

<b>BOAT</b> Name <b>AZAHAR</b> Sail Nr <b>GBR-4115 R</b>	<b>GPH</b> <b>648,6</b>	<b>HULL</b> Length Overall <b>12,787m</b> Maximum Beam <b>3,956m</b> Displacement <b>12.234kg</b> Draft <b>1,871m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0,643%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension <b>0,00</b>
<b>GENERAL</b> Class <b>SWAN 42</b> Designer <b>HOLLAND</b> Builder <b>NAUTOR SWAN</b> Series <b>01/1985</b> Age <b>02/1985</b> Age Allowance <b>0,487%</b> Offset File <b>US18940.OFF - 03/07/1993 6:30:58</b> Measurement by <b>BELTRAN/DEVESA - 16/11/2012</b>		IMSL <b>10,950m</b> VCGD <b>0,113m</b> Sink <b>26,08kg/mm</b> RL <b>7,384m</b> VCGM <b>0,093m</b> WS <b>35,81m<sup>2</sup></b> LSMO <b>10,957m</b> Displacement/Length ratio <b>9,3002</b>



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ORC International  
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	<b>630,9</b>			<b>708,8</b>	
Time On Time	<b>0,9510</b>			<b>0,9524</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>753,5</b>	<b>573,3</b>	<b>500,7</b>	<b>979,0</b>	<b>720,6</b>	<b>602,1</b>
Time on Time	<b>0,8958</b>	<b>1,1773</b>	<b>1,3481</b>	<b>0,6895</b>	<b>0,9367</b>	<b>1,1210</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1128,0</b>	<b>942,4</b>	<b>844,5</b>	<b>777,1</b>	<b>734,8</b>	<b>710,0</b>	<b>685,6</b>
52°	<b>724,6</b>	<b>616,4</b>	<b>548,2</b>	<b>509,4</b>	<b>491,7</b>	<b>483,1</b>	<b>475,4</b>
60°	<b>679,3</b>	<b>580,3</b>	<b>518,0</b>	<b>490,7</b>	<b>476,2</b>	<b>467,7</b>	<b>460,5</b>
75°	<b>643,2</b>	<b>548,4</b>	<b>498,4</b>	<b>476,9</b>	<b>463,5</b>	<b>452,8</b>	<b>438,9</b>
90°	<b>642,6</b>	<b>548,1</b>	<b>496,3</b>	<b>471,3</b>	<b>460,7</b>	<b>449,4</b>	<b>428,8</b>
110°	<b>667,9</b>	<b>554,1</b>	<b>492,5</b>	<b>466,6</b>	<b>449,2</b>	<b>435,0</b>	<b>417,9</b>
120°	<b>688,5</b>	<b>570,2</b>	<b>499,7</b>	<b>470,6</b>	<b>452,3</b>	<b>435,8</b>	<b>407,7</b>
135°	<b>754,5</b>	<b>618,7</b>	<b>532,2</b>	<b>487,1</b>	<b>464,8</b>	<b>448,2</b>	<b>416,1</b>
150°	<b>892,1</b>	<b>706,1</b>	<b>601,2</b>	<b>529,8</b>	<b>488,0</b>	<b>466,7</b>	<b>436,0</b>
Run VMG	<b>1030,1</b>	<b>815,3</b>	<b>693,4</b>	<b>607,7</b>	<b>547,5</b>	<b>502,0</b>	<b>459,1</b>

**Certificate**  
Number **411501**  
ORC Ref **ESP00021624**  
Issued On **20/02/2017**  
VPP Ver. **2017 1.00**  
Valid until **31/12/2017**

**Crew Weight**  
Declared **600kg**  
Default\* **784kg**  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>650,1</b>	<b>0,9229</b>
Double H.OSN	<b>633,4</b>	<b>0,9473</b>
Non Spin GPH	<b>677,0</b>	<b>0,8863</b>
Non Spin OSN	<b>658,0</b>	<b>0,9119</b>

