

<b>BOAT</b> Name <b>ANDROMEDA</b> Sail Nr <b>GRE-49063</b>	<b>GPH</b> <b>703.2</b>	<b>HULL</b> Length Overall <b>11.700m</b> Maximum Beam <b>4.046m</b> Displacement <b>9,525kg</b> Draft <b>1.726m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.661%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>MOODY 39</b> Designer <b>A.PRIMROSE</b> Builder <b>MARINE PROJECTS</b> Series <b>01/1977</b> Age <b>01/1977</b> Age Allowance <b>0.487%</b> Offset File <b>GR0064.BOF - 20/11/1995 17:07:00</b> Measurement by <b>DIMOU/KALATZIS - 24/09/2002</b>		IMSL <b>10.098m</b> VCGD <b>0.388m</b> Sink <b>26.24kg/mm</b> RL <b>5.960m</b> VCGM <b>0.102m</b> WS <b>35.72m²</b> LSM0 <b>10.194m</b> Displacement/Length ratio <b>8.9915</b>



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>681.0</b>			<b>767.0</b>		
Time on Time	<b>0.8811</b>			<b>0.8800</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>834.0</b>	<b>618.0</b>	<b>528.9</b>	<b>1086.1</b>	<b>780.7</b>	<b>642.3</b>
Time on Time	<b>0.8094</b>	<b>1.0923</b>	<b>1.2762</b>	<b>0.6215</b>	<b>0.8646</b>	<b>1.0509</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1300.2</b>	<b>1066.2</b>	<b>944.7</b>	<b>865.0</b>	<b>803.3</b>	<b>764.2</b>	<b>744.5</b>
52°	<b>824.5</b>	<b>688.1</b>	<b>612.6</b>	<b>560.2</b>	<b>527.5</b>	<b>510.5</b>	<b>500.8</b>
60°	<b>767.1</b>	<b>647.4</b>	<b>577.0</b>	<b>532.0</b>	<b>508.4</b>	<b>494.8</b>	<b>484.0</b>
75°	<b>724.5</b>	<b>615.3</b>	<b>548.2</b>	<b>512.8</b>	<b>493.9</b>	<b>480.9</b>	<b>462.4</b>
90°	<b>727.0</b>	<b>614.0</b>	<b>535.0</b>	<b>497.8</b>	<b>478.8</b>	<b>465.6</b>	<b>451.8</b>
110°	<b>718.7</b>	<b>591.3</b>	<b>519.7</b>	<b>488.0</b>	<b>467.9</b>	<b>449.9</b>	<b>422.6</b>
120°	<b>738.1</b>	<b>602.5</b>	<b>526.6</b>	<b>491.7</b>	<b>470.7</b>	<b>451.5</b>	<b>417.2</b>
135°	<b>812.7</b>	<b>653.9</b>	<b>559.0</b>	<b>508.9</b>	<b>483.8</b>	<b>464.8</b>	<b>428.3</b>
150°	<b>960.5</b>	<b>752.2</b>	<b>629.0</b>	<b>554.2</b>	<b>508.8</b>	<b>485.4</b>	<b>450.4</b>
Run VMG	<b>1109.1</b>	<b>868.7</b>	<b>725.8</b>	<b>634.0</b>	<b>571.4</b>	<b>523.7</b>	<b>476.9</b>

**Certificate**

Number **001079**  
ORC Ref **GRE01009181**  
Issued On **14/03/2018**  
VPP Ver. **2018 1.00**  
Valid until **28/02/2019**

**Crew Weight**

Default 708kg  
Maximum **600kg**  
Minimum\* **450kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>701.8</b>	<b>0.8550</b>
Double H.OSN	<b>679.4</b>	<b>0.8831</b>
Non Spin GPH	<b>735.8</b>	<b>0.8154</b>
Non Spin OSN	<b>710.9</b>	<b>0.8440</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1204.6</b>	<b>967.5</b>	<b>835.3</b>	<b>749.5</b>	<b>687.3</b>	<b>643.9</b>	<b>610.7</b>
Circular Random	<b>992.6</b>	<b>792.4</b>	<b>681.4</b>	<b>614.0</b>	<b>570.9</b>	<b>542.4</b>	<b>509.9</b>
Coastal / Long Distance	<b>1195.1</b>	<b>904.8</b>	<b>743.6</b>	<b>641.0</b>	<b>579.8</b>	<b>537.1</b>	<b>482.8</b>
Non Spinnaker	<b>1048.6</b>	<b>832.9</b>	<b>712.5</b>	<b>638.7</b>	<b>591.0</b>	<b>559.3</b>	<b>522.5</b>

