



**ORC**  
Offshore Racing Congress  
World leader in rating technology

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

**Rating Office**

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



**Certificate**

Number **US6738**  
Issued On **27/10/2020**  
ORC Ref **03410000SDC**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 806kg  
Maximum **720kg**  
Minimum\* **540kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>594.5</b>	<b>1.0093</b>
Non Spin OSN	<b>578.8</b>	<b>1.0367</b>

**Sails Limitations**

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

**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 167.05**  
Flying H/S: **No**  
Spin. Pole: **No**

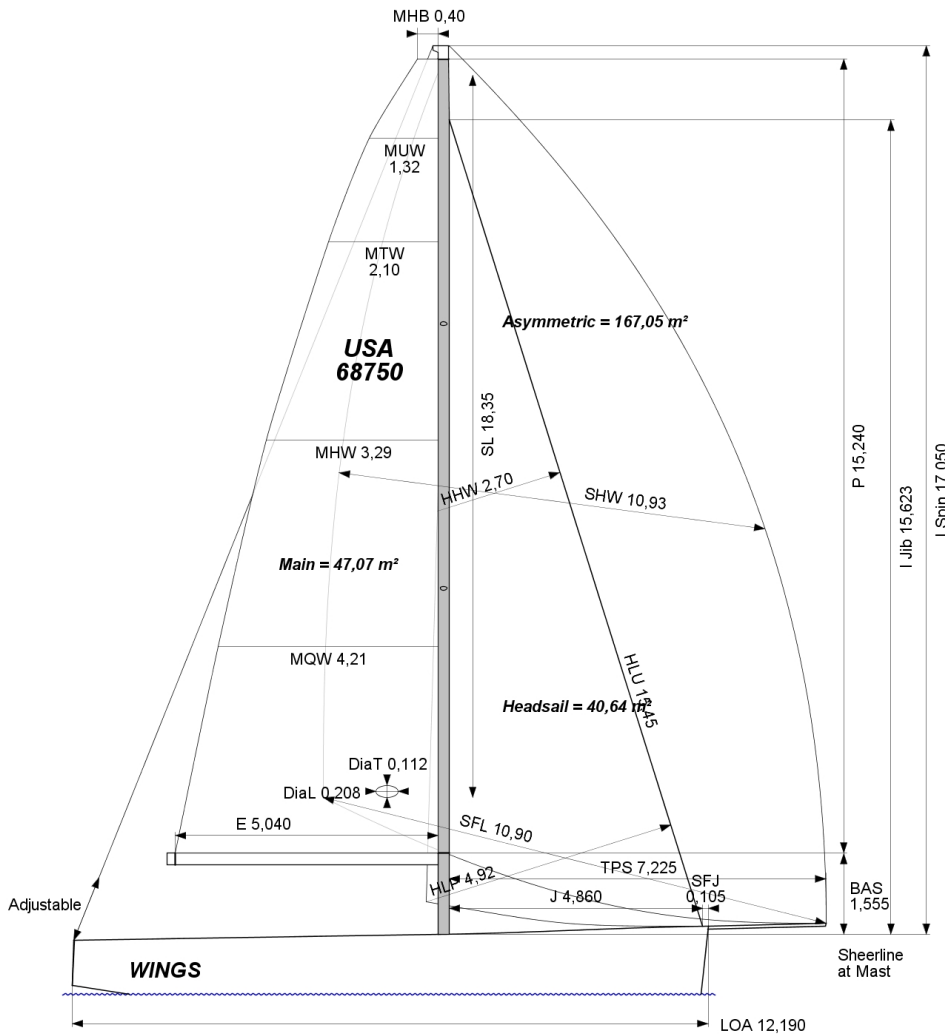
**Class Division Length**

**CDL = 11.009**

**Stability (Estimated)**

Limit Positive Stab.: **117.6°**  
Stability Index: **116.3**

**Owner**



BOAT		GPH	HULL			
Name <b>WINGS</b>		<b>547.2</b>	Data File <b>US6738</b>	LOA <b>12.190m</b>		
Sail Nr <b>USA 68750</b>			Offset File <b>J121a.off</b>	MB <b>3.746m</b>		
			Displacement <b>5,398kg</b>	Draft <b>2.338m</b>		
<b>CLASS</b>						
Class	<b>J 121</b>	IMS Division	<b>Cruiser/Racer</b>	Dynamic All. <b>0.108%</b>		
Designer	<b>JOHNSTONE</b>	Plan Review		Construction <b>Cored</b>		
Builder	<b>CCF</b>	Fiber Rigging	<b>No</b>	Aramid Core <b>No</b>		
Series	<b>09/2017</b>	Crew Arm Ex		Carbon Rudder <b>No</b>		
Age Date	<b>06/2019</b>			Light Stanchions <b>No</b>		
Age Allowance	<b>0.098%</b>	IMSL	<b>11.348m</b>	VCGD <b>-0.086m</b>		
		RL	<b>10.669m</b>	VCGM <b>-0.046m</b>		
		WS	<b>29.03m²</b>			
		LSM0	<b>11.170m</b>	Displacement/Length ratio <b>3.8732</b>		
<b>COMMENTS</b>		Water Ballast	<b>0</b>	Trim Tab <b>No</b>		
		BLR Index	<b>0.0000</b>			
<b>PROPELLER</b>		<b>CENTERBOARD</b>				
Installation	<b>Strut</b>	PRD	<b>0.432</b>			
Type	<b>Folding 2 blades</b>	PBW	<b>0.115</b>	<b>N/A</b>		
		PIPA	<b>0.0035</b>			
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>533.3</b>			<b>603.2</b>		
Time on Time	<b>1.1250</b>			<b>1.1189</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>626.6</b>	<b>484.8</b>	<b>429.5</b>	<b>818.3</b>	<b>602.8</b>	<b>528.1</b>
Time on Time	<b>1.0772</b>	<b>1.3922</b>	<b>1.5715</b>	<b>0.8249</b>	<b>1.1197</b>	<b>1.2782</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>WINGS</b>	Certificate Number	<b>US6738</b>
Sail Nr	<b>USA 68750</b>	Issued On	<b>27/10/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>948.9</b>	<b>769.4</b>	<b>676.1</b>	<b>646.5</b>	<b>634.7</b>	<b>625.0</b>	<b>613.4</b>