Selected Courses							
Windward / Leeward	<b>1079,0</b>	<b>878,9</b>	<b>769,0</b>	<b>692,4</b>	<b>641,1</b>	<b>606,0</b>	<b>572,4</b>
Circular Random	<b>900,8</b>	<b>725,2</b>	<b>629,3</b>	<b>572,0</b>	<b>535,8</b>	<b>511,9</b>	<b>483,1</b>
Ocean for PCS	<b>1108,8</b>	<b>854,3</b>	<b>708,8</b>	<b>618,3</b>	<b>558,7</b>	<b>517,4</b>	<b>462,0</b>
Non Spinnaker	<b>951,5</b>	<b>761,2</b>	<b>656,2</b>	<b>592,7</b>	<b>552,2</b>	<b>525,1</b>	<b>491,7</b>

**Sails Limitations**

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

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>45,0°</b>	<b>43,2°</b>	<b>43,3°</b>	<b>44,5°</b>	<b>43,3°</b>	<b>42,2°</b>	<b>40,7°</b>
Beat VMG	<b>3,19</b>	<b>3,82</b>	<b>4,26</b>	<b>4,63</b>	<b>4,90</b>	<b>5,07</b>	<b>5,25</b>
52°	<b>4,97</b>	<b>5,84</b>	<b>6,57</b>	<b>7,07</b>	<b>7,32</b>	<b>7,45</b>	<b>7,57</b>
60°	<b>5,30</b>	<b>6,20</b>	<b>6,95</b>	<b>7,34</b>	<b>7,56</b>	<b>7,70</b>	<b>7,82</b>
75°	<b>5,60</b>	<b>6,56</b>	<b>7,22</b>	<b>7,55</b>	<b>7,77</b>	<b>7,95</b>	<b>8,20</b>
90°	<b>5,60</b>	<b>6,57</b>	<b>7,25</b>	<b>7,64</b>	<b>7,81</b>	<b>8,01</b>	<b>8,40</b>
110°	<b>5,39</b>	<b>6,50</b>	<b>7,31</b>	<b>7,72</b>	<b>8,01</b>	<b>8,28</b>	<b>8,61</b>
120°	<b>5,23</b>	<b>6,31</b>	<b>7,20</b>	<b>7,65</b>	<b>7,96</b>	<b>8,26</b>	<b>8,83</b>
135°	<b>4,77</b>	<b>5,82</b>	<b>6,76</b>	<b>7,39</b>	<b>7,74</b>	<b>8,03</b>	<b>8,65</b>
150°	<b>4,04</b>	<b>5,10</b>	<b>5,99</b>	<b>6,80</b>	<b>7,38</b>	<b>7,71</b>	<b>8,26</b>
Run VMG	<b>3,49</b>	<b>4,42</b>	<b>5,19</b>	<b>5,92</b>	<b>6,57</b>	<b>7,17</b>	<b>7,84</b>
Gybe Angles	<b>145,9°</b>	<b>150,4°</b>	<b>152,2°</b>	<b>153,2°</b>	<b>163,2°</b>	<b>180,0°</b>	<b>180,0°</b>

**Class Division Length**  
CDL = **9,167**

**Storm Sails Areas**


Heavy Weather Jib	<b>38,17</b>
Storm Jib (JL=10,93)	<b>14,14</b>
Storm Trysail	<b>11,16</b>

**Owner**

<b>BOAT</b>	
Name <b>AZHAR</b>	Sail Nr <b>GBR-4115 R</b>
File <b>GBR4115R</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>09/11/2012</b>		SG <b>1,0270</b>
FFM <b>1,154</b>	FF <b>1,182</b>	SFFP <b>0,893</b>
FAM <b>1,019</b>	FA <b>1,001</b>	SAFP <b>11,991</b>
W1 <b>120,6</b>	PD1 <b>527,7</b>	WD <b>12,640</b>
W2 <b>120,6</b>	PD2 <b>526,0</b>	GSA <b>1,0</b>
W3 <b>120,6</b>	PD3 <b>527,3</b>	RSA <b>1,0</b>
W4 <b>120,6</b>	PD4 <b>527,4</b>	PLM <b>9000,0</b>
LCF from stem on CL / on sheer		<b>7,084 / 7,346</b>
Maximum beam station from stem		<b>7,525</b>
RM Measured		<b>227,7kg·m</b>
RM Default		<b>238,0kg·m</b>
Limit of positive stability / Stab.Index		<b>105,3° / 114,3</b>
Freeboard at mast at 5,500		<b>1,034</b>