**Sails Limitations**

Headsails	Spinnakers
<b>5</b>	<b>3</b>

**Dacron Sails**

<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>46.4°</b>	<b>44.9°</b>	<b>44.4°</b>	<b>44.4°</b>	<b>44.7°</b>	<b>43.8°</b>	<b>43.0°</b>
Beat VMG	<b>2.77</b>	<b>3.38</b>	<b>3.81</b>	<b>4.16</b>	<b>4.48</b>	<b>4.71</b>	<b>4.84</b>
52°	<b>4.37</b>	<b>5.23</b>	<b>5.88</b>	<b>6.43</b>	<b>6.82</b>	<b>7.05</b>	<b>7.19</b>
60°	<b>4.69</b>	<b>5.56</b>	<b>6.24</b>	<b>6.77</b>	<b>7.08</b>	<b>7.28</b>	<b>7.44</b>
75°	<b>4.97</b>	<b>5.85</b>	<b>6.57</b>	<b>7.02</b>	<b>7.29</b>	<b>7.49</b>	<b>7.78</b>
90°	<b>4.95</b>	<b>5.86</b>	<b>6.73</b>	<b>7.23</b>	<b>7.52</b>	<b>7.73</b>	<b>7.97</b>
110°	<b>5.01</b>	<b>6.09</b>	<b>6.93</b>	<b>7.38</b>	<b>7.69</b>	<b>8.00</b>	<b>8.52</b>
120°	<b>4.88</b>	<b>5.98</b>	<b>6.84</b>	<b>7.32</b>	<b>7.65</b>	<b>7.97</b>	<b>8.63</b>
135°	<b>4.43</b>	<b>5.51</b>	<b>6.44</b>	<b>7.07</b>	<b>7.44</b>	<b>7.75</b>	<b>8.41</b>
150°	<b>3.75</b>	<b>4.79</b>	<b>5.72</b>	<b>6.50</b>	<b>7.08</b>	<b>7.42</b>	<b>7.99</b>
Run VMG	<b>3.25</b>	<b>4.14</b>	<b>4.96</b>	<b>5.68</b>	<b>6.30</b>	<b>6.87</b>	<b>7.55</b>
Gybe Angles	<b>147.1°</b>	<b>150.5°</b>	<b>150.9°</b>	<b>154.9°</b>	<b>167.5°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**

**CDL = 8.029**

**Storm Sails Areas**

Heavy Weather Jib **27.26**  
Storm Jib (JL=9.24) **10.10**  
Storm Trysail **9.39**

**Owner**

<b>BOAT</b>	
Name <b>ANDROMEDA</b>	Sail Nr <b>GRE-49063</b>
File <b>GR49063</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>02/04/1994</b>		SG <b>1.0300</b>	
FFM <b>1.632</b>	FF <b>1.642</b>	SFFP <b>1.250</b>	
FAM <b>1.282</b>	FA <b>1.279</b>	SAFP <b>11.090</b>	
W1 <b>18.0</b>	PD1 <b>67.9</b>	WD <b>13.610</b>	
W2 <b>36.0</b>	PD2 <b>135.1</b>	GSA <b>1.0</b>	
W3 <b>54.0</b>	PD3 <b>202.8</b>	RSA <b>1.0</b>	
W4 <b>72.0</b>	PD4 <b>272.1</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>6.749 / 7.043</b>	
Maximum beam station from stem		<b>6.800</b>	
RM Measured		<b>285.6kg-m</b>	
RM Default		<b>248.7kg-m</b>	
Limit of positive stability / Stab.Index		<b>113.9° / 118.2</b>	
Freeboard at mast at 4.940		<b>1.327</b>	



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**IMS Measurement Certificate**

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>1</b>		
Inner Stay <b>Fixed</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>12.240</b>	E <b>4.385</b>	MDT1 <b>0.170</b>	MW <b>0.165</b>
IG <b>14.080</b>	J <b>4.940</b>	MDL1 <b>0.215</b>	GO <b>0.210</b>
ISP <b>14.100</b>	SFJ <b>0.000</b>	MDT2 <b>0.150</b>	BD <b>0.100</b>
BAS <b>1.535</b>	SPL <b>5.100</b>	MDL2 <b>0.170</b>	MWT <b></b>
FSP <b></b>	TPS <b>4.910</b>	TL <b>2.140</b>	MCG <b></b>

