



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

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

**Rating Office**

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



**Certificate**

Number **US6715**  
Issued On **14/09/2020**  
ORC Ref **03410000QA3**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 586kg  
Maximum **595kg**  
Minimum\* **446kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **611.8 0.9807**  
Non Spin OSN **594.7 1.0088**

**Sails Limitations**

Headsails **5** Spinnakers **4**  
**Asymmetric on centerline**  
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 116.01**  
Flying H/S: **No**  
Spin. Pole: **No**

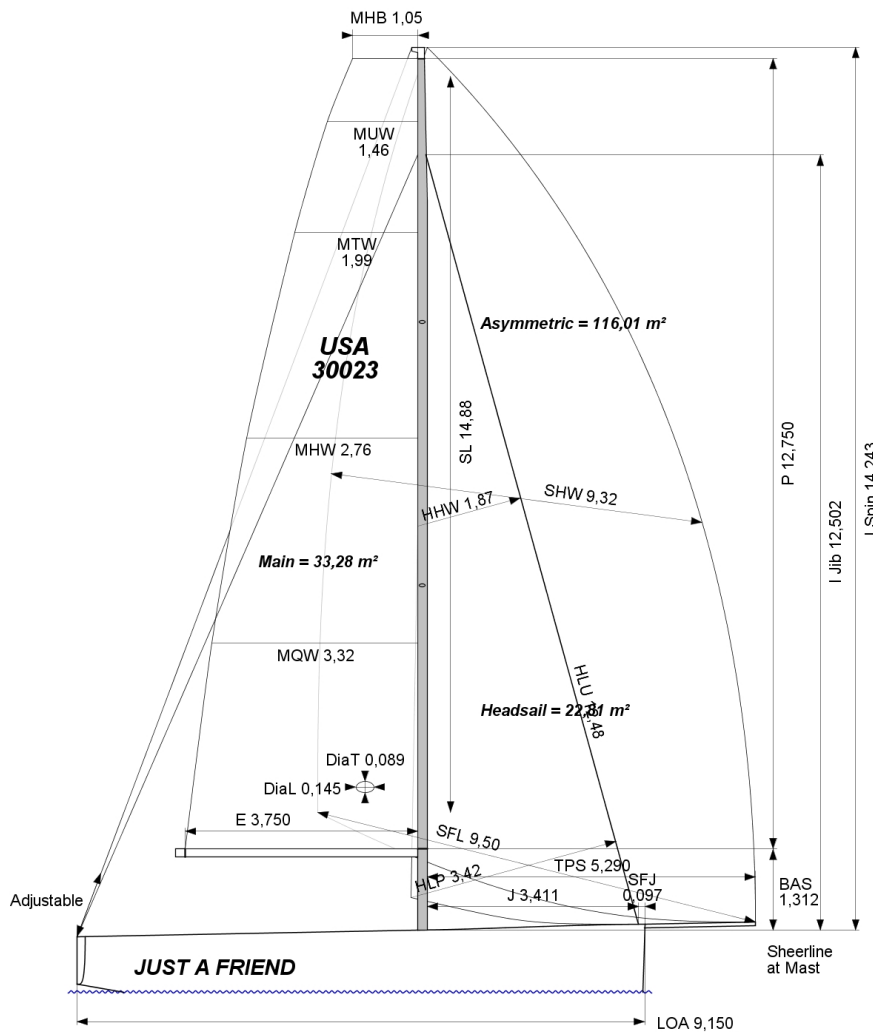
**Class Division Length**

**CDL = 9.284**

**Stability (Estimated)**

Limit Positive Stab.: **125.2°**  
Stability Index: **118.8**

**Owner**



<b>BOAT</b> Name <b>JUST A FRIEND</b> Sail Nr <b>USA 30023</b>		<b>GPH</b> <b>557.8</b>	<b>HULL</b> Data File <b>US6715</b> LOA <b>9.150m</b> Offset File <b>C-C30M.OFF</b> MB <b>2.978m</b> Displacement <b>1,851kg</b> Draft <b>2.253m</b>			
<b>CLASS</b> Class <b>C&amp;C 30 MILLS</b> Designer <b>Mills</b> Builder <b>US Watercraft</b> Series <b>01/2014</b> Age Date <b>01/2015</b> Age Allowance <b>0.195%</b>		IMS Division <b>Performance</b> 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 Carbon Rudder <b>Yes</b> Light Stanchions <b>No</b>		IMSL <b>9.064m</b> VCGD <b>-0.343m</b> Sink <b>13.38kg/mm</b> RL <b>9.503m</b> VCGM <b>-0.348m</b> WS <b>16.88m²</b> LSM0 <b>8.936m</b> Displacement/Length ratio <b>2.5940</b>		
<b>COMMENTS</b>		Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>		<b>CENTERBOARD</b>  <b>N/A</b>		
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.300</b> Type <b>Folding 2 blades</b> PBW <b>0.265</b> PIPA <b>0.0032</b>						
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>544.8</b>			<b>615.8</b>		
Time on Time	<b>1.1014</b>			<b>1.0961</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>628.9</b>	<b>500.4</b>	<b>432.1</b>	<b>812.5</b>	<b>625.3</b>	<b>530.9</b>
Time on Time	<b>1.0733</b>	<b>1.3490</b>	<b>1.5620</b>	<b>0.8308</b>	<b>1.0794</b>	<b>1.2715</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>							
Name	<b>JUST A FRIEND</b>	Certificate Number	<b>US6715</b>				
Sail Nr	<b>USA 30023</b>	Issued On	<b>14/09/2020</b>				

