



World Leader in Rating Technology

## 2016 ORC Club Certificate

### Rating Office

ORC  
Central Rating Office  
issuing certificates for  
CANADA



### Certificate

Number **002/16**  
Issued On **30.3.2016**.  
ORC Ref **CAN00062260**  
VPP Ver. **2016 1.01**  
Valid until **31.12.2016**.

### Crew Weight

Declared **817kg**  
Default\* **975kg**  
Non Manual Pwr **No**

### Special Scoring

	ToD	ToT
Non Spin GPH	<b>612.3</b>	<b>0.9799</b>
Non Spin OSN	<b>595.0</b>	<b>1.0085</b>
N/S Perf. Line	<b>-17.4</b>	<b>0.596</b>

### Sails Limitations

Headsails **7** Spinnakers **4**  
**Dacron Sails**  
Spinnaker configuration  
Symmetric: **Yes** **138.90**  
Asymmetric: **Yes** **117.13**  
Flying H/S: **No**  
Spin. Pole: **Yes**

### Class Division Length

CDL = **11.174**

### Stability

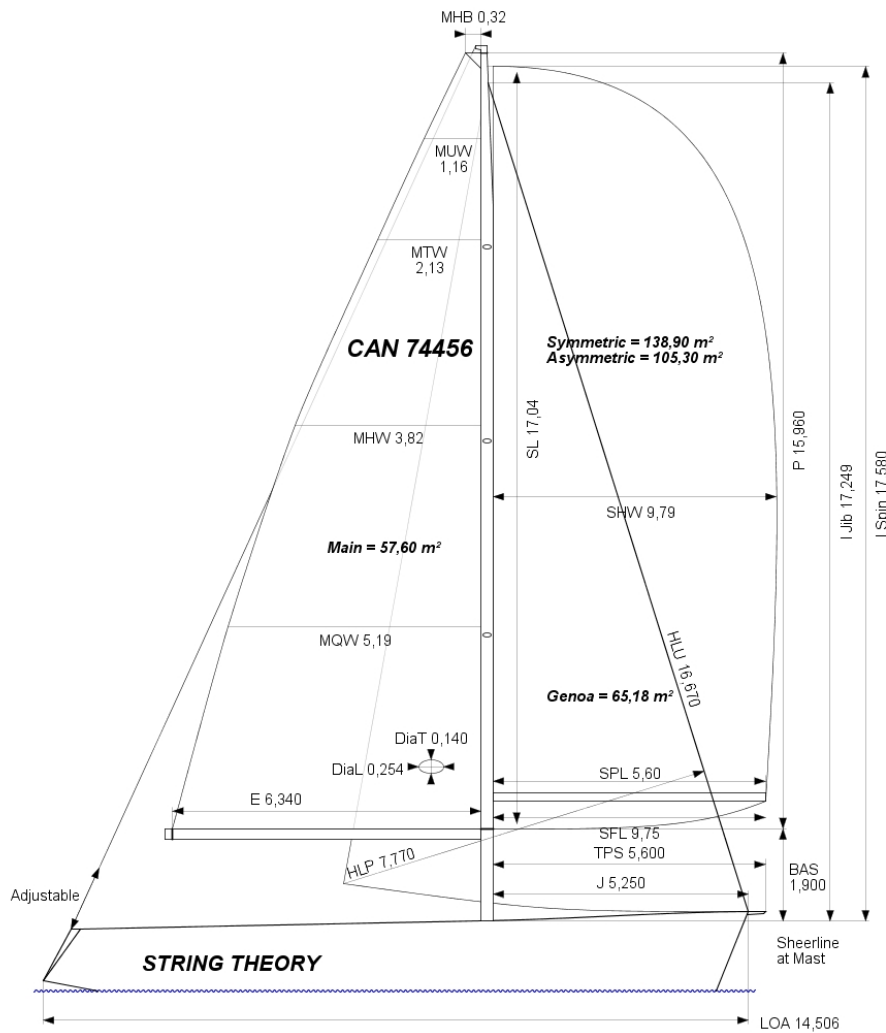
LPS (Estimated): **111.8°**  
Stability Index: **117.0**  
OSR Category: **N/A**

