

<b>BOAT</b> Name <b>ARTFULL</b> Sail Nr <b>RUS-7272</b>	<b>GPH</b> <b>578,4</b>	<b>HULL</b> Length Overall <b>12,000m</b> Maximum Beam <b>3,792m</b> Displacement <b>6.662kg</b> Draft <b>2,527m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0,090%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>Yes</b> Crew Arm Extension
<b>GENERAL</b> Class <b>A 40</b> Designer <b>NIVELT BERNARD</b> Builder <b>ARCHAMBAULT</b> Series <b>06/2007</b> Age <b>06/2011</b> Age Allowance <b>0,325%</b> Offset File <b>A40RC2.OFF - 21/03/2009 15:21:06</b> Measurement by <b>Tacha Montaner - 26/07/2013</b>		IMSL <b>10,891m</b> VCGD <b>-0,312m</b> Sink <b>20,95kg/mm</b> RL <b>10,222m</b> VCGM <b>-0,319m</b> WS <b>28,43m<sup>2</sup></b> LSMO <b>10,539m</b> Displacement/Length ratio <b>5,6912</b>



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**2017**  
ORC International  
Certificate

**Rating Office**  
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28002 Madrid  
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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	<b>561,4</b>			<b>625,9</b>	
Time On Time	<b>1,0687</b>			<b>1,0785</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>668,6</b>	<b>511,3</b>	<b>449,9</b>	<b>868,5</b>	<b>629,7</b>	<b>538,5</b>
Time on Time	<b>1,0095</b>	<b>1,3202</b>	<b>1,5005</b>	<b>0,7772</b>	<b>1,0719</b>	<b>1,2535</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>995,7</b>	<b>819,4</b>	<b>714,2</b>	<b>660,5</b>	<b>637,3</b>	<b>625,2</b>	<b>609,7</b>
52°	<b>650,3</b>	<b>541,5</b>	<b>486,2</b>	<b>464,7</b>	<b>455,4</b>	<b>450,3</b>	<b>444,6</b>
60°	<b>611,2</b>	<b>513,5</b>	<b>472,0</b>	<b>453,2</b>	<b>442,0</b>	<b>436,1</b>	<b>430,4</b>
75°	<b>579,5</b>	<b>494,4</b>	<b>462,0</b>	<b>442,7</b>	<b>426,2</b>	<b>412,9</b>	<b>401,0</b>
90°	<b>582,0</b>	<b>490,0</b>	<b>459,7</b>	<b>442,3</b>	<b>424,6</b>	<b>406,0</b>	<b>375,1</b>
110°	<b>588,2</b>	<b>486,4</b>	<b>449,2</b>	<b>426,2</b>	<b>412,7</b>	<b>399,8</b>	<b>373,9</b>
120°	<b>605,1</b>	<b>496,4</b>	<b>455,1</b>	<b>428,9</b>	<b>401,6</b>	<b>384,6</b>	<b>359,8</b>
135°	<b>670,5</b>	<b>540,7</b>	<b>476,5</b>	<b>447,6</b>	<b>423,5</b>	<b>397,5</b>	<b>341,8</b>
150°	<b>798,5</b>	<b>638,0</b>	<b>536,1</b>	<b>477,3</b>	<b>449,6</b>	<b>427,2</b>	<b>379,4</b>
Run VMG	<b>922,0</b>	<b>736,7</b>	<b>619,0</b>	<b>544,5</b>	<b>497,4</b>	<b>462,6</b>	<b>418,1</b>

Selected Courses	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Windward / Leeward	<b>958,9</b>	<b>778,1</b>	<b>666,6</b>	<b>602,5</b>	<b>567,4</b>	<b>543,9</b>	<b>513,9</b>
Circular Random	<b>801,6</b>	<b>645,3</b>	<b>561,0</b>	<b>511,6</b>	<b>480,4</b>	<b>459,1</b>	<b>429,8</b>
Ocean for PCS	<b>982,4</b>	<b>756,9</b>	<b>629,2</b>	<b>550,8</b>	<b>499,8</b>	<b>464,0</b>	<b>413,6</b>
Non Spinnaker	<b>864,0</b>	<b>689,4</b>	<b>593,6</b>	<b>536,5</b>	<b>500,3</b>	<b>475,9</b>	<b>443,3</b>

