



World Leader in Rating Technology

2016  
ORC Club  
Certificate

Rating Office

ORC  
Central Rating Office  
issuing certificates for  
CANADA



Certificate

Number **005/16**  
Issued On **24.3.2016**.  
ORC Ref **CAN00062092**  
VPP Ver. **2016 1.01**  
Valid until **31.12.2016**.

Crew Weight

Declared **898kg**  
Default\* **898kg**  
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	<b>641.3</b>	<b>0.9356</b>
Non Spin OSN	<b>622.2</b>	<b>0.9644</b>
N/S Perf. Line	<b>-12.7</b>	<b>0.577</b>

Sails Limitations

Headsails **1** Spinnakers **3**  
**Dacron Sails**  
Spinnaker configuration  
Symmetric: **No**  
Asymmetric: **Yes 125.70**  
Flying H/S: **No**  
Spin. Pole: **Yes**

Class Division Length

CDL = **10.301**

Stability

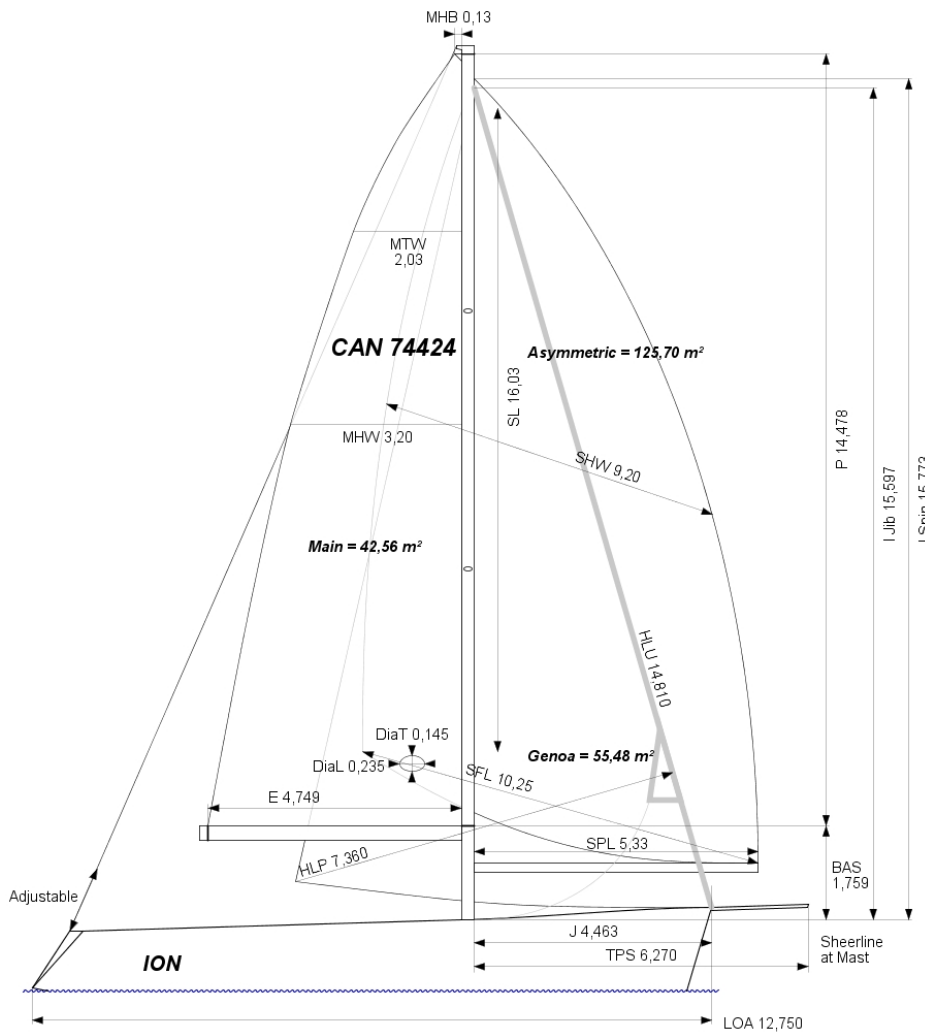
LPS (Estimated): **125.0°**  
Stability Index: **129.7**  
OSR Category: **N/A**

Owner

Bill Jones  
3770 Glen Oaks Drive  
V9T 6H2 Nanaimo BC  
CANADA

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

Signature



BOAT		GPH		HULL		
Name <b>Ion</b>			<b>612.9</b>	Data File <b>CAN74424.dxt</b>	LOA <b>12.750m</b>	
Sail Nr <b>CAN 74424</b>				Offset File <b>OCE43CL.OFF</b>	MB <b>4.110m</b>	
				Displacement <b>9,812kg</b>	Draft <b>2.017m</b>	
<b>CLASS</b>		<b>IMS Division Cruiser/Racer</b>				
Class <b>Beneteau 43</b>	Designer <b>Berret/Racoupeau</b>	Builder <b>Beneteau</b>	Series <b>01.2007</b>	Age Date <b>01.2009</b>	Age Allowance <b>0.292%</b>	
<b>COMMENTS</b>		SPL = 5.334				
<b>PROPELLER</b>		<b>CENTERBOARD</b>				
Installation <b>Shaft exposed</b>	PRD <b>0.305</b>	Water Ballast <b>0</b> Trim Tab <b>No</b>				
Type <b>Feathering 3 blades</b>	PBW <b>0.135</b>	N/A				
	PIPA <b>0.0014</b>					
<b>SCORING OPTIONS</b>						
	<b>OFFSHORE</b>			<b>INSHORE</b>		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	<b>594.7</b>			<b>667.8</b>		
Time On Time	<b>1.0090</b>			<b>1.0108</b>		
Performance Line	PLT <b>0.636</b>	PLD <b>7.1</b>		PLT <b>0.749</b>	PLD <b>130.3</b>	
Triple Number	Low <b>0.9371</b>	Medium <b>1.2517</b>	High <b>1.4446</b>	Low <b>0.7153</b>	Medium <b>0.9952</b>	High <b>1.1961</b>