### Owner

John Mortimer  
303 5270 Oakmount Crescent  
V5H 4S1 Burnaby  
CANADA

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature



BOAT		GPH		HULL			
Name	<b>String Theory</b>			Data File	<b>CAN74456.dxt</b>	LOA	<b>14.506m</b>
Sail Nr	<b>CAN 74456</b>			Offset File	<b>F191.off</b>	MB	<b>4.512m</b>
			<b>588.1</b>	Displacement	<b>12,311kg</b>	Draft	<b>2.297m</b>
CLASS				IMS Division	<b>Cruiser/Racer</b>	Dynamic All.	<b>0.297%</b>
Class	<b>First 47.7</b>			Fwd Accom.	<b>Yes</b>	Construction	<b>Solid</b>
Designer	<b>Farr</b>			Fiber Rigging	<b>No</b>	Aramid Core	<b>No</b>
Builder	<b>Beneteau</b>			Crew Arm Ex		Carbon Rudder	<b>No</b>
Series	<b>05.1998</b>					Light Stanchions	<b>No</b>
Age Date	<b>01.2001</b>			IMSL	<b>12.888m</b>	VCGD	<b>0.132m</b>
Age Allowance	<b>0.487%</b>			RL	<b>9.459m</b>	VCGM	<b>0.157m</b>
				WS	<b>42.52m2</b>		
				LSM0	<b>12.765m</b>	Displacement/Length ratio	<b>5.9188</b>
COMMENTS				Water Ballast	<b>0</b>	Trim Tab	<b>No</b>
PROPELLER				CENTERBOARD			
Installation	<b>Shaft exposed</b>	PRD	<b>0.450</b>	<b>N/A</b>			
Type	<b>Feathering 3 blades</b>	PIPA	<b>0.0027</b>				
SCORING OPTIONS							
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD			
Time On Distance	<b>570.8</b>			<b>643.3</b>			
Time On Time	<b>1.0511</b>			<b>1.0493</b>			
Performance Line	PLT	PLD		PLT	PLD		
	<b>0.653</b>	<b>1.1</b>		<b>0.770</b>	<b>125.5</b>		
Triple Number	Low	Medium	High	Low	Medium	High	
	<b>0.9706</b>	<b>1.3073</b>	<b>1.5133</b>	<b>0.7388</b>	<b>1.0351</b>	<b>1.2460</b>	



World Leader in Rating Technology

# 2016

## ORC Club Certificate Appendix

BOAT	
Name	<b>String Theory</b>
Sail Nr	<b>CAN 74456</b>
Certificate Number	<b>002/16</b>
Issued On	<b>30.3.2016.</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1056.5</b>	<b>862.9</b>	<b>755.8</b>	<b>686.6</b>	<b>649.8</b>	<b>630.0</b>	<b>612.8</b>
52°	<b>671.7</b>	<b>556.8</b>	<b>489.8</b>	<b>454.2</b>	<b>439.2</b>	<b>431.9</b>	<b>425.6</b>
60°	<b>622.2</b>	<b>520.0</b>	<b>463.3</b>	<b>437.1</b>	<b>424.4</b>	<b>418.0</b>	<b>411.7</b>
75°	<b>580.5</b>	<b>488.2</b>	<b>444.5</b>	<b>424.0</b>	<b>410.4</b>	<b>399.5</b>	<b>387.6</b>
90°	<b>578.8</b>	<b>487.1</b>	<b>443.8</b>	<b>423.7</b>	<b>409.3</b>	<b>395.7</b>	<b>372.3</b>
110°	<b>619.6</b>	<b>504.3</b>	<b>445.5</b>	<b>419.8</b>	<b>400.6</b>	<b>383.6</b>	<b>361.0</b>
120°	<b>636.9</b>	<b>518.1</b>	<b>453.1</b>	<b>424.3</b>	<b>404.8</b>	<b>385.4</b>	<b>353.3</b>
135°	<b>705.2</b>	<b>566.1</b>	<b>485.9</b>	<b>442.4</b>	<b>419.8</b>	<b>401.5</b>	<b>364.6</b>
150°	<b>842.3</b>	<b>660.4</b>	<b>554.6</b>	<b>485.6</b>	<b>444.4</b>	<b>422.3</b>	<b>387.8</b>
Run VMG	<b>972.6</b>	<b>762.6</b>	<b>640.4</b>	<b>558.5</b>	<b>503.6</b>	<b>462.1</b>	<b>415.6</b>

