



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

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

**Rating Office**

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



**Certificate**

Number **US6594**  
Issued On **02/09/2020**  
ORC Ref **03410000PMC**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 744kg  
Maximum **744kg**  
Minimum\* **558kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr

**Special Scoring**

ToD ToT  
Non Spin GPH **601.6 0.9973**  
Non Spin OSN **588.0 1.0203**

**Sails Limitations**

Headsails **6** Spinnakers **4**  
**Asymmetric on centerline**  
**Spinnaker configuration**  
Symmetric: **No**  
Asymmetric: **Yes 163.45**  
Flying H/S: **No**  
Spin. Pole: **No**

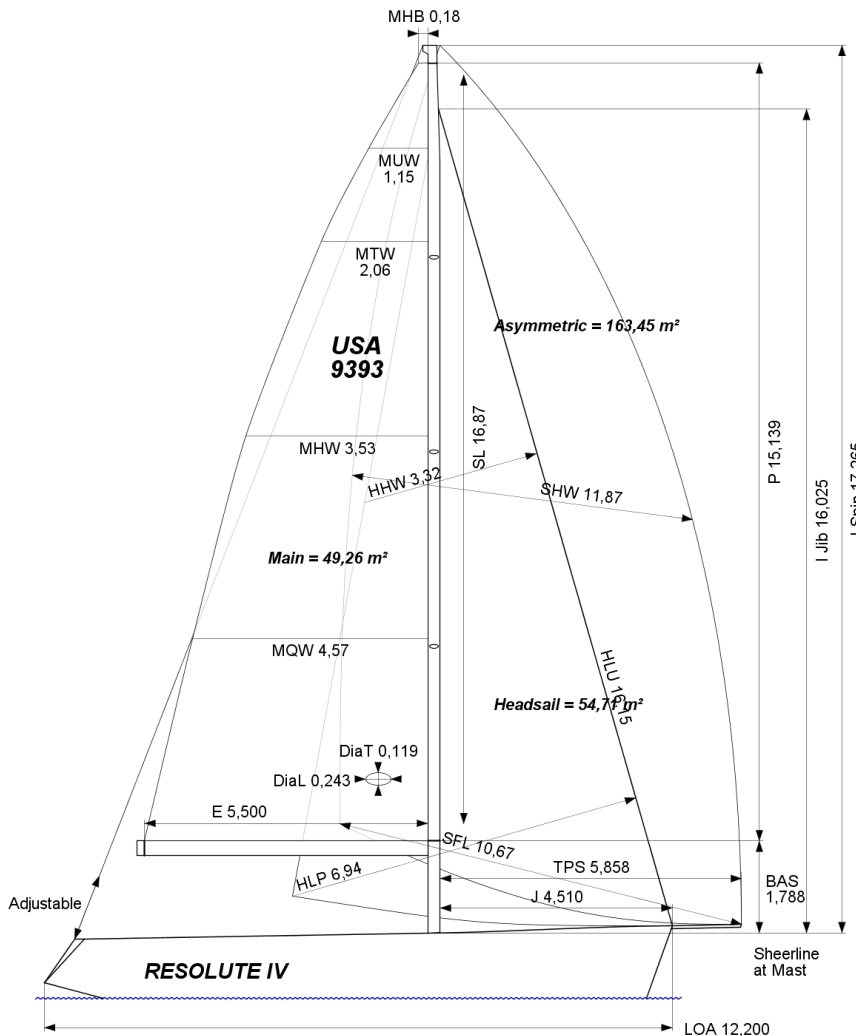
**Class Division Length**

**CDL = 10.373**

**Stability (Measured)**

Limit Positive Stab.: **120.2°**  
Stability Index: **121.0**

**Owner**



<b>BOAT</b> Name <b>Resolute IV</b> Sail Nr <b>usa 9393</b>		<b>GPH</b> <b>568.5</b>	<b>HULL</b> Data File <b>US6594</b> LOA <b>12.200m</b> Offset File <b>US31082C.OFF</b> MB <b>3.780m</b> Displacement <b>6,352kg</b> Draft <b>2.445m</b>			
<b>CLASS</b> Class <b>IMX 40</b> Designer <b>JEPPSON</b> Builder <b>X-YACHTS</b> Series <b>01/2000</b> Age Date <b>01/2001</b> Age Allowance <b>0.487%</b>		IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.000%</b> Plan Review Construction <b>Cored</b> Fiber Rigging <b>Yes</b> Aramid Core Crew Arm Ex Carbon Rudder Light Stanchions		IMSL <b>10.624m</b> VCGD <b>-0.014m</b> Sink <b>21.58kg/mm</b> RL <b>10.130m</b> VCGM <b>0.007m</b> WS <b>28.92m²</b> LSM0 <b>10.562m</b> Displacement/Length ratio <b>5.3910</b>		
<b>COMMENTS</b>		Water Ballast <b>0</b> Trim Tab BLR Index <b>0.0000</b>		<b>CENTERBOARD</b>  <b>N/A</b>		
<b>PROPELLER</b> Installation <b>Strut</b> PRD <b>0.432</b> Type <b>Folding 2 blades</b> PBW <b>0.108</b> PIPA <b>0.0031</b>						
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>555.6</b>			<b>624.2</b>		
Time on Time	<b>1.0798</b>			<b>1.0813</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>637.0</b>	<b>507.3</b>	<b>460.5</b>	<b>822.9</b>	<b>624.6</b>	<b>559.5</b>
Time on Time	<b>1.0596</b>	<b>1.3307</b>	<b>1.4657</b>	<b>0.8203</b>	<b>1.0807</b>	<b>1.2064</b>

