



World Leader in Rating Technology

2016  
ORC Club  
Certificate

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

**Certificate**  
Number **F00337**  
Issued On **23/5/2016**  
ORC Ref **GRE01006055**  
VPP Ver. **2016 1.01**  
Valid until **28/2/2017**

**Crew Weight**  
Declared **600kg**  
Default\* **685kg**  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>701,3</b>	<b>0,8556</b>
Non Spin OSN	<b>679,5</b>	<b>0,8831</b>
N/S Perf. Line	<b>-6,1</b>	<b>0,537</b>

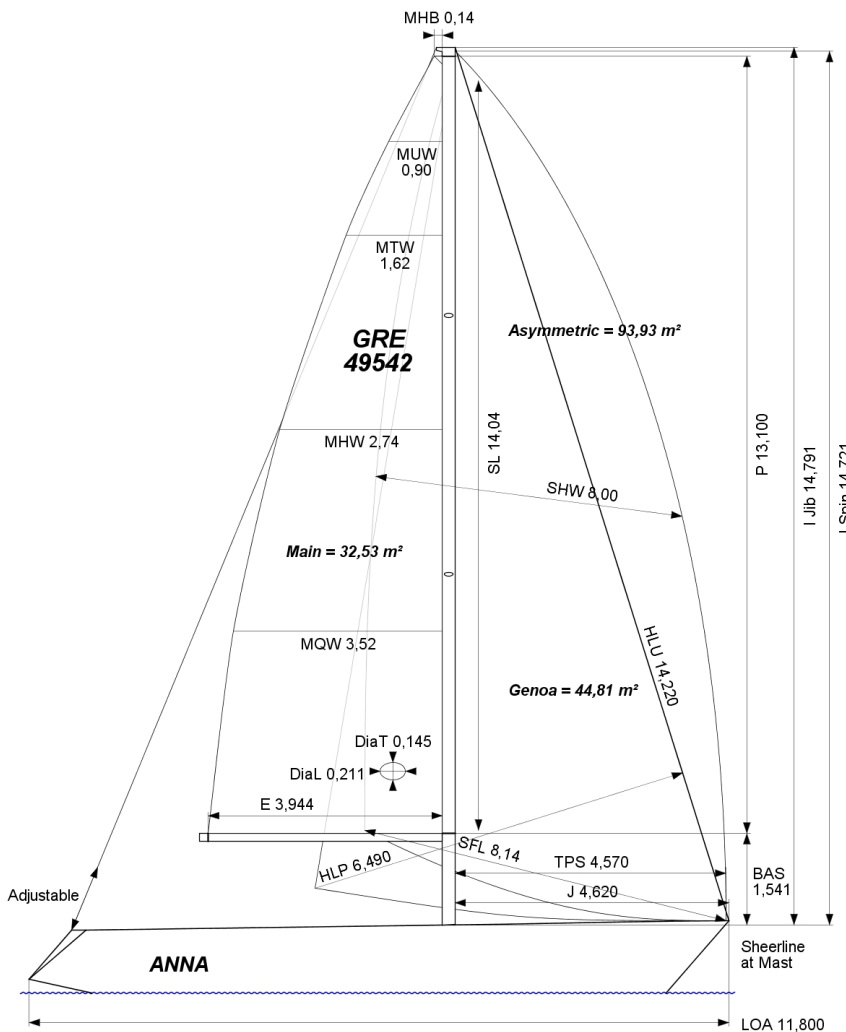
**Sails Limitations**  
Headsails **6** Spinnakers **3**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 93,93**  
Flying H/S: **No**  
Spin. Pole: **No**

**Class Division Length**  
CDL = **8,448**

**Stability**  
LPS (Measured): **114,5°**  
Stability Index: **118,8**  
OSR Category: **1**

**Owner**



<b>BOAT</b> Name <b>ANNA</b> Sail Nr <b>GRE-49542</b>	<b>GPH</b> <b>674,5</b>	<b>HULL</b> Data File <b>GR49542.dxt</b> LOA <b>11,800m</b> Offset File <b>GR0093.BOF</b> MB <b>3,878m</b> Displacement <b>8,643kg</b> Draft <b>2,020m</b>
<b>CLASS</b> Class <b>GIBSEA 402</b> Designer <b>JOUBERT/NIVELT</b> Builder <b>GIBERT MARINE SA</b> Series <b>01/1987</b> Age Date <b>01/1988</b> Age Allowance <b>0,488%</b>	<b>IMS Division</b> <b>Cruiser/Racer</b> Dynamic All. <b>0,571%</b> <b>Fwd Accom.</b> <b>Yes</b> Construction <b>Solid</b> <b>Fiber Rigging</b> <b>No</b> Aramid Core <b>No</b> <b>Crew Arm Ex</b> Carbon Rudder <b>No</b> Light Stanchions <b>No</b>	<b>IMS L</b> <b>9,766m</b> VCGD <b>-0,029m</b> Sink <b>20,78kg/mm</b> <b>RL</b> <b>7,129m</b> VCGM <b>0,080m</b> WS <b>29,45m<sup>2</sup></b> <b>LSM0</b> <b>9,962m</b> Displacement/Length ratio <b>8,7423</b>
<b>COMMENTS</b>	<b>Water Ballast</b> <b>0</b> <b>Trim Tab</b> <b>No</b>	<b>Water Ballast</b> <b>0</b> <b>Trim Tab</b> <b>No</b>
<b>PROPELLER</b> Installation <b>Shaft exposed</b> PRD <b>0,480</b> Type <b>Feathering 2 blades</b> PBW <b>0,153</b> PIPA <b>0,0050</b>	<b>CENTERBOARD</b> <b>N/A</b>	<b>CENTERBOARD</b> <b>N/A</b>
<b>SCORING OPTIONS</b>		
	<b>OFFSHORE</b> COASTAL / LONG DISTANCE	<b>INSHORE</b> WINDWARD / LEEWARD
Time On Distance	<b>655,7</b>	<b>740,1</b>
Time On Time	<b>0,9151</b>	<b>0,9120</b>
Performance Line	PLT <b>0,594</b> PLD <b>19,1</b>	PLT <b>0,727</b> PLD <b>167,6</b>
Triple Number	Low <b>0,8586</b> Medium <b>1,1348</b> High <b>1,2959</b>	Low <b>0,6592</b> Medium <b>0,8972</b> High <b>1,0671</b>