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

<b>PROPELLER</b>			
Installation <b>Shaft exposed</b>	PRD <b>0.420</b>		
Type <b>Feathering 3 blades</b>	PBW <b>0.148</b>		
Twin Screw <b>No</b>	PIPA <b>0.0051</b>		
PSA <b>20.000</b>	PHL <b>0.130</b>	ST3 <b>0.121</b>	ESL <b>1.070</b>
PSD <b>0.030</b>	ST1 <b>0.017</b>	ST4 <b>0.065</b>	
PHD <b>0.055</b>	ST2 <b>0.121</b>	ST5 <b>0.240</b>	

<b>COMMENTS</b>	

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



Invalid for Racing

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<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>									
<b>Mainsail</b>	<b>MHB</b>	<b>MUW</b>	<b>MTW</b>	<b>MHW</b>	<b>MQW</b>	<b>Area</b>	<b>Area (r)</b>	<b>Formula</b>	
	0.140	0.83	1.52	2.67	3.60	30.76	31.27	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
<b>Symmetric</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>			SL · (SFL + 4·SHW) / 6	
	14.18	14.18	14.18	9.16	9.08	108.05			
<b>Asymmetric</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>	<b>Area (r)</b>		AS · (SFL + 4·SHW) / 6	
	14.52	13.08	13.80	5.82	7.09	69.85 86.86			

<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>
0.04	0.90	1.81	3.69	5.59	7.45	14.09	52.24			02/02/2018	Dacron	No.1
0.05	0.84	1.71	3.57	5.47	7.25	13.78	49.58			06/03/2017	Dacron	No.1 Cruising
					6.60	13.66	45.89			01/02/1991	Dacron	No.1 Light
0.08	0.77	1.54	3.12	4.73	6.39	13.70	43.23			02/02/2018	Dacron	No.2
					5.81	12.30	36.37			14/03/2015	Dacron	No.3
					4.12	11.84	24.83		Y	14/03/2015	Nylon	DRIFTER
0.06	0.53	1.03	2.05	3.07	4.12	11.67	24.02			02/02/2018	Dacron	HWJ
					4.37	10.18	22.64			14/03/2015	Dacron	HWJ-2