# 2020

## ORC Club Certificate Appendix

BOAT							
Name	<b>Resolute IV</b>	Certificate Number			<b>US6594</b>		
Sail Nr	<b>usa 9393</b>	Issued On			<b>02/09/2020</b>		

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>918.6</b>	<b>761.6</b>	<b>690.0</b>	<b>663.5</b>	<b>651.0</b>	<b>647.0</b>	<b>636.5</b>
52°	<b>606.7</b>	<b>514.1</b>	<b>482.3</b>	<b>472.3</b>	<b>467.5</b>	<b>464.8</b>	<b>460.5</b>
60°	<b>575.0</b>	<b>497.3</b>	<b>470.8</b>	<b>460.5</b>	<b>455.3</b>	<b>452.3</b>	<b>448.4</b>
75°	<b>551.1</b>	<b>487.0</b>	<b>461.6</b>	<b>445.9</b>	<b>436.7</b>	<b>431.0</b>	<b>425.9</b>
90°	<b>546.5</b>	<b>478.4</b>	<b>451.4</b>	<b>433.3</b>	<b>422.0</b>	<b>411.5</b>	<b>399.1</b>
110°	<b>565.4</b>	<b>480.1</b>	<b>448.5</b>	<b>430.8</b>	<b>407.2</b>	<b>388.0</b>	<b>362.3</b>
120°	<b>577.6</b>	<b>485.5</b>	<b>450.6</b>	<b>423.2</b>	<b>402.5</b>	<b>388.2</b>	<b>351.1</b>
135°	<b>654.4</b>	<b>520.5</b>	<b>468.4</b>	<b>439.5</b>	<b>411.3</b>	<b>384.6</b>	<b>331.1</b>
150°	<b>774.3</b>	<b>621.2</b>	<b>521.6</b>	<b>472.2</b>	<b>450.9</b>	<b>430.0</b>	<b>383.8</b>
Run VMG	<b>894.0</b>	<b>717.3</b>	<b>602.3</b>	<b>544.6</b>	<b>519.3</b>	<b>483.1</b>	<b>437.3</b>
Selected Courses							
Windward / Leeward	<b>906.3</b>	<b>739.4</b>	<b>646.1</b>	<b>604.0</b>	<b>585.1</b>	<b>565.1</b>	<b>536.9</b>
Circular Random	<b>769.8</b>	<b>626.7</b>	<b>552.1</b>	<b>510.3</b>	<b>485.0</b>	<b>467.8</b>	<b>442.9</b>
Coastal / Long Distance	<b>905.1</b>	<b>695.7</b>	<b>585.3</b>	<b>527.4</b>	<b>498.2</b>	<b>472.0</b>	<b>425.4</b>
Non Spinnaker	<b>828.2</b>	<b>669.0</b>	<b>583.7</b>	<b>534.2</b>	<b>503.7</b>	<b>483.4</b>	<b>457.0</b>

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>42.0°</b>	<b>40.9°</b>	<b>39.4°</b>	<b>37.9°</b>	<b>37.7°</b>	<b>37.7°</b>	<b>37.5°</b>
Beat VMG	<b>3.92</b>	<b>4.73</b>	<b>5.22</b>	<b>5.43</b>	<b>5.53</b>	<b>5.56</b>	<b>5.66</b>
52°	<b>5.93</b>	<b>7.00</b>	<b>7.46</b>	<b>7.62</b>	<b>7.70</b>	<b>7.75</b>	<b>7.82</b>
60°	<b>6.26</b>	<b>7.24</b>	<b>7.65</b>	<b>7.82</b>	<b>7.91</b>	<b>7.96</b>	<b>8.03</b>
75°	<b>6.53</b>	<b>7.39</b>	<b>7.80</b>	<b>8.07</b>	<b>8.24</b>	<b>8.35</b>	<b>8.45</b>
90°	<b>6.59</b>	<b>7.52</b>	<b>7.98</b>	<b>8.31</b>	<b>8.53</b>	<b>8.75</b>	<b>9.02</b>
110°	<b>6.37</b>	<b>7.50</b>	<b>8.03</b>	<b>8.36</b>	<b>8.84</b>	<b>9.28</b>	<b>9.94</b>
120°	<b>6.23</b>	<b>7.41</b>	<b>7.99</b>	<b>8.51</b>	<b>8.94</b>	<b>9.27</b>	<b>10.25</b>
135°	<b>5.50</b>	<b>6.92</b>	<b>7.69</b>	<b>8.19</b>	<b>8.75</b>	<b>9.36</b>	<b>10.87</b>
150°	<b>4.65</b>	<b>5.80</b>	<b>6.90</b>	<b>7.62</b>	<b>7.98</b>	<b>8.37</b>	<b>9.38</b>
Run VMG	<b>4.03</b>	<b>5.02</b>	<b>5.98</b>	<b>6.61</b>	<b>6.93</b>	<b>7.45</b>	<b>8.23</b>
Gybe Angles	<b>144.0°</b>	<b>147.0°</b>	<b>147.8°</b>	<b>151.3°</b>	<b>151.5°</b>	<b>176.0°</b>	<b>177.0°</b>