<b>BOAT</b>	
Name <b>ANNA</b>	Sail Nr <b>GRE-49542</b>
File <b>GR49542.dxt</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>06/04/1996</b>		SG <b>1,0280</b>
FFM <b>1,213</b>	FF <b>1,231</b>	SFFP <b>0,500</b>
FAM <b>1,063</b>	FA <b>1,060</b>	SAFP <b>10,840</b>
W1 <b>20,000</b>	PD1 <b>56,0</b>	WD <b>12,620</b>
W2 <b>40,000</b>	PD2 <b>110,0</b>	GSA <b>28,3</b>
W3 <b>60,000</b>	PD3 <b>162,0</b>	RSA <b>5674,5</b>
W4 <b>80,000</b>	PD4 <b>218,0</b>	PLM <b>1660,0</b>
LCF from stem on CL / on sheer		<b>6,503 / 6,722</b>
Maximum beam station from stem		<b>6,856</b>
RM Measured		<b>134,1kg·m</b>
RM Default		<b>151,7kg·m</b>
Limit of positive stability / Stab.Index		<b>114,5° / 118,8</b>
Freeboard at mast at 4,620		<b>1,149</b>

<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>13,100</b>	E <b>3,944</b>	MDT1 <b>0,145</b>	MW <b>0,211</b>	
IG <b>14,791</b>	J <b>4,620</b>	MDL1 <b>0,211</b>	GO <b>0,261</b>	
ISP <b>14,721</b>	SFJ <b>0,000</b>	MDT2 <b>0,145</b>	BD <b>0,139</b>	
BAS <b>1,541</b>	SPL	MDL2 <b>0,211</b>	MWT	
FSP <b>0,072</b>	TPS <b>4,570</b>	TL <b>0,000</b>	MCG	



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Measurements Datasheet

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

<b>PROPELLER</b>		
Installation <b>Shaft exposed</b>	PRD <b>0,480</b>	
Type <b>Feathering 2 blades</b>	PBW <b>0,153</b>	
Twin Screw <b>No</b>	PIPA <b>0,0050</b>	
PSA <b>16,200</b>	PHL <b>0,080</b>	ST3 <b>0,106</b> ESL <b>0,880</b>
PSD <b>0,030</b>	ST1 <b>0,031</b>	ST4 <b>0,056</b>
PHD <b>0,075</b>	ST2 <b>0,098</b>	ST5 <b>0,195</b>

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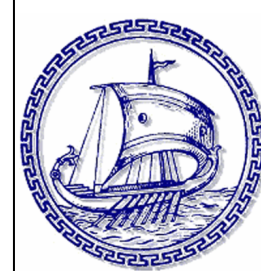
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<b>COMMENTS</b>

<b>MOVEABLE BALLAST</b>
N/A

<b>CENTERBOARD</b>
N/A



<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,139	0,90	1,62	2,74	3,52	32,53	33,16	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	93,93	AS · (SFL + 4·SHW) / 6		
	14,04	14,04	14,04	8,00	8,14				

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0,76	1,50	3,07	4,71	6,49	14,22	44,81				28/03/2009	Pentex	

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>TSALTAS</b>				
Date <b>06/04/1996</b>				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
OR	Anchor	70,0	1,00	*Legacy Anchor*
+	Anchor	40,0	40,80	Danforth
+	Chain	35,0	40,80	20m
+	Tools	20,0	6,80	
<i>Id</i>	<i>Item</i>	<i>Maker</i>	<i>Model</i>	
1	Engine	Perkins	50hp	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	
+	Deck-Gear	15,0		

<b>MEASUREMENT INVENTORY</b>								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
1	Tank Fuel		St. Steel	150,0	9,40			0,0
2	Tank Water		St. Steel	200,0	4,90			0,0
3	Tank Water		St. Steel	200,0	4,90			0,0
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
1	Battery	60,0	9,00					



