

<b>BOAT</b> Name <b>MARY ANN</b> Sail Nr <b>ESP-9595</b>	<b>GPH</b> <b>664,1</b>	<b>HULL</b> Length Overall <b>11,562m</b> Maximum Beam <b>3,872m</b> Displacement <b>7.509kg</b> Draft <b>1,997m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0,408%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>BAVARIA 38 CR</b> Designer Builder <b>Bavaria</b> Series <b>08/2007</b> Age <b>08/2010</b> Age Allowance <b>0,325%</b> Offset File <b>Bava38cr(3).off - 15/01/2015 23:23:00</b> Measurement by <b>Tacha Montaner - 10/01/2012</b>		IMSL <b>10,550m</b> VCGD <b>0,298m</b> Sink <b>22,79kg/mm</b> RL <b>7,282m</b> VCGM <b>0,185m</b> WS <b>29,74m<sup>2</sup></b> LSMO <b>10,529m</b> Displacement/Length ratio <b>6,4331</b>



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**2017**  
ORC International  
Certificate

**Rating Office**  
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	<b>642,8</b>			<b>722,3</b>	
Time On Time	<b>0,9334</b>			<b>0,9345</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>788,2</b>	<b>582,4</b>	<b>501,7</b>	<b>1028,6</b>	<b>733,5</b>	<b>606,6</b>
Time on Time	<b>0,8564</b>	<b>1,1590</b>	<b>1,3453</b>	<b>0,6562</b>	<b>0,9202</b>	<b>1,1127</b>

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1198,7</b>	<b>978,8</b>	<b>862,5</b>	<b>782,5</b>	<b>732,6</b>	<b>710,1</b>	<b>695,7</b>
52°	<b>768,5</b>	<b>638,5</b>	<b>563,4</b>	<b>517,5</b>	<b>495,3</b>	<b>485,9</b>	<b>479,8</b>
60°	<b>716,2</b>	<b>600,0</b>	<b>531,6</b>	<b>497,2</b>	<b>480,0</b>	<b>470,5</b>	<b>463,7</b>
75°	<b>674,5</b>	<b>567,3</b>	<b>508,9</b>	<b>482,6</b>	<b>466,8</b>	<b>454,7</b>	<b>438,4</b>
90°	<b>674,8</b>	<b>567,2</b>	<b>503,8</b>	<b>473,1</b>	<b>455,8</b>	<b>447,9</b>	<b>425,6</b>
110°	<b>693,1</b>	<b>566,5</b>	<b>498,8</b>	<b>469,9</b>	<b>449,8</b>	<b>431,0</b>	<b>401,8</b>
120°	<b>714,2</b>	<b>582,8</b>	<b>507,9</b>	<b>474,8</b>	<b>454,7</b>	<b>435,3</b>	<b>398,0</b>
135°	<b>792,2</b>	<b>639,2</b>	<b>545,2</b>	<b>494,3</b>	<b>469,2</b>	<b>450,2</b>	<b>412,2</b>
150°	<b>942,0</b>	<b>735,4</b>	<b>617,3</b>	<b>541,1</b>	<b>494,7</b>	<b>470,8</b>	<b>435,3</b>
Run VMG	<b>1087,7</b>	<b>849,2</b>	<b>712,1</b>	<b>620,0</b>	<b>556,6</b>	<b>508,7</b>	<b>461,3</b>

**Certificate**  
Number **959501**  
ORC Ref **ESP00021194**  
Issued On **01/02/2017**  
VPP Ver. **2017 1.00**  
Valid until **31/12/2017**

**Crew Weight**  
Declared **500kg**  
Default\* **741kg**  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>664,7</b>	<b>0,9027</b>
Double H.OSN	<b>643,8</b>	<b>0,9320</b>
Non Spin GPH	<b>693,6</b>	<b>0,8651</b>
Non Spin OSN	<b>670,1</b>	<b>0,8954</b>

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	<b>1143,2</b>	<b>914,0</b>	<b>787,3</b>	<b>701,3</b>	<b>644,6</b>	<b>609,4</b>	<b>578,5</b>
Circular Random	<b>938,3</b>	<b>748,2</b>	<b>643,1</b>	<b>580,0</b>	<b>540,1</b>	<b>514,1</b>	<b>483,2</b>
Ocean for PCS	<b>1156,8</b>	<b>881,9</b>	<b>724,5</b>	<b>626,8</b>	<b>563,0</b>	<b>519,0</b>	<b>460,6</b>
Non Spinnaker	<b>990,6</b>	<b>785,3</b>	<b>671,1</b>	<b>601,8</b>	<b>557,7</b>	<b>528,7</b>	<b>494,2</b>

