



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

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

**Rating Office**

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



**Certificate**

Number **US6003**  
Issued On **01/10/2020**  
ORC Ref **03410000RBL**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 468kg  
Maximum **450kg**  
Minimum\* **338kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **650.1 0.9229**  
Non Spin OSN **631.4 0.9502**

**Sails Limitations**

Headsails **5** Spinnakers **4**  
**Asymmetric on centerline**  
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 80.63**  
Flying H/S: **Yes 27.76**  
Spin. Pole: **No**

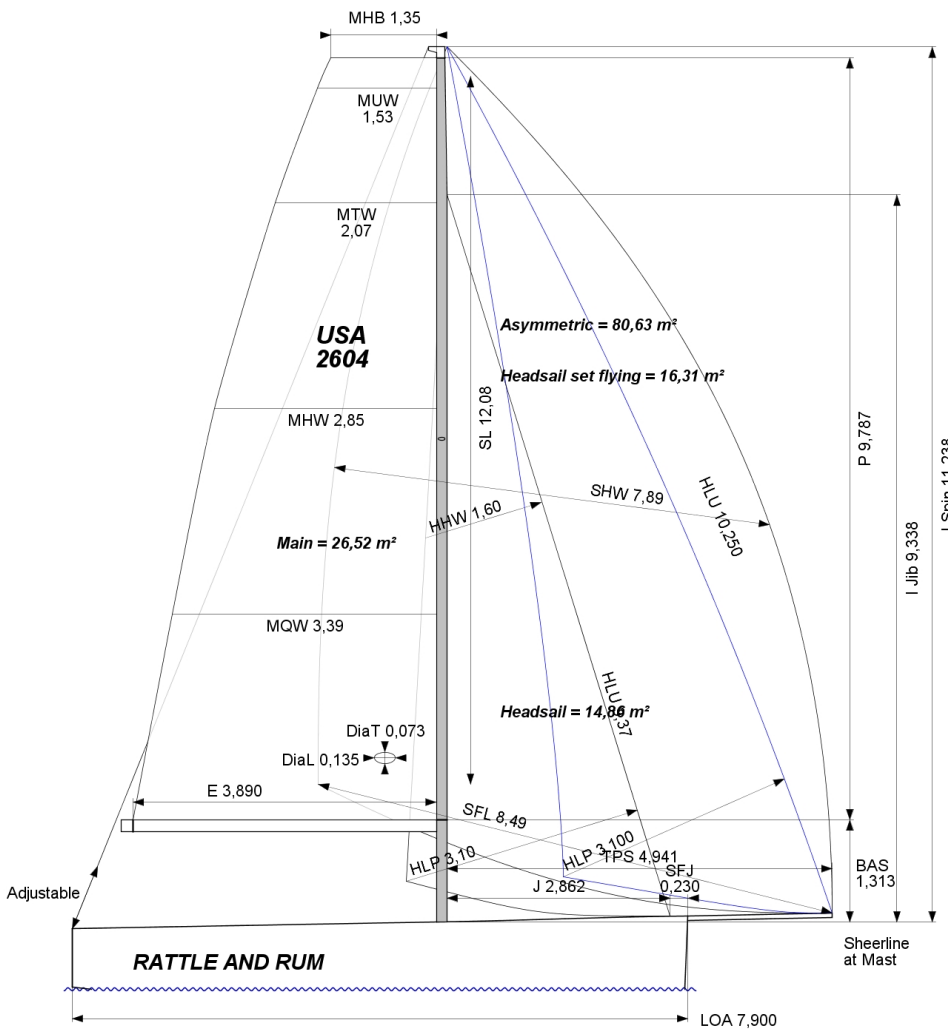
**Class Division Length**

**CDL = 7.975**

**Stability (Measured)**

Limit Positive Stab.: **116.2°**  
Stability Index: **108.5**

**Owner**



|   |  |  |
|---|--|--|
| <b>BOAT</b><br>Name <b>RATTLE AND RUM</b><br>Sail Nr <b>USA2604</b>   | <b>GPH</b><br><b>591.9</b>   | <b>HULL</b><br>Data File <b>US6003</b> LOA <b>7.900m</b><br>Offset File <b>wracegp26.off</b> MB <b>2.554m</b><br>Displacement <b>1,142kg</b> Draft <b>1.902m</b>                             |
