



World Leader in Rating Technology

## 2017 ORC Club Certificate

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

**Certificate**  
 Number **001137**  
 Issued On **17/3/2017**  
 ORC Ref **GRE01006836**  
 VPP Ver. **2017 1.00**  
 Valid until **28/2/2018**

**Crew Weight**  
 Declared **795kg**  
 Default\* **795kg**  
 Non Manual Pwr **No**

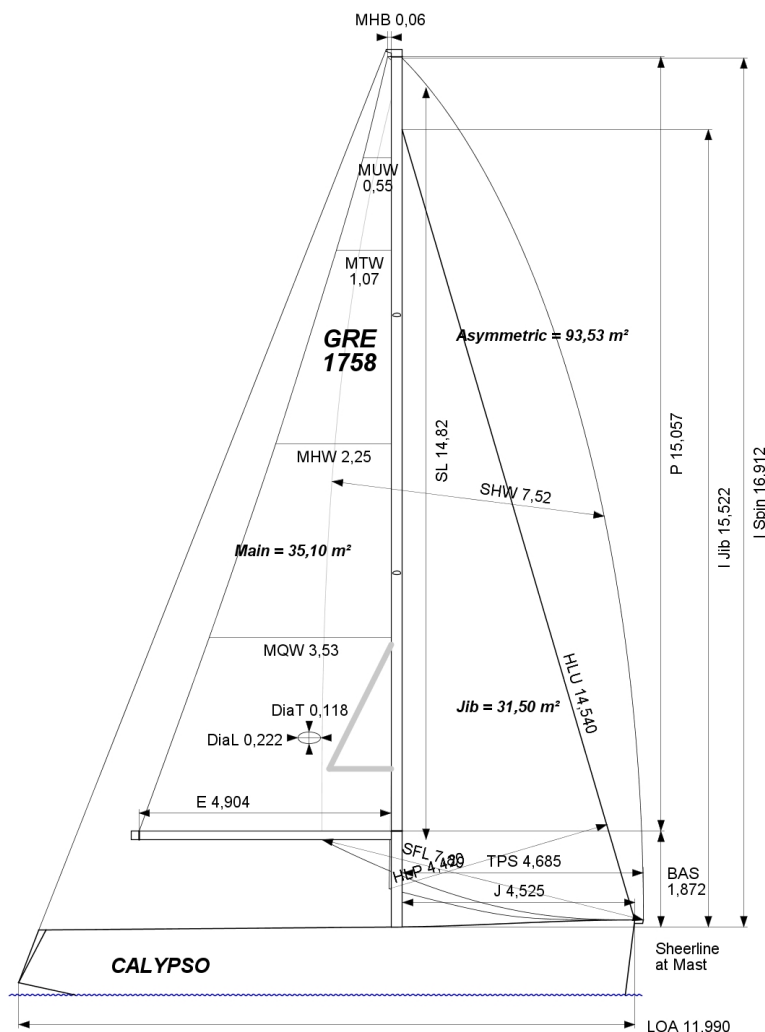
**Special Scoring**  
 ToD ToT  
 Non Spin GPH **722,5 0,8304**  
 Non Spin OSN **692,4 0,8665**

**Sails Limitations**  
 Headsails **5** Spinnakers **3**  
**Dacron Sails**  
**Spinnaker configuration**  
 Symmetric: **No**  
 Asymmetric: **Yes 93,53**  
 Flying H/S: **No**  
 Spin. Pole: **No**