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>923.7</b>	<b>758.1</b>	<b>703.3</b>	<b>685.0</b>	<b>673.5</b>	<b>661.4</b>	<b>663.2</b>
52°	<b>609.5</b>	<b>524.7</b>	<b>500.8</b>	<b>491.2</b>	<b>486.0</b>	<b>475.9</b>	<b>468.1</b>
60°	<b>577.8</b>	<b>512.0</b>	<b>483.7</b>	<b>470.5</b>	<b>463.0</b>	<b>454.5</b>	<b>441.1</b>
75°	<b>536.4</b>	<b>496.3</b>	<b>463.3</b>	<b>436.6</b>	<b>424.6</b>	<b>417.6</b>	<b>396.9</b>
90°	<b>522.8</b>	<b>472.6</b>	<b>443.4</b>	<b>421.4</b>	<b>393.6</b>	<b>379.5</b>	<b>365.7</b>
110°	<b>533.5</b>	<b>475.9</b>	<b>421.7</b>	<b>385.9</b>	<b>362.7</b>	<b>343.0</b>	<b>317.3</b>
120°	<b>556.0</b>	<b>484.7</b>	<b>430.1</b>	<b>384.7</b>	<b>346.1</b>	<b>322.6</b>	<b>288.7</b>
135°	<b>634.2</b>	<b>514.6</b>	<b>459.6</b>	<b>404.1</b>	<b>353.6</b>	<b>317.9</b>	<b>261.8</b>
150°	<b>757.3</b>	<b>600.8</b>	<b>517.4</b>	<b>465.9</b>	<b>414.6</b>	<b>366.3</b>	<b>273.4</b>
Run VMG	<b>874.5</b>	<b>693.7</b>	<b>598.9</b>	<b>538.0</b>	<b>478.7</b>	<b>422.9</b>	<b>315.7</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>899.1</b>	<b>725.9</b>	<b>651.1</b>	<b>611.5</b>	<b>576.1</b>	<b>542.2</b>	<b>489.4</b>
Circular Random	<b>759.4</b>	<b>618.5</b>	<b>542.8</b>	<b>497.0</b>	<b>465.7</b>	<b>441.9</b>	<b>405.7</b>
Coastal / Long Distance	<b>896.6</b>	<b>684.2</b>	<b>587.2</b>	<b>526.5</b>	<b>481.2</b>	<b>441.9</b>	<b>380.8</b>
Non Spinnaker	<b>851.4</b>	<b>684.3</b>	<b>593.6</b>	<b>539.2</b>	<b>503.5</b>	<b>477.9</b>	<b>441.1</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>42.0°</b>	<b>40.1°</b>	<b>37.5°</b>	<b>37.1°</b>	<b>36.4°</b>	<b>36.0°</b>	<b>36.8°</b>
Beat VMG	<b>3.90</b>	<b>4.75</b>	<b>5.12</b>	<b>5.26</b>	<b>5.35</b>	<b>5.44</b>	<b>5.43</b>
52°	<b>5.91</b>	<b>6.86</b>	<b>7.19</b>	<b>7.33</b>	<b>7.41</b>	<b>7.56</b>	<b>7.69</b>
60°	<b>6.23</b>	<b>7.03</b>	<b>7.44</b>	<b>7.65</b>	<b>7.78</b>	<b>7.92</b>	<b>8.16</b>
75°	<b>6.71</b>	<b>7.25</b>	<b>7.77</b>	<b>8.25</b>	<b>8.48</b>	<b>8.62</b>	<b>9.07</b>
90°	<b>6.89</b>	<b>7.62</b>	<b>8.12</b>	<b>8.54</b>	<b>9.15</b>	<b>9.49</b>	<b>9.84</b>
110°	<b>6.75</b>	<b>7.56</b>	<b>8.54</b>	<b>9.33</b>	<b>9.93</b>	<b>10.50</b>	<b>11.34</b>
120°	<b>6.48</b>	<b>7.43</b>	<b>8.37</b>	<b>9.36</b>	<b>10.40</b>	<b>11.16</b>	<b>12.47</b>
135°	<b>5.68</b>	<b>7.00</b>	<b>7.83</b>	<b>8.91</b>	<b>10.18</b>	<b>11.32</b>	<b>13.75</b>
150°	<b>4.75</b>	<b>5.99</b>	<b>6.96</b>	<b>7.73</b>	<b>8.68</b>	<b>9.83</b>	<b>13.17</b>
Run VMG	<b>4.12</b>	<b>5.19</b>	<b>6.01</b>	<b>6.69</b>	<b>7.52</b>	<b>8.51</b>	<b>11.40</b>
Gybe Angles	<b>142.5°</b>	<b>145.5°</b>	<b>150.3°</b>	<b>149.0°</b>	<b>145.0°</b>	<b>144.5°</b>	<b>144.5°</b>