



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

**2020**  
**Club**  
**Double Handed**

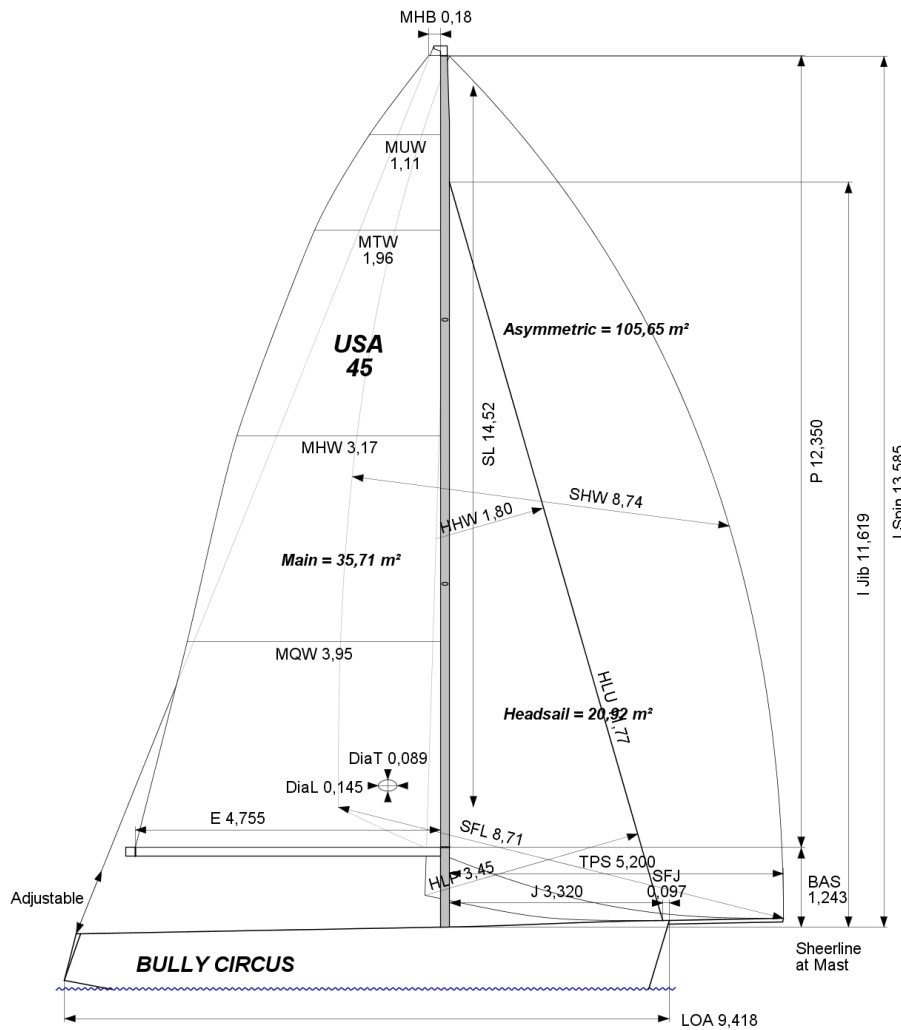
**Rating Office**

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**Racing**  
**Congress**

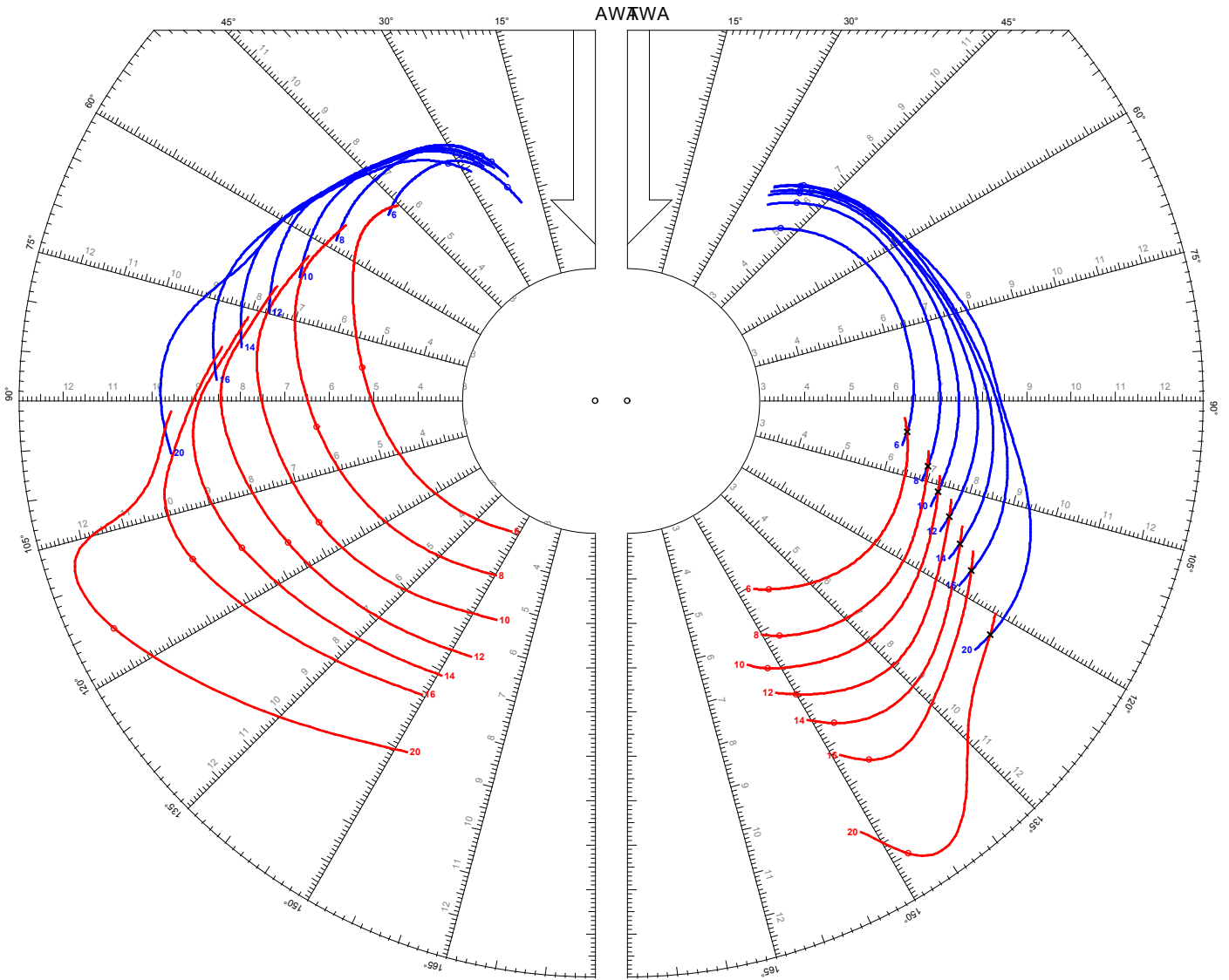


**Certificate**

Number **US6533**  
Issued On **24/07/2020**  
ORC Ref **03410000N5C**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**



<b>BOAT</b> Name <b>BULLY CIRCUS</b> Sail Nr <b>USA 45</b>		<b>GPH</b> <b>595.2</b>	<b>HULL</b> Data File <b>US6533DH</b> LOA <b>9.418m</b> Offset File <b>US30655.OFF</b> MB <b>3.042m</b> Displacement <b>1,962kg</b> Draft <b>2.094m</b>		<b>Crew Weight</b> Default <b>170kg</b> Maximum <b>170kg</b> Non Manual Pwr <b>No</b>
<b>CLASS</b> Class <b>FARR 30</b> Designer <b>Farr</b> Builder <b>Carroll Marine</b> Series <b>01/1996</b> Age Date <b>01/1996</b> Age Allowance <b>0.487%</b>			<b>Performance</b> IMS Division <b>Performance</b> Dynamic All. <b>0.000%</b> Fiber Rigging <b>No</b> Construction <b>Cored</b> Crew Arm Ex <b>0.00</b> Aramid