



# 2020 ORC Club Certificate

### Rating Office

Offshore  
Racing  
Congress



### Certificate

Number **US6587**  
 Issued On **05/08/2020**  
 ORC Ref **0341000001C**  
 VPP Ver. **2020 1.02**  
 Valid until **31/12/2020**

### Crew Weight

Default **1,551kg**  
 Maximum **1,551kg**  
 Minimum\* **1,163kg**  
 \*when applied by the NoR and SI  
 Non Manual Pwr **No**

### Special Scoring

	ToD	ToT
Non Spin GPH	<b>469.8</b>	<b>1.2771</b>
Non Spin OSN	<b>462.4</b>	<b>1.2975</b>

### Sails Limitations

Headsails **8** Spinnakers **6**

### Spinnaker configuration

Symmetric: **No**  
 Asymmetric: **Yes 242.50**  
 Flying H/S: **Yes 205.42**  
 Spin. Pole: **Yes**

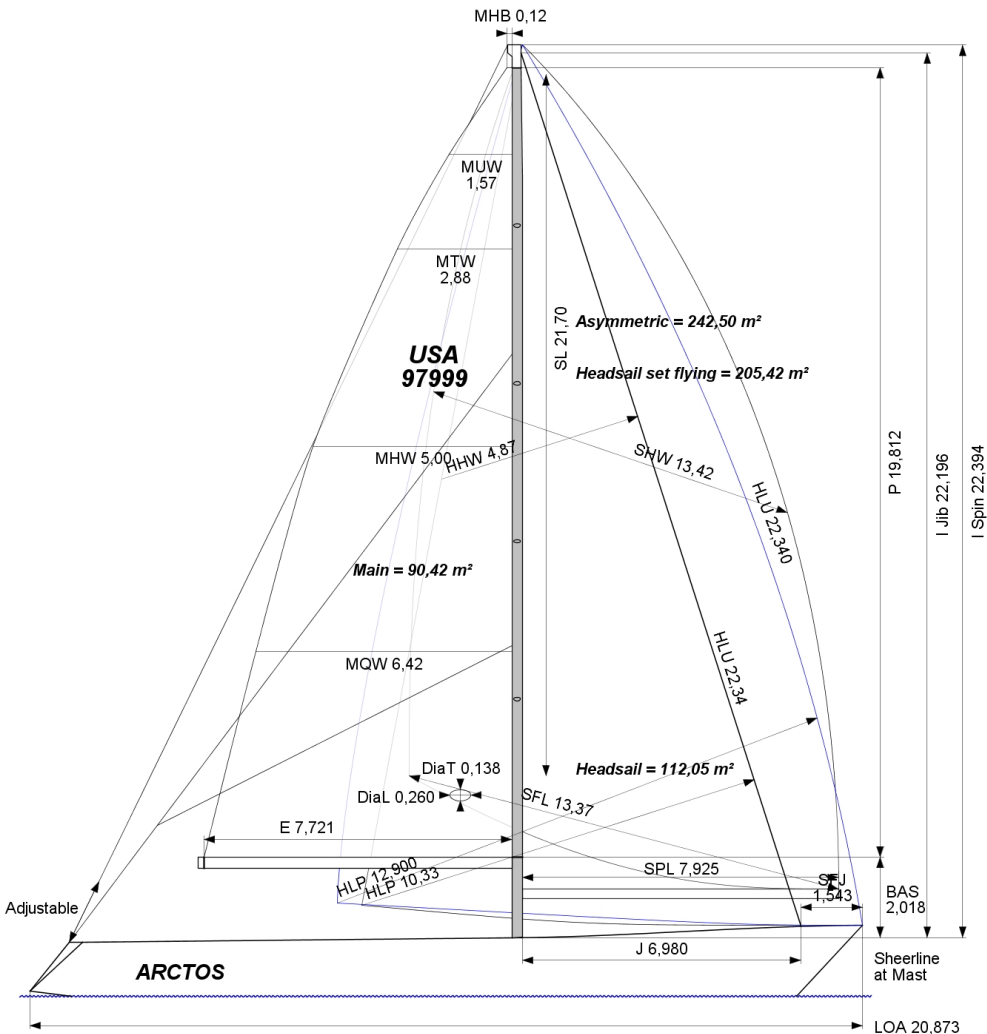
### Class Division Length

**CDL = 16.999**

### Stability (Measured)

Limit Positive Stab.: **115.8°**  
 Stability Index: **120.5**

### Owner



BOAT
Name <b>ARCTOS</b> Sail Nr <b>USA-97999</b>

GPH
<b>443.1</b>

HULL
Data File <b>US6587</b> LOA <b>20.873m</b> Offset File <b>us302301.off</b> MB <b>4.621m</b> Displacement <b>11,233kg</b> Draft <b>3.179m</b>

CLASS
Class <b>AND70</b> Designer <b>ANDREWS</b> Builder <b>DENCHO</b> Series <b>05/1992</b> Age Date <b>05/1992</b> Age Allowance <b>0.487%</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 <b>0.00</b> Carbon Rudder <b>Yes</b> Light Stanchions <b>No</b>
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COMMENTS
5 GAL OF FUEL, FBD ADJ SCALE = 25220lbs W 5 GAL FUEL

IMSL <b>18.131m</b> VCGD <b>-0.028m</b> Sink <b>40.46kg/mm</b> RL <b>15.818m</b> VCGM <b>-0.020m</b> WS <b>49.34m²</b> LSMO <b>17.677m</b> Displacement/Length ratio <b>2.0336</b>
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Water Ballast <b>0</b> Trim Tab <b>No</b> BLR Index <b>0.0000</b>
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PROPELLER
Installation <b>Strut</b> PRD <b>0.467</b> Type <b>Folding 2 blades</b> PBW <b>0.119</b> PIPA <b>0.0038</b>