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>42,9°</b>	<b>41,7°</b>	<b>41,2°</b>	<b>39,2°</b>	<b>37,9°</b>	<b>37,3°</b>	<b>36,4°</b>
Beat VMG	<b>3,62</b>	<b>4,39</b>	<b>5,04</b>	<b>5,45</b>	<b>5,65</b>	<b>5,76</b>	<b>5,90</b>
52°	<b>5,54</b>	<b>6,65</b>	<b>7,40</b>	<b>7,75</b>	<b>7,90</b>	<b>7,99</b>	<b>8,10</b>
60°	<b>5,89</b>	<b>7,01</b>	<b>7,63</b>	<b>7,94</b>	<b>8,14</b>	<b>8,25</b>	<b>8,36</b>
75°	<b>6,21</b>	<b>7,28</b>	<b>7,79</b>	<b>8,13</b>	<b>8,45</b>	<b>8,72</b>	<b>8,98</b>
90°	<b>6,19</b>	<b>7,35</b>	<b>7,83</b>	<b>8,14</b>	<b>8,48</b>	<b>8,87</b>	<b>9,60</b>
110°	<b>6,12</b>	<b>7,40</b>	<b>8,02</b>	<b>8,45</b>	<b>8,72</b>	<b>9,01</b>	<b>9,63</b>
120°	<b>5,95</b>	<b>7,25</b>	<b>7,91</b>	<b>8,39</b>	<b>8,96</b>	<b>9,36</b>	<b>10,00</b>
135°	<b>5,37</b>	<b>6,66</b>	<b>7,55</b>	<b>8,04</b>	<b>8,50</b>	<b>9,06</b>	<b>10,53</b>
150°	<b>4,51</b>	<b>5,64</b>	<b>6,72</b>	<b>7,54</b>	<b>8,01</b>	<b>8,43</b>	<b>9,49</b>
Run VMG	<b>3,90</b>	<b>4,89</b>	<b>5,82</b>	<b>6,61</b>	<b>7,24</b>	<b>7,78</b>	<b>8,61</b>
Gybe Angles	<b>140,8°</b>	<b>147,6°</b>	<b>148,8°</b>	<b>155,9°</b>	<b>170,4°</b>	<b>180,0°</b>	<b>180,0°</b>

**Certificate**  
Number **727201**  
ORC Ref **ESP00021334**  
Issued On **07/02/2017**  
VPP Ver. **2017 1.00**  
Valid until **31/12/2017**

**Crew Weight**  
Declared **650kg**  
Default\* **742kg**  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>580,9</b>	<b>1,0328</b>
Double H.OSN	<b>564,7</b>	<b>1,0625</b>
Non Spin GPH	<b>612,9</b>	<b>0,9790</b>
Non Spin OSN	<b>594,5</b>	<b>1,0092</b>

**Sails Limitations**

Headsails	Spinnakers
<b>6</b>	<b>4</b>

**Class Division Length**  
CDL = **10,557**

**Storm Sails Areas**


Heavy Weather Jib	<b>31,03</b>
Storm Jib (JL=9,85)	<b>11,49</b>
Storm Trysail	<b>14,37</b>

**Owner**

<b>BOAT</b>	
Name <b>ARTFULL</b>	Sail Nr <b>RUS-7272</b>
File <b>RUS7272</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>26/07/2013</b>		SG <b>1,0250</b>	
FFM <b>1,358</b>	FF <b>1,358</b>	SFFP <b>0,185</b>	
FAM <b>1,088</b>	FA <b>1,089</b>	SAFP <b>11,820</b>	
W1 <b>114,2</b>	PD1 <b>581,0</b>	WD <b>11,070</b>	
W2 <b>114,2</b>	PD2 <b>592,7</b>	GSA <b>1,0</b>	
W3 <b>114,2</b>	PD3 <b>591,2</b>	RSA <b>1,0</b>	
W4 <b>114,2</b>	PD4 <b>589,6</b>	PLM <b>9000,0</b>	
LCF from stem on CL / on sheer		<b>6,516 / 6,767</b>	
Maximum beam station from stem		<b>7,800</b>	
RM Measured		<b>169,1kg·m</b>	
RM Default		<b>149,7kg·m</b>	
Limit of positive stability / Stab.Index		<b>136,1° / 137,4</b>	
Freeboard at mast at 4,700		<b>1,216</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>15,460</b>	E <b>5,310</b>	MDT1 <b>0,136</b>	MW <b>0,200</b>
IG <b>15,000</b>	J <b>4,700</b>	MDL1 <b>0,226</b>	GO <b>0,250</b>
ISP <b>16,000</b>	SFJ <b>0,000</b>	MDT2 <b>0,126</b>	BD <b>0,200</b>
BAS <b>1,870</b>	SPL <b>5,250</b>	MDL2 <b>0,200</b>	MWT
FSP <b>0,070</b>	TPS	TL <b>0,400</b>	MCG



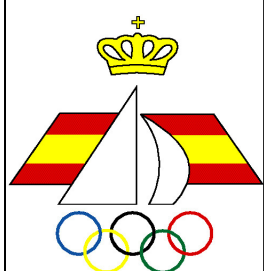
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**IMS Measurement Certificate**

**Certificate**

Number **727201**  
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 Issued On **07/02/2017**  
 VPP Ver. **2017 1.00**  
 Valid until **31/12/2017**



