



**2020**  
ORC Club  
Certificate

**Rating Office**  
Hellenic Sailing Federation  
Offshore Committee  
Επιτροπή  
Ανοικτής Θαλάσσης  
Ελληνικής  
Ιστιοπλοϊκής Ομοσπονδίας

**Certificate**  
Number **00377**  
Issued On **17/06/2020**  
ORC Ref **03420000KS7**  
VPP Ver. **2020 1.02**  
Valid until **28/02/2021**

**Crew Weight**

|          |       |
|----------|-------|
| Default  | 312kg |
| Maximum  | 299kg |
| Minimum* | 214kg |

*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

|                           |               |
|---------------------------|---------------|
| ToD                       | ToT           |
| Non Spin GPH <b>856.3</b> | <b>0.7007</b> |
| Non Spin OSN <b>828.3</b> | <b>0.7244</b> |

**Sails Limitations**

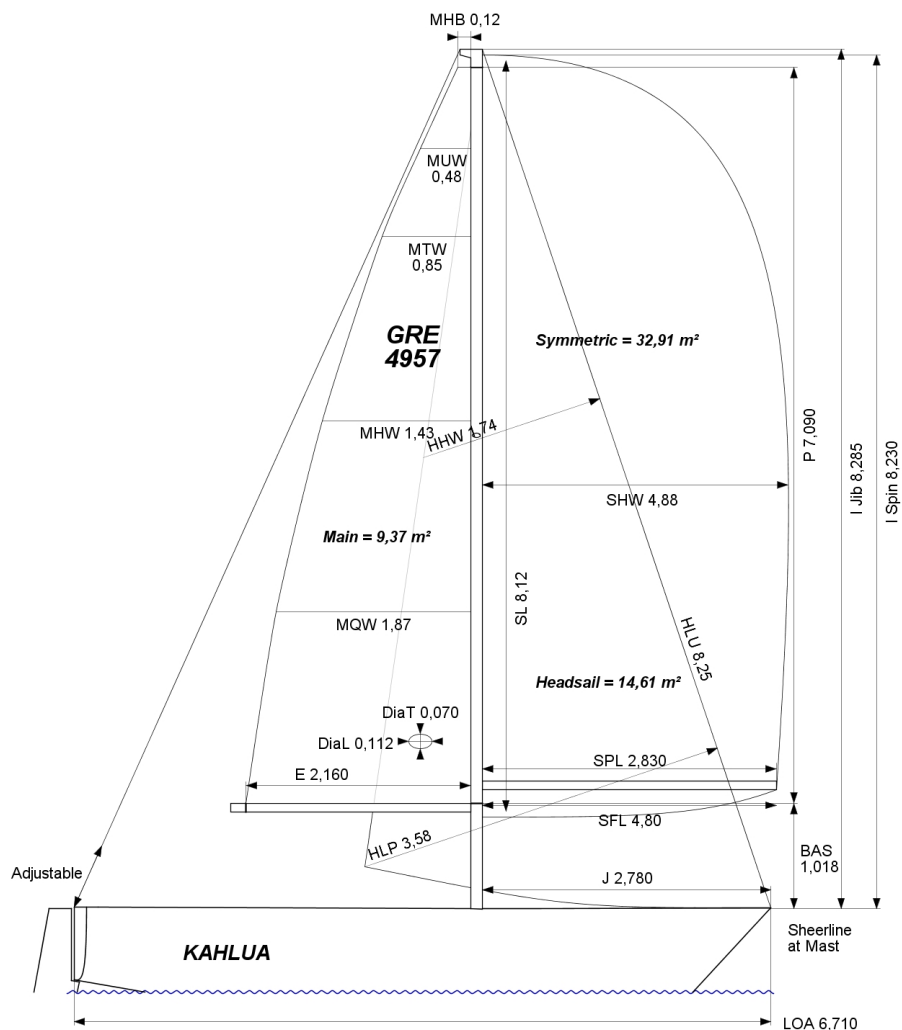
Headsails **5** Spinnakers **4**  
**Woven Polyester**

**Spinnaker configuration**  
Symmetric: **Yes** **32.91**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**  
CDL = **5.168**

