



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020  
ORC Club  
Certificate**

**Rating Office**

**Offshore  
Racing  
Congress**



**Certificate**

Number **US6275**  
Issued On **20/07/2020**  
ORC Ref **03410000MQQ**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 411kg  
Maximum **340kg**  
Minimum\* **255kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

|              | ToD          | ToT           |
|--------------|--------------|---------------|
| Non Spin GPH | <b>688.6</b> | <b>0.8713</b> |
| Non Spin OSN | <b>671.2</b> | <b>0.8939</b> |

**Sails Limitations**

Headsails **5** Spinnakers **4**

**Asymmetric on centerline**

**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 63.62**  
Flying H/S: **No**  
Spin. Pole: **No**

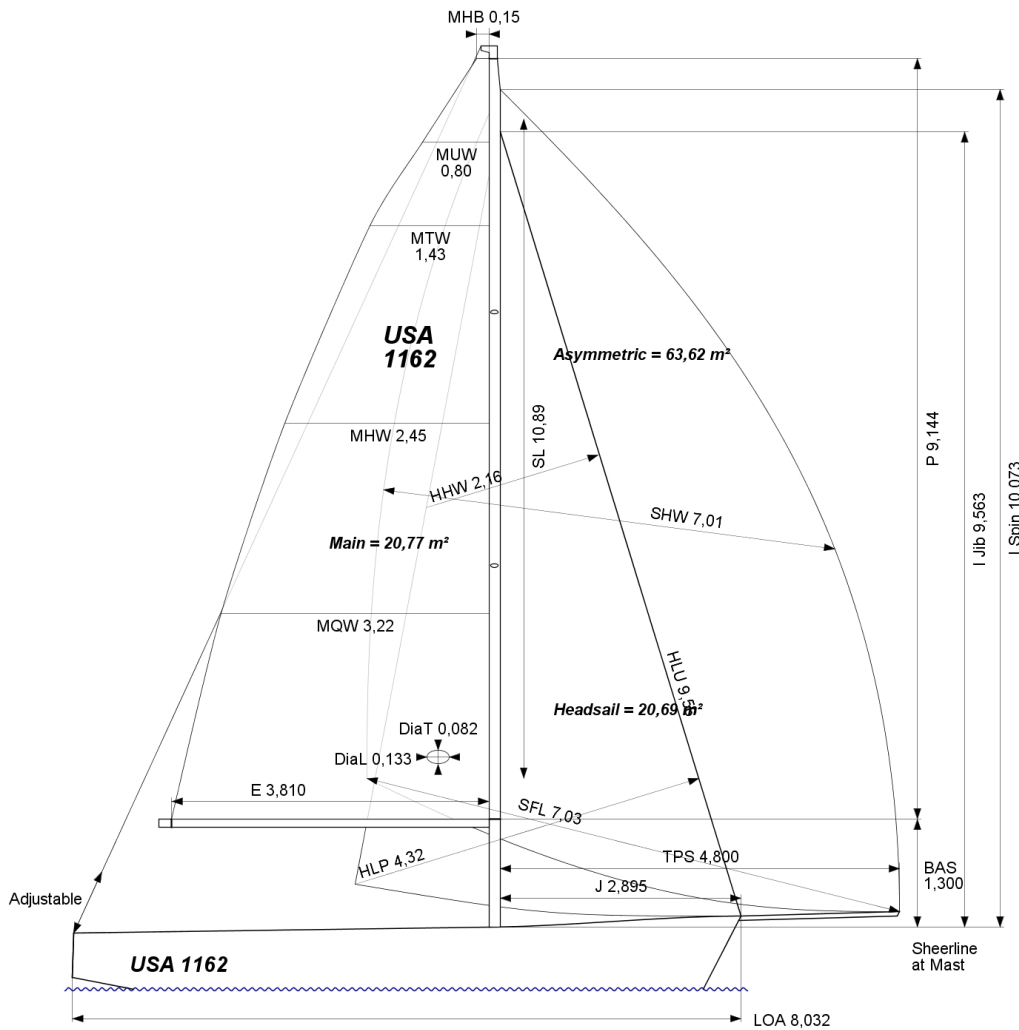
**Class Division Length**

**CDL = 7.258**

**Stability (Estimated)**

Limit Positive Stab.: **111.7°**  
Stability Index: **104.9**

**Owner**



| BOAT                   |                                | GPH           |               | HULL                      |                   |               |
|------------------------|--------------------------------|---------------|---------------|---------------------------|-------------------|---------------|
| Name                   | <b>USA 1162</b>                |               |               | Data File                 | <b>US6275</b>     |               |
| Sail Nr                | <b>USA 1162</b>                |               |               | Offset File               | <b>J80.OD.OFF</b> |               |
|                        |                                |               |               | Displacement              | <b>1,438kg</b>    |               |
|                        |                                |               |               | LOA                       | <b>8.032m</b>     |               |
|                        |                                |               |               | MB                        | <b>2.488m</b>     |               |
|                        |                                |               |               | Draft                     | <b>1.501m</b>     |               |
| <b>CLASS</b>           |                                |               |               | IMS Division              | <b>Sportboat</b>  |               |
| Class                  | <b>J-80</b>                    |               |               | Dynamic All.              | <b>0.000%</b>     |               |
| Designer               | <b>JOHNSTONE</b>               |               |               | Plan Review               | <b>Cored</b>      |               |
| Builder                | <b>TPI</b>                     |               |               | Fiber Rigging             | <b>No</b>         |               |
| Series                 | <b>11/1997</b>                 |               |               | Crew Arm Ex               | <b>0.00</b>       |               |
| Age Date               | <b>01/2009</b>                 |               |               | Aramid Core               | <b>No</b>         |               |
| Age Allowance          | <b>0.487%</b>                  |               |               | Carbon Rudder             | <b>No</b>         |               |
| <b>COMMENTS</b>        |                                |               |               | Light Stanchions          | <b>No</b>         |               |
|                        |                                |               |               | IMSL                      | <b>7.237m</b>     |               |
|                        |                                |               |               | RL                        | <b>7.288m</b>     |               |