Core <b>No</b> Carbon Rudder <b>Yes</b> Light Stanchions		<b>Sails Limitations</b> Headsails <b>5</b> Spinnakers <b>4</b> <b>Asymmetric on centerline</b> <b>Spinnaker configuration</b> Symmetric: <b>No</b> Asymmetric: <b>Yes 105.64</b> Flying H/S: <b>No</b> Spin. Pole: <b>No</b>
<b>COMMENTS</b>			<b>LSM0</b> <b>8.423m</b> Displacement/Length ratio <b>3.2832</b> Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>		<b>Stability (Measured)</b> Limit Positive Stab.: <b>130.9°</b> Stability Index: <b>124.4</b>
<b>PROPELLER</b> Type <b>No Propeller</b>			<b>CENTERBOARD</b> <b>N/A</b>		<b>Owner</b>
<b>SCORING OPTIONS</b>					
	Time on Distance	Time on Time			
Coastal or Long Distance	<b>586.7</b>	<b>1.0227</b>			
Circular Random	<b>595.2</b>	<b>1.0081</b>			
Predominantly Upwind	<b>596.0</b>	<b>1.0067</b>			
Predominantly Downwind	<b>523.9</b>	<b>1.1452</b>			



Polar Plot for Boat	
Name	<b>BULLY CIRCUS</b>
Sail Number	<b>USA 45</b>
Class	<b>FARR 30</b>
Designer	<b>Farr</b>
Builder	<b>Carroll Marine</b>
Issued On	<b>24/07/2020 - VPP 2020 1.02</b>