**Stability (Estimated)**  
Limit Positive Stab.: **117.4°**  
Stability Index: **112.5**

**Owner**



|  |                                |   |  |   |               |               |
|--|--------------------------------|---|--|---|---------------|---------------|
| <b>BOAT</b><br>Name <b>KAHLUA</b><br>Sail Nr <b>GRE-4957</b>   |                                | <b>GPH</b><br><b>818.3</b>  | <b>HULL</b><br>Data File <b>GR4957</b> LOA <b>6.710m</b><br>Offset File <b>CATCH22.OFF</b> MB <b>2.396m</b><br>Displacement <b>1,504kg</b> Draft <b>1.191m</b> |   |               |               |
| <b>CLASS</b><br>Class <b>CATCH 22</b><br>Designer <b>CARVILL &amp; HAWKINS</b><br>Builder <b>ATLANTA MARINE</b><br>Series <b>10/1975</b><br>Age Date <b>10/1975</b><br>Age Allowance <b>0.487%</b> |                                | IMS Division <b>Cruiser/Racer</b> Dynamic All. <b>0.387%</b><br>Plan Review Construction <b>Solid</b><br>Fiber Rigging <b>No</b> Aramid Core <b>No</b><br>Crew Arm Ex Carbon Rudder <b>No</b><br>Light Stanchions <b>No</b> |  | IMSL <b>5.740m</b> VCGD <b>-0.044m</b> Sink <b>7.27kg/mm</b><br>RL <b>4.595m</b> VCGM <b>-0.013m</b> WS <b>9.92m²</b><br>LSM0 <b>5.741m</b> Displacement/Length ratio <b>7.9485</b> |               |               |
| <b>COMMENTS</b>  |                                | Water Ballast <b>0</b> Trim Tab <b>No</b><br>BLR Index <b>0.0000</b>  |  |   |               |               |
| <b>PROPELLER</b><br>Type <b>No Propeller</b>   |                                | <b>CENTERBOARD</b><br><b>NA</b>   |  |   |               |               |
| <b>SCORING OPTIONS</b>   |                                |   |  |   |               |               |
| Time on Distance   | <b>COASTAL / LONG DISTANCE</b> |   |  | <b>WINDWARD / LEEWARD</b>   |               |               |
|  | <b>795.6</b>                   |   |  | <b>883.8</b>  |               |               |
| Time on Time   | <b>0.7541</b>                  |   |  | <b>0.7637</b>   |               |               |
| Triple Number  | Low                            | Medium  | High   | Low   | Medium        | High          |
|  | <b>931.3</b>                   | <b>727.3</b>  | <b>650.3</b>   | <b>1194.1</b>   | <b>890.0</b>  | <b>776.2</b>  |
| Time on Distance   | <b>0.7248</b>                  | <b>0.9281</b>   | <b>1.0380</b>  | <b>0.5653</b>   | <b>0.7584</b> | <b>0.8696</b> |

|                    |                                 |
|--------------------|---------------------------------|
| <b>BOAT</b>        |                                 |
| Name <b>KAHLUA</b> | Sail Nr <b>GRE-4957</b>         |
| File <b>GR4957</b> | Data in <b>meters/kilograms</b> |

|                                |  |
|--------------------------------|--|
| <b>RIG</b>                     |  |
| Forestay Tension <b>Aft</b>    | Spreaders <b>1</b>                                 |
| Inner Stay <b>None Fitted</b>  | Runners/Checkstays <b>0</b>                        |
| Carbon Mast <b>No</b>          | Jib Furler <b>No</b>                               |
| Fiber Rigging <b>No</b>        | Main Furler <b>No</b>                              |
| Non-Circular Rigging <b>No</b> |  |
| Articulated Bowsprit <b>No</b> |  |
| P <b>7.090</b>                 | E <b>2.160</b> MDT1 <b>0.070</b> MW <b>0.112</b>   |
| IG <b>8.285</b>                | J <b>2.780</b> MDL1 <b>0.112</b> GO <b>0.115</b>   |
| ISP <b>8.230</b>               | SFJ <b>0.000</b> MDT2 <b>0.070</b> BD <b>0.082</b> |
| BAS <b>1.018</b>               | SPL <b>2.830</b> MDL2 <b>0.112</b> MWT             |
| FSD <b>0.000</b>               | TPS TL <b>0.000</b> MCG                            |

|  |                 |                       |  |
|--|-----------------|-----------------------|--|
| <b>INCLINING TEST AND FREEBOARDS</b>     |                 |                       |  |
| Inclining Test <b>Club Estimated VCG</b> |                 |                       |  |
| Flotation date <b>08/04/2014</b>         |                 | SG                    |  |
| FFM <b>0.815</b>                         | FF <b>0.815</b> | SFFP <b>0.500</b>     |  |
| FAM <b>0.816</b>                         | FA <b>0.816</b> | SAFP <b>6.475</b>     |  |
| LCF from stem on CL / on sheer           |                 | <b>3.795 / 3.964</b>  |  |
| Maximum beam station from stem           |                 | <b>4.175</b>          |  |
| RM Measured                              |                 | <b>22.1kg-m</b>       |  |
| RM Default                               |                 | <b>21.5kg-m</b>       |  |
| Limit of positive stability / Stab.Index |                 | <b>117.4° / 112.5</b> |  |
| Freeboard at mast at 2.780               |                 | <b>0.802</b>          |  |