Selected Courses							
Windward / Leeward	<b>1014.5</b>	<b>812.8</b>	<b>698.1</b>	<b>622.5</b>	<b>576.7</b>	<b>546.0</b>	<b>514.2</b>
Circular Random	<b>829.0</b>	<b>661.7</b>	<b>569.7</b>	<b>514.6</b>	<b>479.8</b>	<b>456.6</b>	<b>428.2</b>
Ocean for PCS	<b>1026.7</b>	<b>782.8</b>	<b>643.3</b>	<b>556.9</b>	<b>500.4</b>	<b>461.1</b>	<b>408.1</b>
Non Spinnaker	<b>870.9</b>	<b>692.0</b>	<b>592.7</b>	<b>532.6</b>	<b>494.2</b>	<b>468.6</b>	<b>436.7</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>45.8°</b>	<b>44.2°</b>	<b>43.9°</b>	<b>43.4°</b>	<b>41.8°</b>	<b>40.7°</b>	<b>40.5°</b>
Beat VMG	<b>3.41</b>	<b>4.17</b>	<b>4.76</b>	<b>5.24</b>	<b>5.54</b>	<b>5.71</b>	<b>5.87</b>
52°	<b>5.36</b>	<b>6.47</b>	<b>7.35</b>	<b>7.93</b>	<b>8.20</b>	<b>8.33</b>	<b>8.46</b>
60°	<b>5.79</b>	<b>6.92</b>	<b>7.77</b>	<b>8.24</b>	<b>8.48</b>	<b>8.61</b>	<b>8.74</b>
75°	<b>6.20</b>	<b>7.37</b>	<b>8.10</b>	<b>8.49</b>	<b>8.77</b>	<b>9.01</b>	<b>9.29</b>
90°	<b>6.22</b>	<b>7.39</b>	<b>8.11</b>	<b>8.50</b>	<b>8.80</b>	<b>9.10</b>	<b>9.67</b>
110°	<b>5.81</b>	<b>7.14</b>	<b>8.08</b>	<b>8.57</b>	<b>8.99</b>	<b>9.38</b>	<b>9.97</b>
120°	<b>5.65</b>	<b>6.95</b>	<b>7.95</b>	<b>8.48</b>	<b>8.89</b>	<b>9.34</b>	<b>10.19</b>
135°	<b>5.11</b>	<b>6.36</b>	<b>7.41</b>	<b>8.14</b>	<b>8.58</b>	<b>8.97</b>	<b>9.88</b>
150°	<b>4.27</b>	<b>5.45</b>	<b>6.49</b>	<b>7.41</b>	<b>8.10</b>	<b>8.52</b>	<b>9.28</b>
Run VMG	<b>3.70</b>	<b>4.72</b>	<b>5.62</b>	<b>6.45</b>	<b>7.15</b>	<b>7.79</b>	<b>8.66</b>
Gybe Angles	<b>144.4°</b>	<b>148.5°</b>	<b>150.3°</b>	<b>152.7°</b>	<b>158.8°</b>	<b>180.0°</b>	<b>180.0°</b>