**Sails Limitations**

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

Dacron Sails

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>44,8°</b>	<b>43,3°</b>	<b>42,8°</b>	<b>43,0°</b>	<b>42,0°</b>	<b>41,0°</b>	<b>40,4°</b>
Beat VMG	<b>3,00</b>	<b>3,68</b>	<b>4,17</b>	<b>4,60</b>	<b>4,91</b>	<b>5,07</b>	<b>5,17</b>
52°	<b>4,68</b>	<b>5,64</b>	<b>6,39</b>	<b>6,96</b>	<b>7,27</b>	<b>7,41</b>	<b>7,50</b>
60°	<b>5,03</b>	<b>6,00</b>	<b>6,77</b>	<b>7,24</b>	<b>7,50</b>	<b>7,65</b>	<b>7,76</b>
75°	<b>5,34</b>	<b>6,35</b>	<b>7,07</b>	<b>7,46</b>	<b>7,71</b>	<b>7,92</b>	<b>8,21</b>
90°	<b>5,33</b>	<b>6,35</b>	<b>7,15</b>	<b>7,61</b>	<b>7,90</b>	<b>8,04</b>	<b>8,46</b>
110°	<b>5,19</b>	<b>6,36</b>	<b>7,22</b>	<b>7,66</b>	<b>8,00</b>	<b>8,35</b>	<b>8,96</b>
120°	<b>5,04</b>	<b>6,18</b>	<b>7,09</b>	<b>7,58</b>	<b>7,92</b>	<b>8,27</b>	<b>9,05</b>
135°	<b>4,54</b>	<b>5,63</b>	<b>6,60</b>	<b>7,28</b>	<b>7,67</b>	<b>8,00</b>	<b>8,73</b>
150°	<b>3,82</b>	<b>4,89</b>	<b>5,83</b>	<b>6,65</b>	<b>7,28</b>	<b>7,65</b>	<b>8,27</b>
Run VMG	<b>3,31</b>	<b>4,24</b>	<b>5,06</b>	<b>5,81</b>	<b>6,47</b>	<b>7,08</b>	<b>7,80</b>
Gybe Angles	<b>146,3°</b>	<b>150,0°</b>	<b>151,7°</b>	<b>154,4°</b>	<b>165,2°</b>	<b>180,0°</b>	<b>180,0°</b>

**Class Division Length**  
CDL = **8,917**

**Storm Sails Areas**

Heavy Weather Jib	<b>24,41</b>
Storm Jib (JL=8,74)	<b>9,04</b>
Storm Trysail	<b>9,97</b>

**Owner**

<b>BOAT</b>	
Name <b>MARY ANN</b>	Sail Nr <b>ESP-9595</b>
File <b>E9595</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>05/10/2011</b>	SG <b>1,0250</b>	
FFM <b>1,495</b>	FF <b>1,496</b>	SFFP <b>0,171</b>
FAM <b>1,103</b>	FA <b>1,109</b>	SAFP <b>10,900</b>
W1 <b>110,7</b>	PD1 <b>582,9</b>	WD <b>11,100</b>
W2 <b>110,7</b>	PD2 <b>583,2</b>	GSA <b>1,0</b>
W3 <b>110,7</b>	PD3 <b>584,6</b>	RSA <b>1,0</b>
W4 <b>110,7</b>	PD4 <b>584,1</b>	PLM <b>9000,0</b>
LCF from stem on CL / on sheer		<b>6,257 / 6,534</b>
Maximum beam station from stem		<b>6,946</b>
RM Measured		<b>165,8kg·m</b>
RM Default		<b>168,2kg·m</b>
Limit of positive stability / Stab.Index		<b>110,1° / 112,6</b>
Freeboard at mast at 4,230		<b>1,266</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>12,500</b>	E <b>4,560</b>	MDT1 <b>0,115</b>	MW <b>0,210</b>
IG <b>13,414</b>	J <b>4,230</b>	MDL1 <b>0,210</b>	GO <b>0,220</b>
ISP <b>13,650</b>	SFJ <b>0,000</b>	MDT2 <b>0,115</b>	BD <b>0,170</b>
BAS <b>1,660</b>	SPL <b>3,960</b>	MDL2 <b>0,210</b>	MWT <b>100,00</b>
FSP <b>0,064</b>	TPS <b>5,100</b>	TL <b>0,000</b>	MCG <b>6,000</b>



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

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0,350</b>	
Type <b>Folding 2 blades</b>	PBW	
Twin Screw <b>No</b>	PIPA <b>0,0035</b>	
ST1 <b>0,042</b>	ST3 <b>0,180</b>	ST5 <b>0,300</b>
ST2 <b>0,180</b>	ST4 <b>0,112</b>	EDL <b>2,500</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
	0,120	0,90	1,60	2,75	3,67	32,44 32,98 $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric	SLU	SLE	SL	SHW	SFL	Area (r) Formula
	13,74	13,74	13,74	7,57	7,23	85,90 $SL \cdot (SFL + 4 \cdot SHW) / 6$
Asymmetric	SLU	SLE	SL	SHW	SFL	Area (r) Formula
	14,00	12,70	13,35	5,70	7,60	67,64 73,85 $AS \cdot (SFL + 4 \cdot SHW) / 6$

<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
0,09	0,75	1,45	2,87	4,33	5,85	13,25	38,49			09/11/2016	Unknow	