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>		
Inner Stay <b>Adjustable</b>	Runners <b>1</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>14,860</b>	E <b>4,290</b>	MDT1 <b>0,130</b>	MW <b>0,195</b>
IG <b>16,600</b>	J <b>5,080</b>	MDL1 <b>0,195</b>	GO <b>0,260</b>
ISP <b>16,600</b>	SFJ <b>0,420</b>	MDT2 <b>0,130</b>	BD <b>0,180</b>
BAS <b>1,740</b>	SPL <b>5,100</b>	MDL2 <b>0,130</b>	MWT
FSP <b>0,090</b>	TPS <b>5,400</b>	TL <b>0,000</b>	MCG



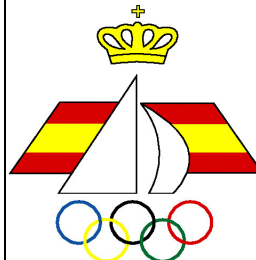
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**IMS Measurement Certificate**

**Certificate**

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

<b>PROPELLER</b>		
Installation <b>Shaft exposed</b>	PRD <b>0,400</b>	
Type <b>Feathering 2 blades</b>	PBW <b>0,253</b>	
Twin Screw <b>No</b>	PIPA <b>0,0064</b>	
PSA <b>18,440</b>	PHL <b>0,134</b>	ST3 <b>0,122</b> ESL <b>1,065</b>
PSD <b>0,031</b>	ST1 <b>0,038</b>	ST4 <b>0,075</b>
PHD <b>0,075</b>	ST2 <b>0,122</b>	ST5 <b>0,242</b>

<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
	0,090	0,86	1,57	2,74	3,54	37,35 37,83 $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric	SLU	SLE	SL	SHW	SFL	127,25 $SL \cdot (SFL + 4 \cdot SHW) / 6$
Asymmetric	SLU	SLE	SL	SHW	SFL	119,27 $AS \cdot (SFL + 4 \cdot SHW) / 6$
	16,84	16,30	16,55	8,65	8,64	

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0,10	0,96	1,86	3,73	5,66	7,60	15,94	60,19					
0,09	0,84	1,63	3,28	5,02	6,84	15,96	53,53					Unknow