CENTERBOARD
<b>NA</b>

SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time on Distance	<b>436.4</b>			<b>498.5</b>	
Time on Time	<b>1.3750</b>			<b>1.3541</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>507.3</b>	<b>393.6</b>	<b>344.2</b>	<b>681.8</b>	<b>501.7</b>	<b>429.8</b>
Time on Time	<b>1.3307</b>	<b>1.7149</b>	<b>1.9612</b>	<b>0.9900</b>	<b>1.3455</b>	<b>1.5705</b>

# 2020

## ORC Club Certificate Appendix

<b>BOAT</b>			
Name	<b>ARCTOS</b>	Certificate Number	<b>US6587</b>
Sail Nr	<b>USA-97999</b>	Issued On	<b>05/08/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>742.4</b>	<b>611.9</b>	<b>558.0</b>	<b>530.9</b>	<b>517.5</b>	<b>508.5</b>	<b>495.0</b>
52°	<b>474.1</b>	<b>398.8</b>	<b>374.8</b>	<b>364.6</b>	<b>358.6</b>	<b>356.4</b>	<b>346.5</b>
60°	<b>439.2</b>	<b>377.5</b>	<b>360.4</b>	<b>351.2</b>	<b>344.9</b>	<b>340.9</b>	<b>329.3</b>
75°	<b>399.2</b>	<b>360.8</b>	<b>342.8</b>	<b>327.4</b>	<b>317.6</b>	<b>311.0</b>	<b>308.6</b>
90°	<b>386.2</b>	<b>349.6</b>	<b>326.7</b>	<b>311.1</b>	<b>299.8</b>	<b>291.3</b>	<b>280.2</b>
110°	<b>403.0</b>	<b>355.7</b>	<b>329.7</b>	<b>306.0</b>	<b>288.5</b>	<b>274.7</b>	<b>253.1</b>
120°	<b>437.1</b>	<b>371.7</b>	<b>346.2</b>	<b>320.4</b>	<b>296.3</b>	<b>275.6</b>	<b>242.2</b>
135°	<b>555.2</b>	<b>432.8</b>	<b>369.6</b>	<b>339.1</b>	<b>309.0</b>	<b>282.3</b>	<b>241.9</b>
150°	<b>670.2</b>	<b>518.8</b>	<b>428.4</b>	<b>378.0</b>	<b>347.8</b>	<b>319.9</b>	<b>267.1</b>
Run VMG	<b>773.8</b>	<b>599.1</b>	<b>494.7</b>	<b>436.4</b>	<b>398.7</b>	<b>369.4</b>	<b>308.4</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>758.1</b>	<b>605.5</b>	<b>526.3</b>	<b>483.7</b>	<b>458.1</b>	<b>439.0</b>	<b>401.7</b>
Circular Random	<b>610.4</b>	<b>493.2</b>	<b>430.3</b>	<b>393.0</b>	<b>368.9</b>	<b>351.5</b>	<b>324.9</b>
Coastal / Long Distance	<b>759.7</b>	<b>565.3</b>	<b>469.3</b>	<b>413.3</b>	<b>381.1</b>	<b>353.7</b>	<b>306.0</b>
Non Spinnaker	<b>656.7</b>	<b>526.6</b>	<b>455.6</b>	<b>413.0</b>	<b>385.3</b>	<b>365.7</b>	<b>338.0</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>45.0°</b>	<b>43.1°</b>	<b>41.6°</b>	<b>40.1°</b>	<b>39.4°</b>	<b>39.4°</b>	<b>39.0°</b>
Beat VMG	<b>4.85</b>	<b>5.88</b>	<b>6.45</b>	<b>6.78</b>	<b>6.96</b>	<b>7.08</b>	<b>7.27</b>
52°	<b>7.59</b>	<b>9.03</b>	<b>9.60</b>	<b>9.87</b>	<b>10.04</b>	<b>10.10</b>	<b>10.39</b>
60°	<b>8.20</b>	<b>9.54</b>	<b>9.99</b>	<b>10.25</b>	<b>10.44</b>	<b>10.56</b>	<b>10.93</b>
75°	<b>9.02</b>	<b>9.98</b>	<b>10.50</b>	<b>11.00</b>	<b>11.33</b>	<b>11.58</b>	<b>11.67</b>
90°	<b>9.32</b>	<b>10.30</b>	<b>11.02</b>	<b>11.57</b>	<b>12.01</b>	<b>12.36</b>	<b>12.85</b>
110°	<b>8.93</b>	<b>10.12</b>	<b>10.92</b>	<b>11.76</b>	<b>12.48</b>	<b>13.11</b>	<b>14.22</b>
120°	<b>8.24</b>	<b>9.69</b>	<b>10.40</b>	<b>11.24</b>	<b>12.15</b>	<b>13.06</b>	<b>14.86</b>
135°	<b>6.48</b>	<b>8.32</b>	<b>9.74</b>	<b>10.62</b>	<b>11.65</b>	<b>12.75</b>	<b>14.88</b>
150°	<b>5.37</b>	<b>6.94</b>	<b>8.40</b>	<b>9.53</b>	<b>10.35</b>	<b>11.25</b>	<b>13.48</b>
Run VMG	<b>4.65</b>	<b>6.01</b>	<b>7.28</b>	<b>8.25</b>	<b>9.03</b>	<b>9.74</b>	<b>11.67</b>
Gybe Angles	<b>141.0°</b>	<b>141.9°</b>	<b>144.0°</b>	<b>150.0°</b>	<b>155.0°</b>	<b>151.5°</b>	<b>147.0°</b>