# 2020

## Double Handed Certificate Appendix

<b>BOAT</b>			
Name	<b>BULLY CIRCUS</b>	Certificate Number	<b>US6533</b>
Sail Nr	<b>USA 45</b>	Issued On	<b>24/07/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>930.3</b>	<b>809.7</b>	<b>773.2</b>	<b>761.6</b>	<b>747.2</b>	<b>744.5</b>	<b>764.3</b>
52°	<b>614.4</b>	<b>550.9</b>	<b>535.3</b>	<b>529.2</b>	<b>524.3</b>	<b>518.7</b>	<b>520.8</b>
60°	<b>582.0</b>	<b>532.5</b>	<b>518.2</b>	<b>511.4</b>	<b>508.7</b>	<b>500.1</b>	<b>498.5</b>
75°	<b>560.3</b>	<b>517.0</b>	<b>495.3</b>	<b>482.5</b>	<b>474.8</b>	<b>470.7</b>	<b>456.8</b>
90°	<b>561.9</b>	<b>513.2</b>	<b>484.0</b>	<b>459.2</b>	<b>443.4</b>	<b>434.1</b>	<b>428.1</b>
110°	<b>556.5</b>	<b>513.3</b>	<b>488.9</b>	<b>464.1</b>	<b>438.2</b>	<b>411.6</b>	<b>374.9</b>
120°	<b>563.4</b>	<b>503.6</b>	<b>475.3</b>	<b>450.2</b>	<b>426.7</b>	<b>404.8</b>	<b>365.1</b>
135°	<b>623.0</b>	<b>521.5</b>	<b>473.2</b>	<b>428.6</b>	<b>397.6</b>	<b>373.7</b>	<b>331.2</b>
150°	<b>739.4</b>	<b>592.8</b>	<b>518.2</b>	<b>474.5</b>	<b>432.1</b>	<b>387.5</b>	<b>307.6</b>
Run VMG	<b>853.7</b>	<b>684.5</b>	<b>601.0</b>	<b>547.9</b>	<b>498.9</b>	<b>447.5</b>	<b>355.2</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>892.0</b>	<b>747.1</b>	<b>687.1</b>	<b>654.7</b>	<b>623.0</b>	<b>596.0</b>	<b>559.7</b>
Circular Random	<b>782.7</b>	<b>649.0</b>	<b>580.5</b>	<b>541.3</b>	<b>515.8</b>	<b>497.1</b>	<b>469.9</b>
Coastal / Long Distance	<b>888.2</b>	<b>704.8</b>	<b>623.4</b>	<b>572.0</b>	<b>533.1</b>	<b>497.9</b>	<b>444.2</b>
Non Spinnaker	<b>850.8</b>	<b>696.3</b>	<b>614.9</b>	<b>568.0</b>	<b>538.6</b>	<b>518.7</b>	<b>492.0</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>41.6°</b>	<b>40.5°</b>	<b>39.8°</b>	<b>39.4°</b>	<b>39.0°</b>	<b>39.4°</b>	<b>41.3°</b>
Beat VMG	<b>3.87</b>	<b>4.45</b>	<b>4.66</b>	<b>4.73</b>	<b>4.82</b>	<b>4.84</b>	<b>4.71</b>
52°	<b>5.86</b>	<b>6.54</b>	<b>6.73</b>	<b>6.80</b>	<b>6.87</b>	<b>6.94</b>	<b>6.91</b>
60°	<b>6.19</b>	<b>6.76</b>	<b>6.95</b>	<b>7.04</b>	<b>7.08</b>	<b>7.20</b>	<b>7.22</b>
75°	<b>6.42</b>	<b>6.96</b>	<b>7.27</b>	<b>7.46</b>	<b>7.58</b>	<b>7.65</b>	<b>7.88</b>
90°	<b>6.41</b>	<b>7.02</b>	<b>7.44</b>	<b>7.84</b>	<b>8.12</b>	<b>8.29</b>	<b>8.41</b>
110°	<b>6.47</b>	<b>7.01</b>	<b>7.36</b>	<b>7.76</b>	<b>8.22</b>	<b>8.75</b>	<b>9.60</b>
120°	<b>6.39</b>	<b>7.15</b>	<b>7.57</b>	<b>8.00</b>	<b>8.44</b>	<b>8.89</b>	<b>9.86</b>
135°	<b>5.78</b>	<b>6.90</b>	<b>7.61</b>	<b>8.40</b>	<b>9.05</b>	<b>9.63</b>	<b>10.87</b>
150°	<b>4.87</b>	<b>6.07</b>	<b>6.95</b>	<b>7.59</b>	<b>8.33</b>	<b>9.29</b>	<b>11.70</b>
Run VMG	<b>4.22</b>	<b>5.26</b>	<b>5.99</b>	<b>6.57</b>	<b>7.22</b>	<b>8.04</b>	<b>10.14</b>
Gybe Angles	<b>143.0°</b>	<b>147.0°</b>	<b>152.3°</b>	<b>150.0°</b>	<b>147.3°</b>	<b>146.0°</b>	<b>148.1°</b>