



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

**2020  
ORC Club  
Certificate**

**Rating Office**

**Offshore  
Racing  
Congress**



**Certificate**

Number **US6229**  
Issued On **28/08/2020**  
ORC Ref **03410000P98**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 915kg  
Maximum **1,036kg**  
Minimum\* **777kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>592.1</b>	<b>1.0133</b>
Non Spin OSN	<b>575.2</b>	<b>1.0432</b>

**Sails Limitations**

Headsails **7** Spinnakers **5**

**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 184.01**  
Flying H/S: **No**  
Spin. Pole: **No**

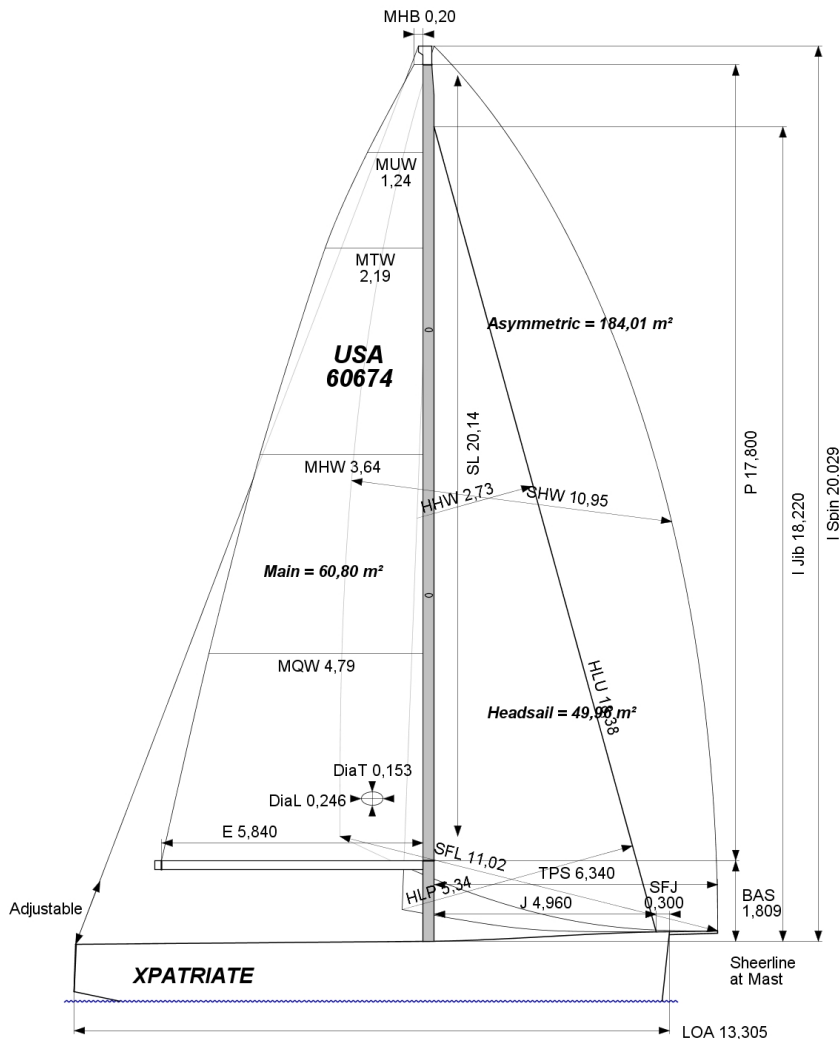
**Class Division Length**

**CDL = 11.773**

**Stability (Estimated)**

Limit Positive Stab.: **130.7°**  
Stability Index: **135.9**

**Owner**



BOAT		GPH		HULL			
Name <b>Xpatriate</b> Sail Nr <b>USA60674</b>		<b>551.5</b>		Data File <b>US6229</b>	LOA <b>13.305m</b>		
				Offset File <b>US42504A.OFF</b>	MB <b>4.054m</b>		
				Displacement <b>9,633kg</b>	Draft <b>2.698m</b>		
				IMS Division <b>Cruiser/Racer</b>	Dynamic All. <b>0.145%</b>		
				Plan Review	Construction <b>Cored</b>		
				Fiber Rigging <b>No</b>	Aramid Core <b>No</b>		
				Crew Arm Ex	Carbon Rudder <b>Yes</b>		
					Light Stanchions <b>No</b>		
				IMSL <b>12.379m</b>	VCGD <b>-0.219m</b>	Sink <b>27.50kg/mm</b>	
				RL <b>11.165m</b>	VCGM <b>-0.205m</b>	WS <b>38.19m²</b>	
				LSM0 <b>12.210m</b>	Displacement/Length ratio <b>5.2919</b>		
				Water Ballast <b>0</b>	Trim Tab <b>No</b>		
				BLR Index <b>0.0000</b>			
<b>COMMENTS</b>				<b>CENTERBOARD</b>			
				<b>N/A</b>			
<b>PROPELLER</b>							
Installation	<b>Strut</b>	PRD	<b>0.280</b>				
Type	<b>Folding 2 blades</b>	PBW	<b>0.131</b>				
		PIPA	<b>0.0038</b>				
<b>SCORING OPTIONS</b>							
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>			
Time on Distance	<b>535.8</b>			<b>602.3</b>			
Time on Time	<b>1.1199</b>			<b>1.1207</b>			
Triple Number	Low	Medium	High	Low	Medium	High	
Time on Distance	<b>632.8</b>	<b>487.6</b>	<b>436.6</b>	<b>820.0</b>	<b>602.8</b>	<b>529.4</b>	
Time on Time	<b>1.0667</b>	<b>1.3843</b>	<b>1.5462</b>	<b>0.8232</b>	<b>1.1198</b>	<b>1.2751</b>	