**2020**  
Measurements  
Datasheet

|                             |  |
|-----------------------------|--|
| <b>MIZZEN RIG AND SAILS</b> |  |
| N/A                         |  |

|                          |  |
|--------------------------|--|
| <b>PROPELLER</b>         |  |
| Type <b>No Propeller</b> |  |

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|                 |  |
|-----------------|--|
| <b>COMMENTS</b> |  |
|                 |  |

|                        |  |
|------------------------|--|
| <b>MOVABLE BALLAST</b> |  |
| N/A                    |  |

|                    |  |
|--------------------|--|
| <b>CENTERBOARD</b> |  |
| N/A                |  |

| <b>SAILS INVENTORY</b>           |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |
|----------------------------------|------|------|------|------|------|-------|----------|------------|-------------|-------------|------------------------|----------|------------|-------------|----------|---------|
| <b>MAINSAIL (1)</b>              |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |
| Id                               | MHB  | MUW  | MTW  | MHW  | MQW  | Area  | Measurer | Meas.Date  | Manufacture | Material    | Comment                |          |            |             |          |         |
| 1                                | 0.12 | 0.48 | 0.85 | 1.43 | 1.87 | 9.38  |          | 13/02/2013 | QUANTUM     | Dacron      | DACRON SQUARED         |          |            |             |          |         |
| <b>HEADSAILS (1)</b>             |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |
| Id                               | HHB  | HUW  | HTW  | HHW  | HQW  | HLP   | HLU      | Ovrlp      | Area        | Btn         | Flying                 | Measurer | Meas.Date  | Manufacture | Material | Comment |
| 1                                | 0.05 | 0.45 | 0.86 | 1.74 | 2.66 | 3.58  | 8.25     | 129%       | 14.61       |             | No                     |          | 13/02/2013 | QUANTUM     | Dacron   | DACRON  |
| <b>SYMMETRIC SPINNAKERS (1)</b>  |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |
| Id                               | SLU  | SLE  | SL   | SHW  | SFL  | Area  | Measurer | Meas.Date  | Manufacture | Material    | Comment                |          |            |             |          |         |
| ORC                              | 8.12 | 8.12 | 8.12 | 4.88 | 4.80 | 32.92 |          |            |             |             | * Copied from legacy * |          |            |             |          |         |
| <b>ASYMMETRIC SPINNAKERS (0)</b> |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |
| Id                               | SLU  | SLE  | SL   | SHW  | SFL  | Area  | Kind     | Measurer   | Meas.Date   | Manufacture | Material               | Comment  |            |             |          |         |
|                                  |      |      |      |      |      |       |          |            |             |             |                        |          |            |             |          |         |

# 2020

## ORC Club Certificate Appendix

| <b>BOAT</b>             |                                 |
|-------------------------|---------------------------------|
| Name <b>KAHLUA</b>      | Certificate Number <b>00377</b> |
| Sail Nr <b>GRE-4957</b> | Issued On <b>17/06/2020</b>     |

