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Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club**  
**Certificate**

**Rating Office**

**Offshore**  
**Racing**  
**Congress**



**Certificate**

Number **US6701**  
Issued On **28/08/2020**  
ORC Ref **03410000P76**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 752kg  
Maximum **752kg**  
Minimum\* **564kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>628.1</b>	<b>0.9553</b>
Non Spin OSN	<b>609.1</b>	<b>0.9851</b>

**Sails Limitations**

Headsails **6** Spinnakers **4**

**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 107.15**  
Flying H/S: **No**  
Spin. Pole: **No**

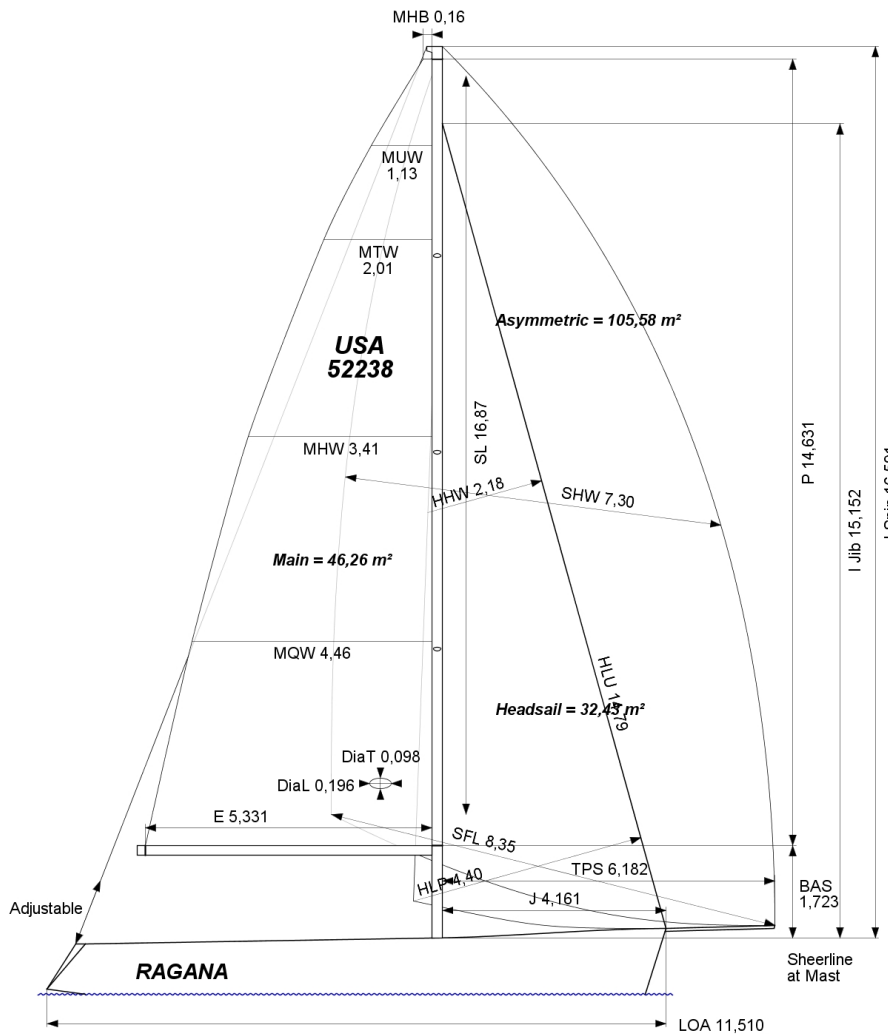
**Class Division Length**

**CDL = 10.253**

**Stability (Measured)**

Limit Positive Stab.: **114.1°**  
Stability Index: **117.4**

**Owner**



BOAT	GPH	HULL
Name <b>RAGANA</b> Sail Nr <b>USA-52238</b>	<b>589.1</b>	Data File <b>US42028</b> LOA <b>11.510m</b> Offset File <b>US31165B.OFF</b> MB <b>3.389m</b> Displacement <b>5,701kg</b> Draft <b>2.292m</b>
<b>CLASS</b> Class <b>CPFR38</b> Designer <b>BRUCE MEREK</b> Builder <b>CAPE FEAR YACHTS</b> Series <b>01/2001</b> Age Date <b>01/2001</b> Age Allowance <b>0.487%</b>	IMS Division Dynamic All. <b>0.000%</b> Plan Review Construction <b>Cored</b> Fiber Rigging <b>No</b> Aramid Core <b>No</b> Crew Arm Ex <b>0.00</b> Carbon Rudder <b>Yes</b> Light Stanchions <b>No</b>	IMS L <b>10.759m</b> VCGD <b>0.056m</b> Sink <b>20.97kg/mm</b> RL <b>9.750m</b> VCGM <b>-0.012m</b> WS <b>28.56m²</b> LSM0 <b>10.635m</b> Displacement/Length ratio <b>4.7396</b>
<b>COMMENTS</b> 6 GAL FUEL ORR FLOAT	Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>	
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.403</b> Type <b>Folding 2 blades</b> PBW <b>0.119</b> PIPA <b>0.0034</b>	<b>CENTERBOARD</b> <b>N/A</b>	
<b>SCORING OPTIONS</b>		
	<b>COASTAL / LONG DISTANCE</b>	<b>WINDWARD / LEEWARD</b>
Time on Distance	<b>572.4</b>	<b>642.7</b>
Time on Time	<b>1.0482</b>	<b>1.0503</b>
Triple Number	Low Medium High	Low Medium High
Time on Distance	<b>672.0 522.2 468.3</b>	<b>867.5 644.0 568.0</b>
Time on Time	<b>1.0044 1.2925 1.4415</b>	<b>0.7781 1.0482 1.1883</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>RAGANA</b>	Certificate Number	<b>US6701</b>
Sail Nr	<b>USA-52238</b>	Issued On	<b>28/08/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>994.7</b>	<b>816.5</b>	<b>717.2</b>	<b>676.3</b>	<b>661.0</b>	<b>654.4</b>	<b>640.3</b>