|                        |                                |               |               | VCGD                      | <b>-0.150m</b>    |               |
|                        |                                |               |               | Sink                      | <b>8.99kg/mm</b>  |               |
|                        |                                |               |               | WS                        | <b>11.89m²</b>    |               |
|                        |                                |               |               | LSM0                      | <b>6.967m</b>     |               |
|                        |                                |               |               | Displacement/Length ratio | <b>4.2523</b>     |               |
|                        |                                |               |               | Water Ballast             | <b>0</b>          |               |
|                        |                                |               |               | Trim Tab No               | <b>No</b>         |               |
|                        |                                |               |               | BLR Index                 | <b>0.0000</b>     |               |
| <b>PROPELLER</b>       |                                |               |               | <b>BILGEBOARD</b>         |                   |               |
| Type                   | <b>No Propeller</b>            |               |               | BS                        | <b>BT</b>         |               |
|                        |                                |               |               | BF                        | <b>BX</b>         |               |
|                        |                                |               |               | BC                        | <b>BY</b>         |               |
|                        |                                |               |               |                           | <b>BA</b>         |               |
|                        |                                |               |               |                           |                   |               |
| <b>SCORING OPTIONS</b> |                                |               |               |                           |                   |               |
|                        | <b>COASTAL / LONG DISTANCE</b> |               |               | <b>WINDWARD / LEEWARD</b> |                   |               |
| Time on Distance       | <b>638.0</b>                   |               |               | <b>720.2</b>              |                   |               |
| Time on Time           | <b>0.9405</b>                  |               |               | <b>0.9372</b>             |                   |               |
| Triple Number          | Low                            | Medium        | High          | Low                       | Medium            | High          |
| Time on Distance       | <b>722.9</b>                   | <b>587.0</b>  | <b>525.4</b>  | <b>924.0</b>              | <b>721.2</b>      | <b>640.0</b>  |
| Time on Time           | <b>0.9338</b>                  | <b>1.1499</b> | <b>1.2848</b> | <b>0.7305</b>             | <b>0.9359</b>     | <b>1.0547</b> |

# 2020

## ORC Club Certificate Appendix

| <b>BOAT</b> |                 |                    |                   |
|-------------|-----------------|--------------------|-------------------|
| Name        | <b>USA 1162</b> | Certificate Number | <b>US6275</b>     |
| Sail Nr     | <b>USA 1162</b> | Issued On          | <b>20/07/2020</b> |