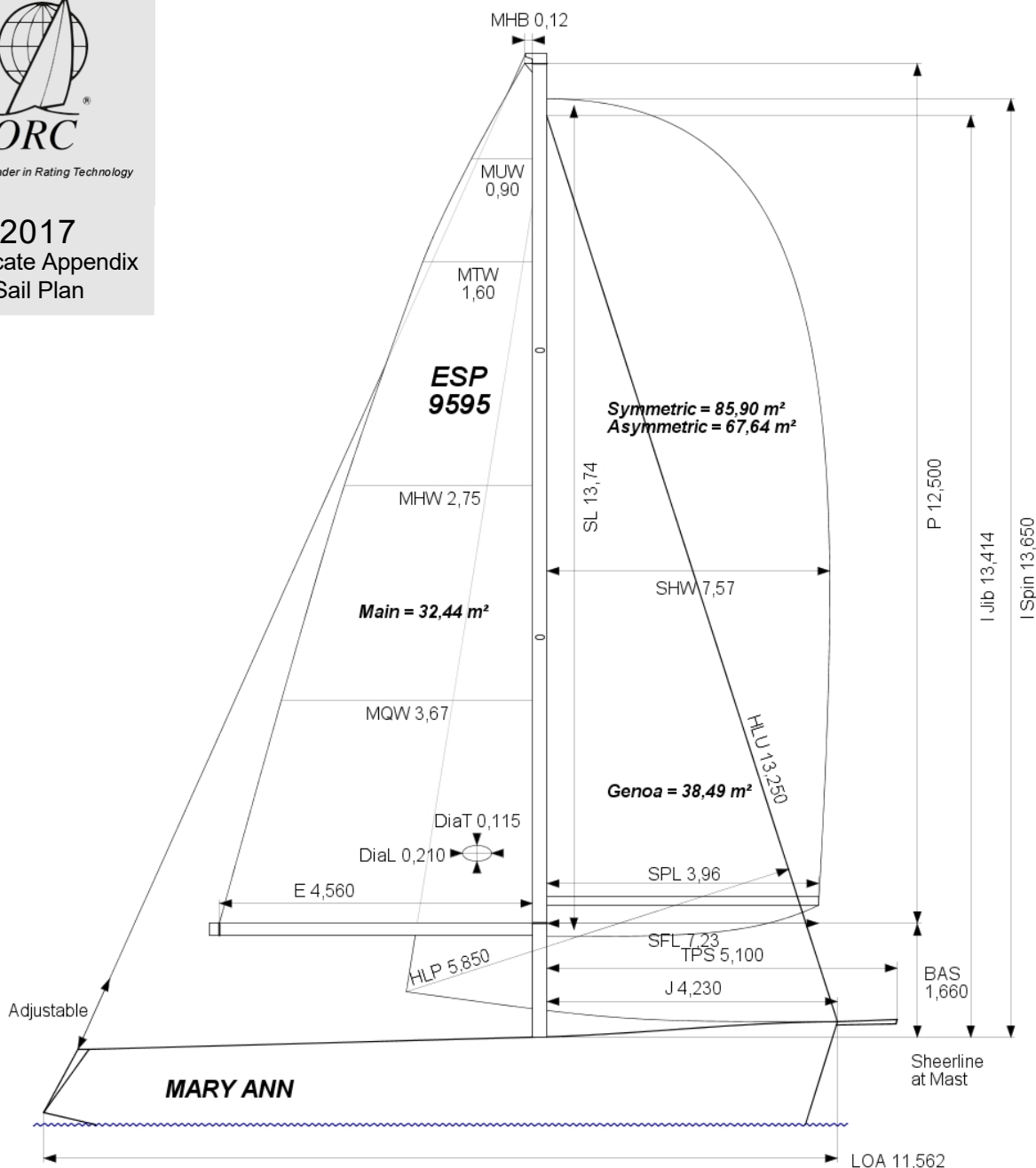
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Tacha Montaner ESP-222</b>				
Date <b>05/11/2011</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
+	Anchor	15,0	5,50	50-mts cabo-
+	Anchor	14,0	4,50	DANFORTH
+	Tools	8,0	5,50	CAJA
Id	Item	Maker	Model	
1	Engine	VOLVO	40 HP	
Id	Item	Weight	Description	
+	Deck-Gear	6,0	Escotas-varias	

<b>MEASUREMENT INVENTORY</b>									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank	GAS		INOX	150,0	9,00			37,5
1	Tank	H2O		PLAST	210,0	9,00			10,0
1	Tank	H2O		PLAST	130,0	1,50			0,0
Id	Item	Weight	Distance	VCG		Description			
6	Battery		4,00	BAT.105AH					
1	Misc	10,0	5,00	Chalecos,Bangalas,Ameses					



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Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
North	0,120	0,90	1,60	2,75	3,67	32,44	SPIN	09/11/2016	NS	Unknown	

**HEADSAILS (1)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
3	0,09	0,75	1,45	2,87	4,33	5,85	13,25	138%	38,49			SPIN	09/11/2016	NS	Unknown	

**SYMMETRIC SPINNAKERS (1)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2	13,74	13,74	13,74	7,57	7,23	85,90	SPIN	09/11/2016		Unknown	S2

**ASYMMETRIC SPINNAKERS (1)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1	14,00	12,70	13,35	5,70	7,60	67,64	asym	North			Unknown	