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## ORC Club Certificate Appendix

<b>BOAT</b>	
Name <b>ANNA</b>	Certificate Number <b>F00337</b>
Sail Nr <b>GRE-49542</b>	Issued On <b>23/5/2016</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1177,5</b>	<b>974,9</b>	<b>867,4</b>	<b>790,9</b>	<b>746,9</b>	<b>724,0</b>	<b>707,4</b>
52°	<b>757,0</b>	<b>637,3</b>	<b>563,9</b>	<b>523,5</b>	<b>505,4</b>	<b>497,1</b>	<b>490,8</b>
60°	<b>708,4</b>	<b>598,9</b>	<b>533,6</b>	<b>505,1</b>	<b>490,0</b>	<b>481,2</b>	<b>474,2</b>
75°	<b>669,3</b>	<b>565,0</b>	<b>513,3</b>	<b>490,7</b>	<b>476,2</b>	<b>464,9</b>	<b>449,0</b>
90°	<b>671,9</b>	<b>567,5</b>	<b>513,1</b>	<b>486,7</b>	<b>476,3</b>	<b>463,5</b>	<b>440,8</b>
110°	<b>694,1</b>	<b>571,7</b>	<b>509,8</b>	<b>483,2</b>	<b>463,8</b>	<b>446,4</b>	<b>428,9</b>
120°	<b>719,0</b>	<b>591,7</b>	<b>518,9</b>	<b>488,7</b>	<b>468,9</b>	<b>450,4</b>	<b>416,5</b>
135°	<b>798,9</b>	<b>648,7</b>	<b>555,3</b>	<b>507,4</b>	<b>483,2</b>	<b>464,8</b>	<b>430,8</b>
150°	<b>939,1</b>	<b>744,1</b>	<b>636,0</b>	<b>562,4</b>	<b>523,3</b>	<b>498,9</b>	<b>468,2</b>
Run VMG	<b>1084,3</b>	<b>859,2</b>	<b>734,3</b>	<b>649,4</b>	<b>604,2</b>	<b>549,2</b>	<b>492,2</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1130,9</b>	<b>917,1</b>	<b>800,9</b>	<b>720,1</b>	<b>675,6</b>	<b>636,6</b>	<b>599,8</b>
Circular Random	<b>939,9</b>	<b>754,8</b>	<b>653,9</b>	<b>594,1</b>	<b>556,7</b>	<b>532,2</b>	<b>502,7</b>
Ocean for PCS	<b>1158,8</b>	<b>890,7</b>	<b>737,8</b>	<b>642,9</b>	<b>580,6</b>	<b>537,2</b>	<b>479,0</b>
Non Spinnaker	<b>992,6</b>	<b>790,8</b>	<b>679,1</b>	<b>611,8</b>	<b>569,2</b>	<b>541,4</b>	<b>508,8</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>44,8°</b>	<b>43,1°</b>	<b>43,1°</b>	<b>43,8°</b>	<b>42,4°</b>	<b>41,4°</b>	<b>40,6°</b>
Beat VMG	<b>3,06</b>	<b>3,69</b>	<b>4,15</b>	<b>4,55</b>	<b>4,82</b>	<b>4,97</b>	<b>5,09</b>
52°	<b>4,76</b>	<b>5,65</b>	<b>6,38</b>	<b>6,88</b>	<b>7,12</b>	<b>7,24</b>	<b>7,34</b>
60°	<b>5,08</b>	<b>6,01</b>	<b>6,75</b>	<b>7,13</b>	<b>7,35</b>	<b>7,48</b>	<b>7,59</b>
75°	<b>5,38</b>	<b>6,37</b>	<b>7,01</b>	<b>7,34</b>	<b>7,56</b>	<b>7,74</b>	<b>8,02</b>
90°	<b>5,36</b>	<b>6,34</b>	<b>7,02</b>	<b>7,40</b>	<b>7,56</b>	<b>7,77</b>	<b>8,17</b>
110°	<b>5,19</b>	<b>6,30</b>	<b>7,06</b>	<b>7,45</b>	<b>7,76</b>	<b>8,06</b>	<b>8,39</b>
120°	<b>5,01</b>	<b>6,08</b>	<b>6,94</b>	<b>7,37</b>	<b>7,68</b>	<b>7,99</b>	<b>8,64</b>
135°	<b>4,51</b>	<b>5,55</b>	<b>6,48</b>	<b>7,10</b>	<b>7,45</b>	<b>7,74</b>	<b>8,36</b>
150°	<b>3,83</b>	<b>4,84</b>	<b>5,66</b>	<b>6,40</b>	<b>6,88</b>	<b>7,22</b>	<b>7,69</b>
Run VMG	<b>3,32</b>	<b>4,19</b>	<b>4,90</b>	<b>5,54</b>	<b>5,96</b>	<b>6,56</b>	<b>7,31</b>
Gybe Angles	<b>145,9°</b>	<b>147,1°</b>	<b>146,5°</b>	<b>146,8°</b>	<b>149,5°</b>	<b>172,7°</b>	<b>176,5°</b>