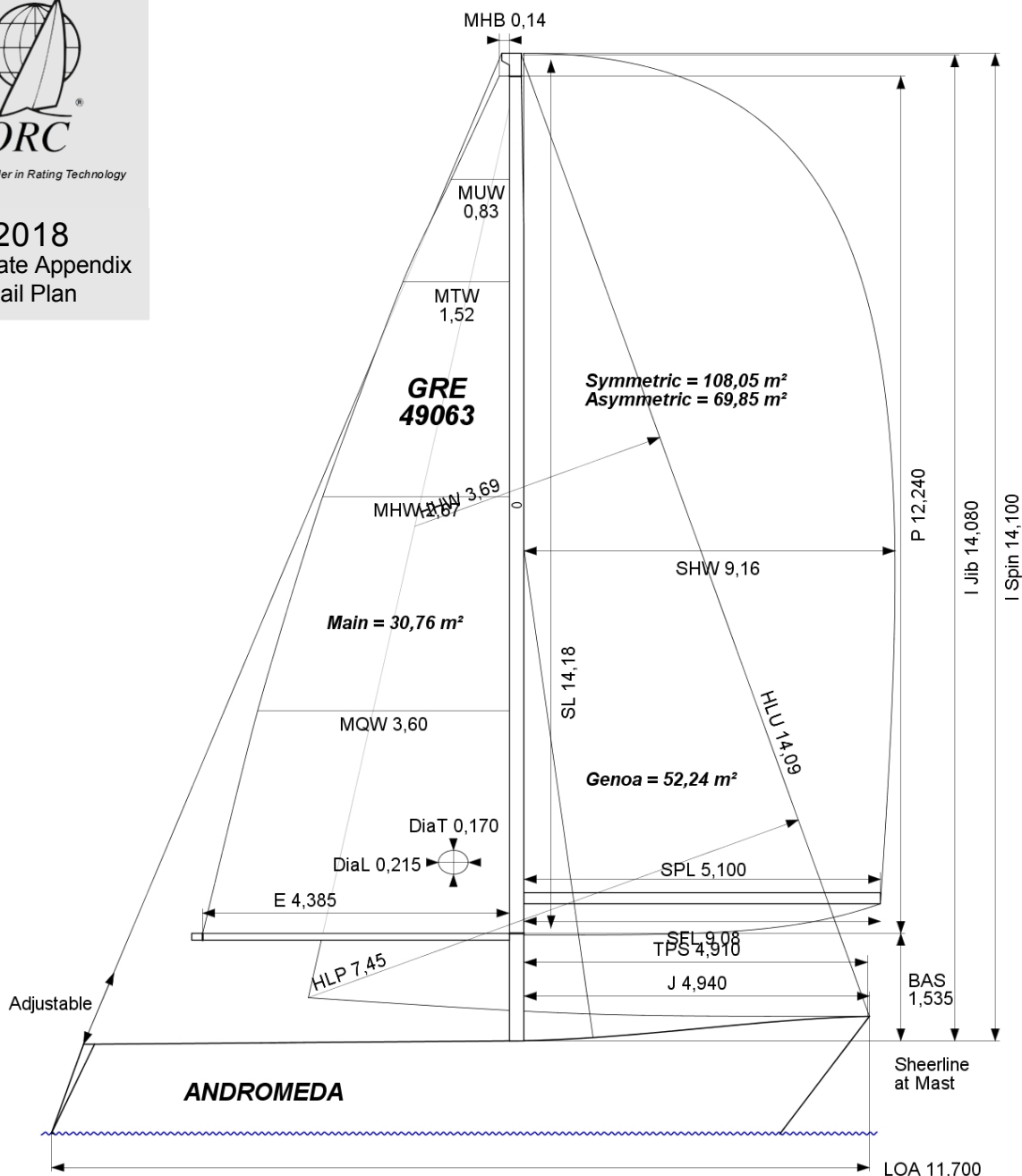
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>DIMOU GRE-9</b>				
Date <b>02/04/1994</b>				
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
4	Anchor	20.0	8.50	ANCHOR
2	Anchor	20.0	8.50	ANCHOR &
4	Chain	40.0	0.80	
4	Tools	20.0	5.80	
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
1	Engine	THORNYCROFT	108	
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Description</b>	
4	Fwd Items	40.0		

<b>MEASUREMENT INVENTORY</b>							
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG</b>	<b>Condtn Description</b>
1	Tank FUEL		INOX	200.0	7.30		0-0
2	Tank WATER		INOX	400.0	6.00		0-0
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>			
1	Battery	80.0	8.60	4 x 90 Ah = 4 x 20 kg			



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Sail Plan



**SAILS INVENTORY**

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.140	0.83	1.52	2.67	3.60	30.76	TSALTAS	20/06/2001	KAKITSIS	Dacron						
HEADSAILS (8)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
2	0.04	0.90	1.81	3.69	5.59	7.45	14.09	151%	52.24			KALATZIS	02/02/2018	KAKITSIS	Dacron	No.1
3	0.05	0.84	1.71	3.57	5.47	7.25	13.78	147%	49.58			KALATZIS	06/03/2017	KAKITSIS	Dacron	No.1 Cruising
1						6.60	13.66	134%	45.89			GRE-3	01/02/1991	KAKITSIS	Dacron	No.1 Light
4	0.08	0.77	1.54	3.12	4.73	6.39	13.70	129%	43.23			KALATZIS	02/02/2018	AAthanassio	Dacron	No.2
5						5.81	12.30	118%	36.37			KALATZIS	14/03/2015	KAKITSIS	Dacron	No.3
8						4.12	11.84	83%	24.83		Y	KALATZIS	14/03/2015	KAKITSIS	Nylon	DRIFTER
6	0.06	0.53	1.03	2.05	3.07	4.12	11.67	83%	24.02			KALATZIS	02/02/2018	AAthanssiou	Dacron	HWJ
SYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	14.18	14.18	14.18	9.16	9.08	108.05	ANTONOPOULO	01/11/2001	KAKITSIS	Nylon						
2	13.88	13.88	13.88	8.84	103.04											
3	13.05	13.05	13.05	7.47	7.82	82.00	KALATZIS	14/03/2015	KAKITSIS	Nylon						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	14.52	13.08	13.80	5.82	7.09	69.85	asym	KALATZIS	02/02/2018	KAKITSIS	Nylon					