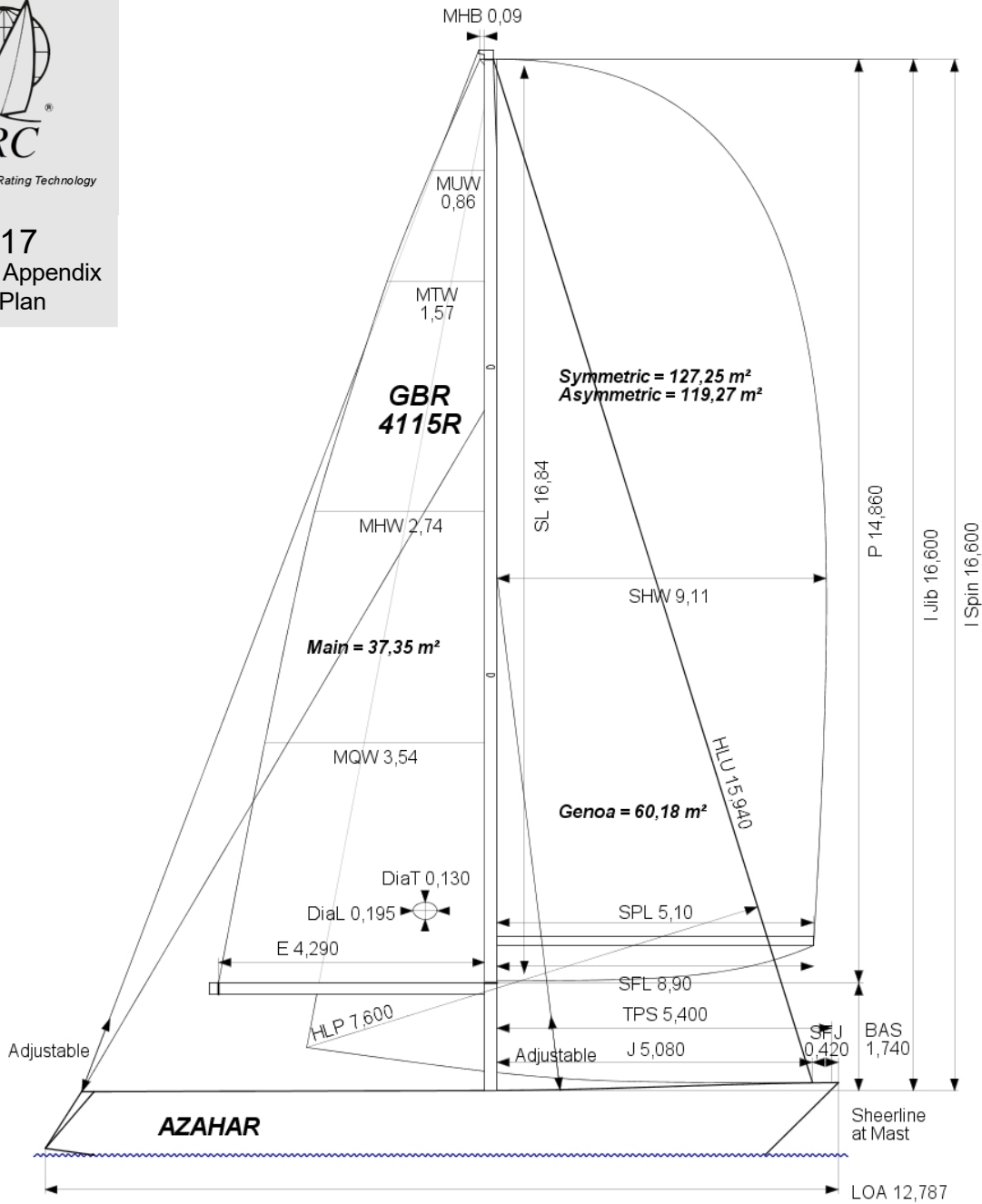
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>JBELTRAN/DEVESA</b>				
Date <b>09/11/2010</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
4	Anchor	90,0	0,00	ANCLA+
Id	Item	Maker	Model	
1	Engine	VOLVO PENTA	50 CV	
Id	Item	Weight Description		

<b>MEASUREMENT INVENTORY</b>						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtm Description
5	Tank	GASOIL		150,0	4,87	0,0
4	Tank	GASOIL		150,0	4,87	0,0
3	Tank	AGUA		25,0	5,57	0,0
2	Tank	AGUA		50,0	4,27	0,0
1	Tank	AGUA		75,0	4,07	0,0
Id	Item	Weight	Distance	VCG Description		
1	Battery	24,0	6,07	BATT		
2	Battery	24,0	6,07	BATT		
3	Battery	24,0	6,07	BATT		
2	Misc		2,47	Aguas Negras 30 lts (v acio)		
1	Misc		5,97	Aguas Negras 30 lts (v acio)		



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Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0,090	0,86	1,57	2,74	3,54	37,35										
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,10	0,96	1,86	3,73	5,66	7,60	15,94	150%	60,19							
2	0,09	0,84	1,63	3,28	5,02	6,84	15,96	135%	53,53							Unknown
SYMMETRIC SPINNAKERS (2)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	16,84	16,84	16,84	9,11	8,90	127,25				Unknown						
1	15,11	15,11	15,11	8,05	7,81	100,76										
ASYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	16,80	16,30	16,55	8,65	8,64	119,27	asym				Unknown					
2	17,15	14,80	15,97	8,39	8,00	110,65	asym				Unknown					
3	16,68	15,60	16,14	6,60	8,75	94,55	asym				Unknown					