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>Xpatriate</b>	Certificate Number	<b>US6229</b>
Sail Nr	<b>USA60674</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>943.6</b>	<b>772.2</b>	<b>676.2</b>	<b>631.9</b>	<b>614.7</b>	<b>606.6</b>	<b>589.7</b>
52°	<b>616.4</b>	<b>515.1</b>	<b>464.0</b>	<b>444.6</b>	<b>437.3</b>	<b>433.5</b>	<b>428.1</b>
60°	<b>581.6</b>	<b>491.5</b>	<b>451.2</b>	<b>434.0</b>	<b>425.6</b>	<b>421.4</b>	<b>417.4</b>
75°	<b>554.9</b>	<b>475.3</b>	<b>442.5</b>	<b>424.8</b>	<b>411.8</b>	<b>402.3</b>	<b>393.9</b>
90°	<b>560.9</b>	<b>466.7</b>	<b>437.8</b>	<b>423.9</b>	<b>408.2</b>	<b>393.1</b>	<b>369.9</b>
110°	<b>550.8</b>	<b>459.4</b>	<b>425.2</b>	<b>404.8</b>	<b>391.8</b>	<b>380.0</b>	<b>358.4</b>
120°	<b>564.8</b>	<b>466.7</b>	<b>429.4</b>	<b>405.1</b>	<b>381.3</b>	<b>364.6</b>	<b>340.3</b>
135°	<b>633.0</b>	<b>508.1</b>	<b>448.7</b>	<b>421.5</b>	<b>397.9</b>	<b>373.4</b>	<b>323.8</b>
150°	<b>753.6</b>	<b>601.0</b>	<b>506.8</b>	<b>453.9</b>	<b>431.0</b>	<b>413.2</b>	<b>373.2</b>
Run VMG	<b>870.1</b>	<b>694.0</b>	<b>585.2</b>	<b>524.1</b>	<b>495.8</b>	<b>466.8</b>	<b>419.8</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>906.9</b>	<b>733.1</b>	<b>630.7</b>	<b>578.0</b>	<b>555.3</b>	<b>536.7</b>	<b>504.8</b>
Circular Random	<b>760.1</b>	<b>613.0</b>	<b>534.7</b>	<b>490.0</b>	<b>462.7</b>	<b>444.4</b>	<b>418.3</b>
Coastal / Long Distance	<b>903.2</b>	<b>687.8</b>	<b>569.2</b>	<b>504.5</b>	<b>472.5</b>	<b>446.2</b>	<b>401.7</b>
Non Spinnaker	<b>834.9</b>	<b>665.8</b>	<b>573.2</b>	<b>518.3</b>	<b>483.9</b>	<b>461.0</b>	<b>431.4</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>41.3°</b>	<b>40.3°</b>	<b>38.6°</b>	<b>37.9°</b>	<b>37.5°</b>	<b>37.1°</b>
Beat VMG	<b>3.82</b>	<b>4.66</b>	<b>5.32</b>	<b>5.70</b>	<b>5.86</b>	<b>5.93</b>	<b>6.10</b>
52°	<b>5.84</b>	<b>6.99</b>	<b>7.76</b>	<b>8.10</b>	<b>8.23</b>	<b>8.30</b>	<b>8.41</b>
60°	<b>6.19</b>	<b>7.32</b>	<b>7.98</b>	<b>8.29</b>	<b>8.46</b>	<b>8.54</b>	<b>8.62</b>
75°	<b>6.49</b>	<b>7.57</b>	<b>8.14</b>	<b>8.47</b>	<b>8.74</b>	<b>8.95</b>	<b>9.14</b>
90°	<b>6.42</b>	<b>7.71</b>	<b>8.22</b>	<b>8.49</b>	<b>8.82</b>	<b>9.16</b>	<b>9.73</b>
110°	<b>6.54</b>	<b>7.84</b>	<b>8.47</b>	<b>8.89</b>	<b>9.19</b>	<b>9.47</b>	<b>10.04</b>
120°	<b>6.37</b>	<b>7.71</b>	<b>8.38</b>	<b>8.89</b>	<b>9.44</b>	<b>9.87</b>	<b>10.58</b>
135°	<b>5.69</b>	<b>7.09</b>	<b>8.02</b>	<b>8.54</b>	<b>9.05</b>	<b>9.64</b>	<b>11.12</b>
150°	<b>4.78</b>	<b>5.99</b>	<b>7.10</b>	<b>7.93</b>	<b>8.35</b>	<b>8.71</b>	<b>9.65</b>
Run VMG	<b>4.14</b>	<b>5.19</b>	<b>6.15</b>	<b>6.87</b>	<b>7.26</b>	<b>7.71</b>	<b>8.58</b>
Gybe Angles	<b>143.0°</b>	<b>145.5°</b>	<b>147.5°</b>	<b>150.5°</b>	<b>151.8°</b>	<b>175.0°</b>	<b>178.0°</b>