| <b>CLASS</b><br>Class <b>GP 26</b><br>Designer <b>DONOVAN</b><br>Builder <b>Mag Marin Istanbul</b><br>Series <b>01/2011</b><br>Age Date <b>01/2015</b><br>Age Allowance <b>0.292%</b> | <b>IMRS Division</b> <b>Sportboat</b> Dynamic All. <b>0.000%</b><br>Plan Review Construction <b>Cored</b><br>Fiber Rigging <b>No</b> Aramid Core <b>No</b><br>Crew Arm Ex Carbon Rudder <b>Yes</b><br>Light Stanchions <b>No</b> | <b>IMSL</b> <b>7.880m</b> VCGD <b>-0.135m</b> Sink <b>10.12kg/mm</b><br>RL <b>8.083m</b> VCGM <b>-0.141m</b> WS <b>12.92m²</b><br>LSM0 <b>7.635m</b> Displacement/Length ratio <b>2.5659</b> |
| <b>COMMENTS</b>   | Water Ballast <b>0</b> Trim Tab <b>No</b><br>BLR Index <b>0.0000</b>   | <b>BILGEBOARD</b><br>BS BT BA<br>BF BX<br>BC BY  |
| <b>PROPELLER</b><br>Type <b>No Propeller</b>  | <b>SCORING OPTIONS</b>   |  |
|   | <b>COASTAL / LONG DISTANCE</b>   | <b>WINDWARD / LEEWARD</b>  |
| Time on Distance  | <b>580.5</b>   | <b>657.3</b>   |
| Time on Time  | <b>1.0335</b>  | <b>1.0270</b>  |
| Triple Number   | Low Medium High  | Low Medium High  |
| Time on Distance  | <b>658.5 533.8 465.8</b>   | <b>846.0 668.5 573.0</b>   |
| Time on Time  | <b>1.0251 1.2645 1.4490</b>  | <b>0.7979 1.0097 1.1780</b>  |

# 2020

## ORC Club Certificate Appendix

| <b>BOAT</b> |                       |                    |                   |
|-------------|-----------------------|--------------------|-------------------|
| Name        | <b>RATTLE AND RUM</b> | Certificate Number | <b>US6003</b>     |
| Sail Nr     | <b>USA2604</b>        | Issued On          | <b>01/10/2020</b> |