**Class Division Length**  
**CDL = 8,938**

**Stability (Estimated)**  
 Limit Positive Stab.: **110,0°**  
 Stability Index: **112,1**

**Owner**



<b>BOAT</b> Name <b>CALYPSO</b> Sail Nr <b>GRE-1758</b>		<b>GPH</b> <b>675,1</b>	<b>HULL</b> Data File <b>GR1758</b> LOA <b>11,990m</b> Offset File <b>SO409DK_CLB.</b> MB <b>3,988m</b> Displacement <b>7.860kg</b> Draft <b>2,097m</b>			
<b>CLASS</b> Class <b>SUN ODYSSEY 409</b> Designer <b>BRIAND PHILIPPE</b> Builder <b>JEANNEAU</b> Series <b>06/2010</b> Age Date <b>03/2015</b> Age Allowance <b>0,228%</b>			IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0,381%</b> Fwd Accom. <b>Yes</b> 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>			
<b>COMMENTS</b> Builder's declared displacement.			IMSL <b>11,054m</b> VCGD <b>0,212m</b> Sink <b>25,17kg/mm</b> RL <b>6,821m</b> VCGM <b>0,231m</b> WS <b>33,36m<sup>2</sup></b> LSM0 <b>11,067m</b> Displacement/Length ratio <b>5,7987</b>			
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0,410</b> Type <b>Solid 3 blades</b> PBW <b>0,165</b> PIPA <b>0,0210</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>652,1</b>			<b>741,7</b>		
Time On Time	<b>0,9201</b>			<b>0,9101</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>819,7</b>	<b>588,0</b>	<b>495,8</b>	<b>1076,9</b>	<b>753,5</b>	<b>612,2</b>
Time on Time	<b>0,8235</b>	<b>1,1479</b>	<b>1,3613</b>	<b>0,6268</b>	<b>0,8958</b>	<b>1,1026</b>

<b>BOAT</b>	
Name <b>CALYPSO</b>	Sail Nr <b>GRE-1758</b>
File <b>GR1758</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date <b>11/03/2016</b>		SG	
FFM	FF	1,452	SFFP 0,185
FAM	FA	1,264	SAFP 11,465
LCF from stem on CL / on sheer		<b>6,405 / 6,673</b>	
Maximum beam station from stem		<b>7,800</b>	
RM Measured		<b>205,0kg·m</b>	
RM Default		<b>202,0kg·m</b>	
Limit of positive stability / Stab.Index		<b>110,0° / 112,1</b>	
Freeboard at mast at 4,525		<b>1,319</b>	

<b>RIG</b>			
Forestay Tension <b>Fixed</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>Yes</b>		
Fiber Rigging <b>No</b>	Main Furler <b>Yes</b>		
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>		
Articulated Bowsprit <b>No</b>			
P <b>15,057</b>	E <b>4,904</b>	MDT1 <b>0,118</b>	MW
IG <b>15,522</b>	J <b>4,525</b>	MDL1 <b>0,222</b>	GO
ISP <b>16,912</b>	SFJ <b>0,000</b>	MDT2	BD
BAS <b>1,872</b>	SPL	MDL2	MWT
FSP <b>-3,000</b>	TPS <b>4,685</b>	TL <b>-3,000</b>	MCG



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## 2017 Measurements Datasheet

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0,410</b>		
Type <b>Solid 3 blades</b>	PBW <b>0,165</b>		
Twin Screw <b>No</b>	PIPA <b>0,0210</b>		
ST1 <b>0,055</b>	ST3 <b>0,200</b>	ST5 <b>0,302</b>	
ST2 <b>0,200</b>	ST4 <b>0,110</b>	EDL <b>3,210</b>	

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<b>COMMENTS</b>	
Builder's declared displacement.	

<b>MOVEABLE 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					
M1	0,065	0,55	1,07	2,25	3,53	35,10	VAFIAS	20/03/2016		Dacron						
<b>HEADSAILS (1)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
H1	0,07	0,52	1,01	2,10	3,30	4,42	14,54	98%	31,50			VAFIAS	20/03/2016		Dacron	
<b>SYMMETRIC SPINNAKERS (0)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
<b>ASYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
S1	15,48	14,15	14,82	7,52	7,80	93,53	asym	VAFIAS	21/09/2015		Polyester					