| <b>TIME ALLOWANCES</b>  |               |               |               |              |              |              |              |
|-------------------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt          | 8 kt          | 10 kt         | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>1408.3</b> | <b>1194.3</b> | <b>1069.4</b> | <b>985.0</b> | <b>936.2</b> | <b>923.1</b> | <b>940.4</b> |
| 52°                     | <b>917.5</b>  | <b>781.6</b>  | <b>706.5</b>  | <b>673.7</b> | <b>655.0</b> | <b>644.9</b> | <b>644.3</b> |
| 60°                     | <b>868.2</b>  | <b>738.9</b>  | <b>681.5</b>  | <b>656.0</b> | <b>638.8</b> | <b>626.3</b> | <b>620.6</b> |
| 75°                     | <b>835.3</b>  | <b>714.1</b>  | <b>664.6</b>  | <b>640.5</b> | <b>622.0</b> | <b>605.1</b> | <b>581.6</b> |
| 90°                     | <b>832.5</b>  | <b>694.1</b>  | <b>644.2</b>  | <b>617.0</b> | <b>598.6</b> | <b>588.5</b> | <b>562.8</b> |
| 110°                    | <b>810.7</b>  | <b>682.1</b>  | <b>635.6</b>  | <b>604.0</b> | <b>574.5</b> | <b>551.1</b> | <b>526.4</b> |
| 120°                    | <b>832.2</b>  | <b>693.1</b>  | <b>641.3</b>  | <b>609.3</b> | <b>578.5</b> | <b>551.2</b> | <b>512.9</b> |
| 135°                    | <b>911.6</b>  | <b>746.5</b>  | <b>663.5</b>  | <b>627.9</b> | <b>597.9</b> | <b>568.4</b> | <b>520.4</b> |
| 150°                    | <b>1043.0</b> | <b>841.3</b>  | <b>719.2</b>  | <b>656.7</b> | <b>625.5</b> | <b>597.8</b> | <b>546.3</b> |
| Run VMG                 | <b>1204.4</b> | <b>969.1</b>  | <b>823.0</b>  | <b>721.8</b> | <b>663.5</b> | <b>631.5</b> | <b>578.3</b> |
| <b>Selected Courses</b> |               |               |               |              |              |              |              |
| Windward / Leeward      | <b>1306.4</b> | <b>1081.7</b> | <b>946.2</b>  | <b>853.4</b> | <b>799.8</b> | <b>777.3</b> | <b>759.4</b> |
| Circular Random         | <b>1119.5</b> | <b>907.9</b>  | <b>794.6</b>  | <b>728.6</b> | <b>688.4</b> | <b>663.0</b> | <b>634.4</b> |
| Coastal / Long Distance | <b>1296.2</b> | <b>1013.7</b> | <b>853.1</b>  | <b>753.8</b> | <b>698.7</b> | <b>661.2</b> | <b>602.5</b> |
| Non Spinnaker           | <b>1186.6</b> | <b>955.8</b>  | <b>830.6</b>  | <b>756.9</b> | <b>711.4</b> | <b>682.8</b> | <b>651.5</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>42.8°</b>  | <b>43.5°</b>  | <b>42.0°</b>  | <b>40.5°</b>  | <b>40.5°</b>  | <b>42.0°</b>  |
| Beat VMG   | <b>2.56</b>   | <b>3.01</b>   | <b>3.37</b>   | <b>3.65</b>   | <b>3.85</b>   | <b>3.90</b>   | <b>3.83</b>   |
| 52°  | <b>3.92</b>   | <b>4.61</b>   | <b>5.10</b>   | <b>5.34</b>   | <b>5.50</b>   | <b>5.58</b>   | <b>5.59</b>   |
| 60°  | <b>4.15</b>   | <b>4.87</b>   | <b>5.28</b>   | <b>5.49</b>   | <b>5.64</b>   | <b>5.75</b>   | <b>5.80</b>   |
| 75°  | <b>4.31</b>   | <b>5.04</b>   | <b>5.42</b>   | <b>5.62</b>   | <b>5.79</b>   | <b>5.95</b>   | <b>6.19</b>   |
| 90°  | <b>4.32</b>   | <b>5.19</b>   | <b>5.59</b>   | <b>5.83</b>   | <b>6.01</b>   | <b>6.12</b>   | <b>6.40</b>   |
| 110°   | <b>4.44</b>   | <b>5.28</b>   | <b>5.66</b>   | <b>5.96</b>   | <b>6.27</b>   | <b>6.53</b>   | <b>6.84</b>   |
| 120°   | <b>4.33</b>   | <b>5.19</b>   | <b>5.61</b>   | <b>5.91</b>   | <b>6.22</b>   | <b>6.53</b>   | <b>7.02</b>   |
| 135°   | <b>3.95</b>   | <b>4.82</b>   | <b>5.43</b>   | <b>5.73</b>   | <b>6.02</b>   | <b>6.33</b>   | <b>6.92</b>   |
| 150°   | <b>3.45</b>   | <b>4.28</b>   | <b>5.01</b>   | <b>5.48</b>   | <b>5.75</b>   | <b>6.02</b>   | <b>6.59</b>   |
| Run VMG  | <b>2.99</b>   | <b>3.71</b>   | <b>4.37</b>   | <b>4.99</b>   | <b>5.43</b>   | <b>5.70</b>   | <b>6.22</b>   |
| Gybe Angles  | <b>149.0°</b> | <b>153.0°</b> | <b>154.0°</b> | <b>176.0°</b> | <b>180.0°</b> | <b>180.0°</b> | <b>180.0°</b> |