52°	<b>652.6</b>	<b>547.9</b>	<b>497.2</b>	<b>479.9</b>	<b>473.8</b>	<b>470.7</b>	<b>463.2</b>
60°	<b>617.7</b>	<b>524.9</b>	<b>485.0</b>	<b>468.5</b>	<b>461.4</b>	<b>457.5</b>	<b>450.9</b>
75°	<b>592.1</b>	<b>509.5</b>	<b>476.3</b>	<b>457.4</b>	<b>443.7</b>	<b>435.3</b>	<b>427.9</b>
90°	<b>594.0</b>	<b>498.8</b>	<b>468.2</b>	<b>455.2</b>	<b>436.7</b>	<b>419.5</b>	<b>398.3</b>
110°	<b>588.2</b>	<b>493.2</b>	<b>457.6</b>	<b>432.3</b>	<b>414.7</b>	<b>401.1</b>	<b>377.9</b>
120°	<b>605.3</b>	<b>502.1</b>	<b>462.8</b>	<b>434.2</b>	<b>406.0</b>	<b>383.3</b>	<b>355.3</b>
135°	<b>674.3</b>	<b>546.1</b>	<b>483.5</b>	<b>453.7</b>	<b>425.5</b>	<b>396.8</b>	<b>339.3</b>
150°	<b>799.8</b>	<b>636.8</b>	<b>539.8</b>	<b>488.1</b>	<b>464.8</b>	<b>443.3</b>	<b>393.9</b>
Run VMG	<b>923.5</b>	<b>735.3</b>	<b>623.3</b>	<b>563.2</b>	<b>533.6</b>	<b>493.1</b>	<b>445.4</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>959.1</b>	<b>775.9</b>	<b>670.3</b>	<b>619.7</b>	<b>597.3</b>	<b>573.7</b>	<b>542.9</b>
Circular Random	<b>808.5</b>	<b>653.6</b>	<b>571.5</b>	<b>524.7</b>	<b>496.0</b>	<b>476.6</b>	<b>449.0</b>
Coastal / Long Distance	<b>955.6</b>	<b>728.8</b>	<b>606.3</b>	<b>541.5</b>	<b>508.0</b>	<b>477.8</b>	<b>429.2</b>
Non Spinnaker	<b>882.6</b>	<b>705.0</b>	<b>608.3</b>	<b>551.3</b>	<b>515.7</b>	<b>492.1</b>	<b>461.6</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>42.8°</b>	<b>40.9°</b>	<b>39.8°</b>	<b>38.3°</b>	<b>37.5°</b>	<b>37.1°</b>	<b>37.1°</b>
Beat VMG	<b>3.62</b>	<b>4.41</b>	<b>5.02</b>	<b>5.32</b>	<b>5.45</b>	<b>5.50</b>	<b>5.62</b>
52°	<b>5.52</b>	<b>6.57</b>	<b>7.24</b>	<b>7.50</b>	<b>7.60</b>	<b>7.65</b>	<b>7.77</b>
60°	<b>5.83</b>	<b>6.86</b>	<b>7.42</b>	<b>7.68</b>	<b>7.80</b>	<b>7.87</b>	<b>7.98</b>
75°	<b>6.08</b>	<b>7.07</b>	<b>7.56</b>	<b>7.87</b>	<b>8.11</b>	<b>8.27</b>	<b>8.41</b>
90°	<b>6.06</b>	<b>7.22</b>	<b>7.69</b>	<b>7.91</b>	<b>8.24</b>	<b>8.58</b>	<b>9.04</b>
110°	<b>6.12</b>	<b>7.30</b>	<b>7.87</b>	<b>8.33</b>	<b>8.68</b>	<b>8.98</b>	<b>9.53</b>
120°	<b>5.95</b>	<b>7.17</b>	<b>7.78</b>	<b>8.29</b>	<b>8.87</b>	<b>9.39</b>	<b>10.13</b>
135°	<b>5.34</b>	<b>6.59</b>	<b>7.45</b>	<b>7.94</b>	<b>8.46</b>	<b>9.07</b>	<b>10.61</b>
150°	<b>4.50</b>	<b>5.65</b>	<b>6.67</b>	<b>7.38</b>	<b>7.75</b>	<b>8.12</b>	<b>9.14</b>
Run VMG	<b>3.90</b>	<b>4.90</b>	<b>5.78</b>	<b>6.39</b>	<b>6.75</b>	<b>7.30</b>	<b>8.08</b>
Gybe Angles	<b>143.5°</b>	<b>147.0°</b>	<b>149.0°</b>	<b>150.5°</b>	<b>152.5°</b>	<b>176.5°</b>	<b>178.0°</b>