| <b>TIME ALLOWANCES</b>  |              |              |              |              |              |              |              |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt         | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>942.6</b> | <b>798.7</b> | <b>757.0</b> | <b>742.7</b> | <b>743.4</b> | <b>732.9</b> | <b>734.7</b> |
| 52°                     | <b>612.7</b> | <b>551.6</b> | <b>535.4</b> | <b>525.8</b> | <b>519.9</b> | <b>518.1</b> | <b>512.7</b> |
| 60°                     | <b>582.3</b> | <b>532.8</b> | <b>513.7</b> | <b>500.5</b> | <b>491.0</b> | <b>492.7</b> | <b>482.3</b> |
| 75°                     | <b>562.3</b> | <b>509.4</b> | <b>477.3</b> | <b>460.7</b> | <b>448.9</b> | <b>440.7</b> | <b>431.6</b> |
| 90°                     | <b>559.7</b> | <b>509.0</b> | <b>457.9</b> | <b>430.7</b> | <b>414.7</b> | <b>402.5</b> | <b>392.6</b> |
| 110°                    | <b>582.1</b> | <b>510.2</b> | <b>466.8</b> | <b>435.4</b> | <b>398.5</b> | <b>366.5</b> | <b>336.8</b> |
| 120°                    | <b>592.7</b> | <b>514.7</b> | <b>455.0</b> | <b>421.0</b> | <b>390.0</b> | <b>359.6</b> | <b>318.6</b> |
| 135°                    | <b>667.9</b> | <b>548.4</b> | <b>485.6</b> | <b>422.4</b> | <b>368.1</b> | <b>333.5</b> | <b>286.6</b> |
| 150°                    | <b>794.0</b> | <b>628.5</b> | <b>548.4</b> | <b>489.7</b> | <b>431.5</b> | <b>380.2</b> | <b>278.5</b> |
| Run VMG                 | <b>916.9</b> | <b>725.8</b> | <b>633.6</b> | <b>565.4</b> | <b>498.3</b> | <b>439.0</b> | <b>321.6</b> |
| <b>Selected Courses</b> |              |              |              |              |              |              |              |
| Windward / Leeward      | <b>929.7</b> | <b>762.2</b> | <b>695.3</b> | <b>654.1</b> | <b>620.8</b> | <b>585.9</b> | <b>528.2</b> |
| Circular Random         | <b>797.1</b> | <b>653.1</b> | <b>576.6</b> | <b>530.8</b> | <b>499.5</b> | <b>475.7</b> | <b>439.4</b> |
| Coastal / Long Distance | <b>928.4</b> | <b>719.1</b> | <b>625.2</b> | <b>562.4</b> | <b>518.9</b> | <b>478.3</b> | <b>412.2</b> |
| Non Spinnaker           | <b>902.8</b> | <b>726.1</b> | <b>630.7</b> | <b>574.2</b> | <b>537.5</b> | <b>511.1</b> | <b>472.7</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>40.5°</b>  | <b>38.6°</b>  | <b>38.1°</b>  | <b>38.1°</b>  | <b>37.9°</b>  | <b>38.6°</b>  |
| Beat VMG   | <b>3.82</b>   | <b>4.51</b>   | <b>4.76</b>   | <b>4.85</b>   | <b>4.84</b>   | <b>4.91</b>   | <b>4.90</b>   |
| 52°  | <b>5.88</b>   | <b>6.53</b>   | <b>6.72</b>   | <b>6.85</b>   | <b>6.92</b>   | <b>6.95</b>   | <b>7.02</b>   |
| 60°  | <b>6.18</b>   | <b>6.76</b>   | <b>7.01</b>   | <b>7.19</b>   | <b>7.33</b>   | <b>7.31</b>   | <b>7.46</b>   |
| 75°  | <b>6.40</b>   | <b>7.07</b>   | <b>7.54</b>   | <b>7.81</b>   | <b>8.02</b>   | <b>8.17</b>   | <b>8.34</b>   |
| 90°  | <b>6.43</b>   | <b>7.07</b>   | <b>7.86</b>   | <b>8.36</b>   | <b>8.68</b>   | <b>8.95</b>   | <b>9.17</b>   |
| 110°   | <b>6.18</b>   | <b>7.06</b>   | <b>7.71</b>   | <b>8.27</b>   | <b>9.03</b>   | <b>9.82</b>   | <b>10.69</b>  |
| 120°   | <b>6.07</b>   | <b>6.99</b>   | <b>7.91</b>   | <b>8.55</b>   | <b>9.23</b>   | <b>10.01</b>  | <b>11.30</b>  |
| 135°   | <b>5.39</b>   | <b>6.56</b>   | <b>7.41</b>   | <b>8.52</b>   | <b>9.78</b>   | <b>10.80</b>  | <b>12.56</b>  |
| 150°   | <b>4.53</b>   | <b>5.73</b>   | <b>6.57</b>   | <b>7.35</b>   | <b>8.34</b>   | <b>9.47</b>   | <b>12.93</b>  |
| Run VMG  | <b>3.93</b>   | <b>4.96</b>   | <b>5.68</b>   | <b>6.37</b>   | <b>7.22</b>   | <b>8.20</b>   | <b>11.19</b>  |
| Gybe Angles  | <b>143.5°</b> | <b>147.0°</b> | <b>150.5°</b> | <b>148.5°</b> | <b>145.0°</b> | <b>143.0°</b> | <b>145.6°</b> |