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# 2017

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name	<b>CALYPSO</b>
Sail Nr	<b>GRE-1758</b>
Certificate Number	<b>001137</b>
Issued On	<b>17/3/2017</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1307,0</b>	<b>1041,9</b>	<b>899,2</b>	<b>808,5</b>	<b>738,7</b>	<b>695,6</b>	<b>679,4</b>
52°	<b>835,3</b>	<b>675,2</b>	<b>586,8</b>	<b>529,0</b>	<b>492,1</b>	<b>473,3</b>	<b>463,9</b>
60°	<b>776,2</b>	<b>633,8</b>	<b>552,1</b>	<b>502,1</b>	<b>474,6</b>	<b>458,9</b>	<b>447,6</b>
75°	<b>729,9</b>	<b>598,2</b>	<b>519,1</b>	<b>477,7</b>	<b>461,9</b>	<b>446,9</b>	<b>423,7</b>
90°	<b>693,7</b>	<b>561,1</b>	<b>487,9</b>	<b>455,7</b>	<b>441,3</b>	<b>435,1</b>	<b>417,2</b>
110°	<b>687,8</b>	<b>556,3</b>	<b>485,5</b>	<b>454,5</b>	<b>433,1</b>	<b>411,4</b>	<b>385,8</b>
120°	<b>716,8</b>	<b>577,7</b>	<b>498,3</b>	<b>461,4</b>	<b>439,3</b>	<b>418,2</b>	<b>376,3</b>
135°	<b>807,2</b>	<b>638,7</b>	<b>542,2</b>	<b>484,8</b>	<b>456,2</b>	<b>435,8</b>	<b>395,8</b>
150°	<b>955,1</b>	<b>741,3</b>	<b>623,3</b>	<b>546,7</b>	<b>501,0</b>	<b>473,1</b>	<b>439,0</b>
Run VMG	<b>1102,9</b>	<b>856,0</b>	<b>719,7</b>	<b>631,2</b>	<b>578,5</b>	<b>541,4</b>	<b>470,6</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1204,9</b>	<b>948,9</b>	<b>809,5</b>	<b>719,9</b>	<b>658,6</b>	<b>618,5</b>	<b>575,0</b>
Circular Random	<b>971,5</b>	<b>766,9</b>	<b>652,7</b>	<b>583,3</b>	<b>538,9</b>	<b>509,5</b>	<b>474,2</b>
Ocean for PCS	<b>1199,8</b>	<b>906,2</b>	<b>737,1</b>	<b>631,3</b>	<b>561,6</b>	<b>513,2</b>	<b>449,7</b>
Non Spinnaker	<b>1061,0</b>	<b>829,3</b>	<b>697,6</b>	<b>615,7</b>	<b>562,3</b>	<b>526,8</b>	<b>485,7</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>45,0°</b>	<b>43,9°</b>	<b>43,2°</b>	<b>43,1°</b>	<b>42,6°</b>	<b>41,3°</b>	<b>41,7°</b>
Beat VMG	<b>2,75</b>	<b>3,46</b>	<b>4,00</b>	<b>4,45</b>	<b>4,87</b>	<b>5,18</b>	<b>5,30</b>
52°	<b>4,31</b>	<b>5,33</b>	<b>6,13</b>	<b>6,81</b>	<b>7,32</b>	<b>7,61</b>	<b>7,76</b>
60°	<b>4,64</b>	<b>5,68</b>	<b>6,52</b>	<b>7,17</b>	<b>7,59</b>	<b>7,85</b>	<b>8,04</b>
75°	<b>4,93</b>	<b>6,02</b>	<b>6,93</b>	<b>7,54</b>	<b>7,79</b>	<b>8,06</b>	<b>8,50</b>
90°	<b>5,19</b>	<b>6,42</b>	<b>7,38</b>	<b>7,90</b>	<b>8,16</b>	<b>8,27</b>	<b>8,63</b>
110°	<b>5,23</b>	<b>6,47</b>	<b>7,41</b>	<b>7,92</b>	<b>8,31</b>	<b>8,75</b>	<b>9,33</b>
120°	<b>5,02</b>	<b>6,23</b>	<b>7,22</b>	<b>7,80</b>	<b>8,19</b>	<b>8,61</b>	<b>9,57</b>
135°	<b>4,46</b>	<b>5,64</b>	<b>6,64</b>	<b>7,43</b>	<b>7,89</b>	<b>8,26</b>	<b>9,10</b>
150°	<b>3,77</b>	<b>4,86</b>	<b>5,78</b>	<b>6,59</b>	<b>7,19</b>	<b>7,61</b>	<b>8,20</b>
Run VMG	<b>3,26</b>	<b>4,21</b>	<b>5,00</b>	<b>5,70</b>	<b>6,22</b>	<b>6,65</b>	<b>7,65</b>
Gybe Angles	<b>145,1°</b>	<b>146,1°</b>	<b>146,2°</b>	<b>146,1°</b>	<b>147,6°</b>	<b>173,7°</b>	<b>177,2°</b>