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

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0,400</b>	
Type <b>Folding 2 blades</b>	PBW	
Twin Screw	PIPA <b>0,0031</b>	
ST1 <b>0,048</b>	ST3	ST5 <b>0,260</b>
ST2	ST4 <b>0,098</b>	EDL <b>2,000</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	
	0,300	1,26	2,03	3,28	4,35	48,36	49,25	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	124,29		SL · (SFL + 4·SHW) / 6	
	17,63	17,63	17,63	8,60	7,90				
Asymmetric Not Available									

<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
0,08	0,51	1,19	2,39	3,62	4,84	15,39	36,96				Unknow	

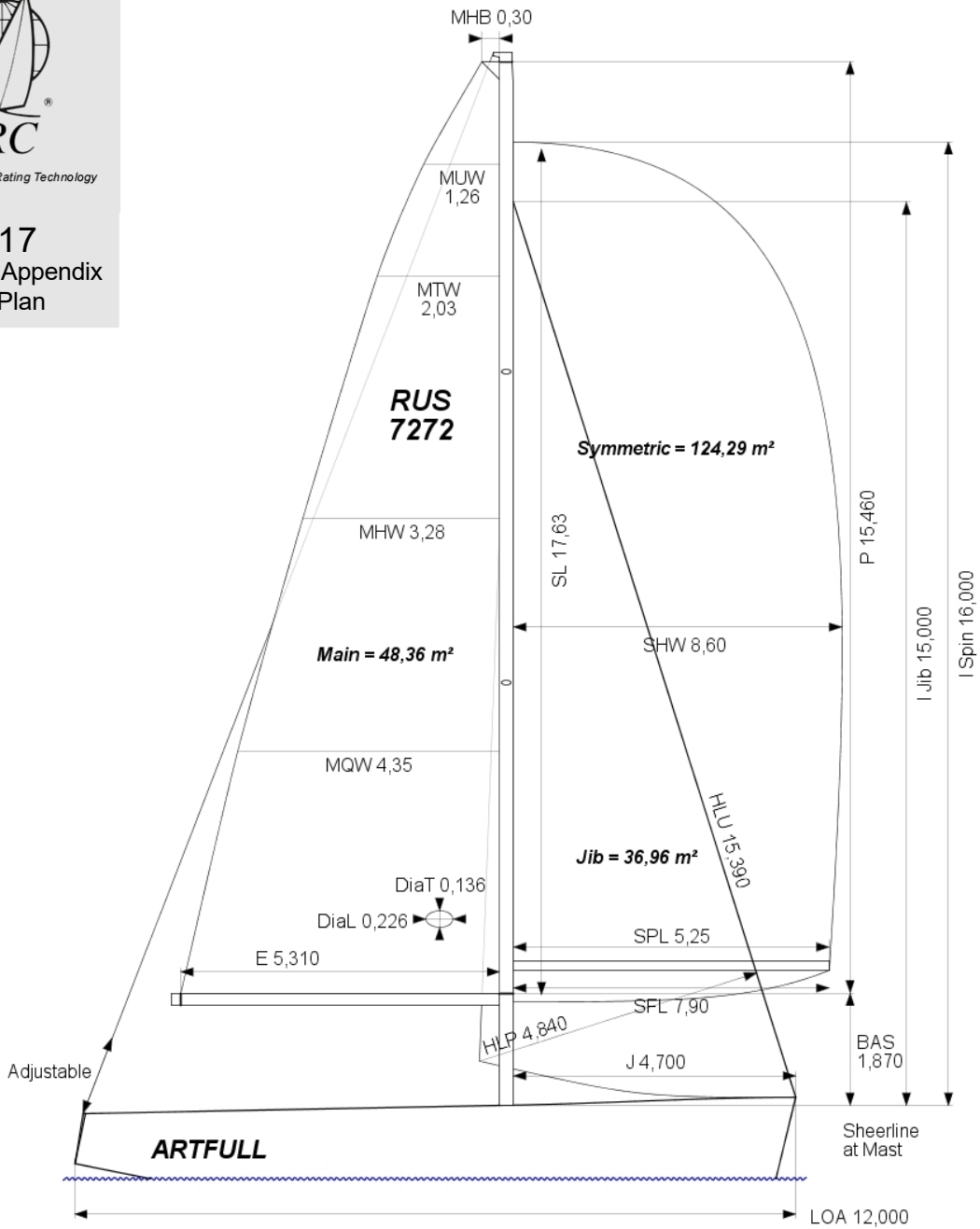
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Tacha Montaner ESP-222</b>				
Date <b>26/07/2013</b>				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

<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		Plast	100,0	8,70	0,00	40,0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG</i>	<i>Description</i>			



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Sail Plan



**SAILS INVENTORY**

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
002	0,300	1,26	2,03	3,28	4,35	48,36				Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,08	0,51	1,19	2,39	3,62	4,84	15,39	103%	36,96							Unknow
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
S1	17,63	17,63	17,63	8,60	7,90	124,29				Unknown						
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				