| <b>TIME ALLOWANCES</b>  |               |              |              |              |              |              |              |
|-------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt          | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>1058.0</b> | <b>874.4</b> | <b>805.4</b> | <b>782.2</b> | <b>772.3</b> | <b>772.8</b> | <b>763.9</b> |
| 52°                     | <b>693.5</b>  | <b>597.7</b> | <b>570.3</b> | <b>560.5</b> | <b>555.4</b> | <b>552.6</b> | <b>544.7</b> |
| 60°                     | <b>655.5</b>  | <b>581.9</b> | <b>555.9</b> | <b>543.8</b> | <b>536.8</b> | <b>532.7</b> | <b>523.0</b> |
| 75°                     | <b>628.1</b>  | <b>570.4</b> | <b>540.9</b> | <b>518.2</b> | <b>505.5</b> | <b>497.8</b> | <b>490.8</b> |
| 90°                     | <b>633.6</b>  | <b>568.7</b> | <b>537.4</b> | <b>506.9</b> | <b>482.4</b> | <b>465.6</b> | <b>450.6</b> |
| 110°                    | <b>632.0</b>  | <b>555.6</b> | <b>514.2</b> | <b>487.3</b> | <b>466.8</b> | <b>447.9</b> | <b>415.5</b> |
| 120°                    | <b>647.5</b>  | <b>560.8</b> | <b>514.8</b> | <b>473.4</b> | <b>443.8</b> | <b>423.2</b> | <b>384.0</b> |
| 135°                    | <b>721.5</b>  | <b>591.8</b> | <b>539.5</b> | <b>494.8</b> | <b>451.6</b> | <b>407.9</b> | <b>330.6</b> |
| 150°                    | <b>849.4</b>  | <b>678.0</b> | <b>588.0</b> | <b>545.8</b> | <b>513.4</b> | <b>472.1</b> | <b>370.2</b> |
| Run VMG                 | <b>980.8</b>  | <b>782.9</b> | <b>678.9</b> | <b>629.7</b> | <b>583.5</b> | <b>545.2</b> | <b>427.5</b> |
| <b>Selected Courses</b> |               |              |              |              |              |              |              |
| Windward / Leeward      | <b>1019.4</b> | <b>828.7</b> | <b>742.2</b> | <b>706.0</b> | <b>677.9</b> | <b>659.0</b> | <b>595.7</b> |
| Circular Random         | <b>876.7</b>  | <b>717.9</b> | <b>635.3</b> | <b>588.0</b> | <b>557.6</b> | <b>534.5</b> | <b>495.0</b> |
| Coastal / Long Distance | <b>1015.5</b> | <b>782.4</b> | <b>674.8</b> | <b>614.3</b> | <b>574.9</b> | <b>540.9</b> | <b>473.0</b> |
| Non Spinnaker           | <b>942.2</b>  | <b>763.4</b> | <b>668.5</b> | <b>613.7</b> | <b>579.6</b> | <b>556.0</b> | <b>521.8</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>39.0°</b>  | <b>37.9°</b>  | <b>37.5°</b>  | <b>37.9°</b>  | <b>37.9°</b>  |
| Beat VMG                                                 | <b>3.40</b>   | <b>4.12</b>   | <b>4.47</b>   | <b>4.60</b>   | <b>4.66</b>   | <b>4.66</b>   | <b>4.71</b>   |
| 52°                                                      | <b>5.19</b>   | <b>6.02</b>   | <b>6.31</b>   | <b>6.42</b>   | <b>6.48</b>   | <b>6.51</b>   | <b>6.61</b>   |
| 60°                                                      | <b>5.49</b>   | <b>6.19</b>   | <b>6.48</b>   | <b>6.62</b>   | <b>6.71</b>   | <b>6.76</b>   | <b>6.88</b>   |
| 75°                                                      | <b>5.73</b>   | <b>6.31</b>   | <b>6.66</b>   | <b>6.95</b>   | <b>7.12</b>   | <b>7.23</b>   | <b>7.33</b>   |
| 90°                                                      | <b>5.68</b>   | <b>6.33</b>   | <b>6.70</b>   | <b>7.10</b>   | <b>7.46</b>   | <b>7.73</b>   | <b>7.99</b>   |
| 110°                                                     | <b>5.70</b>   | <b>6.48</b>   | <b>7.00</b>   | <b>7.39</b>   | <b>7.71</b>   | <b>8.04</b>   | <b>8.66</b>   |
| 120°                                                     | <b>5.56</b>   | <b>6.42</b>   | <b>6.99</b>   | <b>7.60</b>   | <b>8.11</b>   | <b>8.51</b>   | <b>9.37</b>   |
| 135°                                                     | <b>4.99</b>   | <b>6.08</b>   | <b>6.67</b>   | <b>7.28</b>   | <b>7.97</b>   | <b>8.83</b>   | <b>10.89</b>  |
| 150°                                                     | <b>4.24</b>   | <b>5.31</b>   | <b>6.12</b>   | <b>6.60</b>   | <b>7.01</b>   | <b>7.62</b>   | <b>9.72</b>   |
| Run VMG                                                  | <b>3.67</b>   | <b>4.60</b>   | <b>5.30</b>   | <b>5.72</b>   | <b>6.17</b>   | <b>6.60</b>   | <b>8.42</b>   |
| Gybe Angles                                              | <b>145.0°</b> | <b>148.0°</b> | <b>150.0°</b> | <b>150.5°</b> | <b>176.0°</b> | <b>144.3°</b> | <b>140.6°</b> |