</b>	<b>5.41</b>	<b>5.96</b>	<b>6.59</b>
Gybe Angles	<b>166.5°</b>	<b>167.0°</b>	<b>168.0°</b>	<b>169.0°</b>	<b>169.0°</b>	<b>170.5°</b>	<b>174.5°</b>