52°	<b>617.2</b>	<b>508.3</b>	<b>466.1</b>	<b>453.7</b>	<b>448.4</b>	<b>445.6</b>	<b>436.4</b>
60°	<b>580.3</b>	<b>487.0</b>	<b>453.7</b>	<b>440.2</b>	<b>433.9</b>	<b>430.3</b>	<b>419.4</b>
75°	<b>538.9</b>	<b>463.7</b>	<b>441.9</b>	<b>424.2</b>	<b>410.2</b>	<b>402.9</b>	<b>396.1</b>
90°	<b>520.8</b>	<b>453.6</b>	<b>425.5</b>	<b>406.1</b>	<b>393.2</b>	<b>381.5</b>	<b>364.2</b>
110°	<b>542.8</b>	<b>457.9</b>	<b>425.7</b>	<b>399.4</b>	<b>372.0</b>	<b>349.9</b>	<b>323.6</b>
120°	<b>558.7</b>	<b>462.3</b>	<b>425.3</b>	<b>394.3</b>	<b>374.7</b>	<b>351.6</b>	<b>304.8</b>
135°	<b>631.3</b>	<b>495.1</b>	<b>444.3</b>	<b>411.0</b>	<b>377.5</b>	<b>344.2</b>	<b>293.5</b>
150°	<b>751.5</b>	<b>594.9</b>	<b>497.2</b>	<b>446.1</b>	<b>421.2</b>	<b>392.9</b>	<b>326.5</b>
Run VMG	<b>867.7</b>	<b>687.0</b>	<b>574.1</b>	<b>515.6</b>	<b>486.4</b>	<b>453.7</b>	<b>377.0</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>908.3</b>	<b>728.2</b>	<b>625.1</b>	<b>581.0</b>	<b>560.5</b>	<b>539.4</b>	<b>495.2</b>
Circular Random	<b>754.2</b>	<b>608.3</b>	<b>530.8</b>	<b>486.1</b>	<b>457.9</b>	<b>437.6</b>	<b>406.2</b>
Coastal / Long Distance	<b>904.3</b>	<b>682.5</b>	<b>564.0</b>	<b>504.0</b>	<b>473.3</b>	<b>442.9</b>	<b>385.6</b>
Non Spinnaker	<b>838.1</b>	<b>668.2</b>	<b>575.6</b>	<b>520.8</b>	<b>486.3</b>	<b>462.9</b>	<b>431.5</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>43.5°</b>	<b>42.0°</b>	<b>40.5°</b>	<b>39.0°</b>	<b>38.6°</b>	<b>38.3°</b>	<b>38.3°</b>
Beat VMG	<b>3.79</b>	<b>4.68</b>	<b>5.33</b>	<b>5.57</b>	<b>5.67</b>	<b>5.76</b>	<b>5.87</b>
52°	<b>5.83</b>	<b>7.08</b>	<b>7.72</b>	<b>7.93</b>	<b>8.03</b>	<b>8.08</b>	<b>8.25</b>
60°	<b>6.20</b>	<b>7.39</b>	<b>7.93</b>	<b>8.18</b>	<b>8.30</b>	<b>8.37</b>	<b>8.58</b>
75°	<b>6.68</b>	<b>7.76</b>	<b>8.15</b>	<b>8.49</b>	<b>8.78</b>	<b>8.94</b>	<b>9.09</b>
90°	<b>6.91</b>	<b>7.94</b>	<b>8.46</b>	<b>8.87</b>	<b>9.16</b>	<b>9.44</b>	<b>9.88</b>
110°	<b>6.63</b>	<b>7.86</b>	<b>8.46</b>	<b>9.01</b>	<b>9.68</b>	<b>10.29</b>	<b>11.13</b>
120°	<b>6.44</b>	<b>7.79</b>	<b>8.46</b>	<b>9.13</b>	<b>9.61</b>	<b>10.24</b>	<b>11.81</b>
135°	<b>5.70</b>	<b>7.27</b>	<b>8.10</b>	<b>8.76</b>	<b>9.54</b>	<b>10.46</b>	<b>12.27</b>
150°	<b>4.79</b>	<b>6.05</b>	<b>7.24</b>	<b>8.07</b>	<b>8.55</b>	<b>9.16</b>	<b>11.03</b>
Run VMG	<b>4.15</b>	<b>5.24</b>	<b>6.27</b>	<b>6.98</b>	<b>7.40</b>	<b>7.93</b>	<b>9.55</b>
Gybe Angles	<b>143.0°</b>	<b>145.0°</b>	<b>147.3°</b>	<b>151.8°</b>	<b>149.0°</b>	<b>147.0°</b>	<b>142.5°</b>