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# 2016

## ORC Club Certificate Appendix

<b>BOAT</b>	
Name <b>Ion</b>	Certificate Number <b>005/16</b>
Sail Nr <b>CAN 74424</b>	Issued On <b>24.3.2016.</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1103.2</b>	<b>902.2</b>	<b>794.2</b>	<b>720.0</b>	<b>679.0</b>	<b>657.4</b>	<b>640.9</b>
52°	<b>702.2</b>	<b>584.3</b>	<b>515.3</b>	<b>477.7</b>	<b>461.2</b>	<b>453.9</b>	<b>447.9</b>
60°	<b>651.4</b>	<b>546.4</b>	<b>487.5</b>	<b>460.8</b>	<b>447.2</b>	<b>439.7</b>	<b>433.1</b>
75°	<b>609.0</b>	<b>513.4</b>	<b>468.3</b>	<b>447.9</b>	<b>434.0</b>	<b>422.7</b>	<b>407.9</b>
90°	<b>608.3</b>	<b>513.5</b>	<b>468.3</b>	<b>444.5</b>	<b>432.7</b>	<b>420.5</b>	<b>395.4</b>
110°	<b>631.0</b>	<b>516.5</b>	<b>463.2</b>	<b>439.6</b>	<b>420.2</b>	<b>401.0</b>	<b>378.6</b>
120°	<b>649.1</b>	<b>532.0</b>	<b>470.7</b>	<b>444.4</b>	<b>425.1</b>	<b>404.9</b>	<b>365.3</b>
135°	<b>720.9</b>	<b>584.5</b>	<b>501.6</b>	<b>461.0</b>	<b>439.6</b>	<b>421.1</b>	<b>381.8</b>
150°	<b>857.1</b>	<b>675.1</b>	<b>572.6</b>	<b>500.8</b>	<b>462.4</b>	<b>441.9</b>	<b>406.5</b>
Run VMG	<b>989.7</b>	<b>779.5</b>	<b>661.2</b>	<b>574.5</b>	<b>519.8</b>	<b>477.8</b>	<b>434.7</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1046.5</b>	<b>840.8</b>	<b>727.7</b>	<b>647.3</b>	<b>599.4</b>	<b>567.6</b>	<b>537.8</b>
Circular Random	<b>860.2</b>	<b>688.3</b>	<b>594.0</b>	<b>537.6</b>	<b>501.9</b>	<b>478.2</b>	<b>449.0</b>
Ocean for PCS	<b>1063.1</b>	<b>813.0</b>	<b>670.1</b>	<b>581.4</b>	<b>523.3</b>	<b>482.8</b>	<b>427.5</b>
Non Spinnaker	<b>910.8</b>	<b>724.2</b>	<b>620.8</b>	<b>558.4</b>	<b>518.7</b>	<b>492.3</b>	<b>459.9</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>45.6°</b>	<b>43.9°</b>	<b>43.5°</b>	<b>43.5°</b>	<b>41.9°</b>	<b>40.7°</b>	<b>39.7°</b>
Beat VMG	<b>3.26</b>	<b>3.99</b>	<b>4.53</b>	<b>5.00</b>	<b>5.30</b>	<b>5.48</b>	<b>5.62</b>
52°	<b>5.13</b>	<b>6.16</b>	<b>6.99</b>	<b>7.54</b>	<b>7.81</b>	<b>7.93</b>	<b>8.04</b>
60°	<b>5.53</b>	<b>6.59</b>	<b>7.38</b>	<b>7.81</b>	<b>8.05</b>	<b>8.19</b>	<b>8.31</b>
75°	<b>5.91</b>	<b>7.01</b>	<b>7.69</b>	<b>8.04</b>	<b>8.29</b>	<b>8.52</b>	<b>8.83</b>
90°	<b>5.92</b>	<b>7.01</b>	<b>7.69</b>	<b>8.10</b>	<b>8.32</b>	<b>8.56</b>	<b>9.10</b>
110°	<b>5.71</b>	<b>6.97</b>	<b>7.77</b>	<b>8.19</b>	<b>8.57</b>	<b>8.98</b>	<b>9.51</b>
120°	<b>5.55</b>	<b>6.77</b>	<b>7.65</b>	<b>8.10</b>	<b>8.47</b>	<b>8.89</b>	<b>9.85</b>
135°	<b>4.99</b>	<b>6.16</b>	<b>7.18</b>	<b>7.81</b>	<b>8.19</b>	<b>8.55</b>	<b>9.43</b>
150°	<b>4.20</b>	<b>5.33</b>	<b>6.29</b>	<b>7.19</b>	<b>7.78</b>	<b>8.15</b>	<b>8.86</b>
Run VMG	<b>3.64</b>	<b>4.62</b>	<b>5.44</b>	<b>6.27</b>	<b>6.93</b>	<b>7.53</b>	<b>8.28</b>
Gybe Angles	<b>144.5°</b>	<b>147.8°</b>	<b>149.6°</b>	<b>153.3°</b>	<b>161.6°</b>	<b>180.0°</b>	<b>180.0°</b>