



World Leader in Rating Technology

## 2010 ORC Club Certificate

### Rating Office

Estonian Yachting Union  
Regati 1, 11911  
Tallinn  
Estonia

### Certificate

Number **EST405**  
Issued On **8.05.2010**  
ORC Ref **EST00000863**  
VPP Ver. **2010 1.11**  
Valid until **31.12.2010**

### Crew Weight

Declared **350 kg**  
Default\* **341 kg**  
Non Manual Power **No**

### Special Scoring

	ToD	ToT
Double	<b>719,5</b>	<b>0,8339</b>
Non Spinnaker	<b>744,5</b>	<b>0,8059</b>
N/S Perf. Line	<b>118,7</b>	<b>0,729</b>

### Sails Limitations

Genoas **3** Spinnakers **3**  
Jibs **2**

### Spinnaker configuration

Symmetric: **Yes 29,65**  
Asymmetric: **No**  
Code Zero: **No**  
Spin. Pole: **Yes**

### Stability

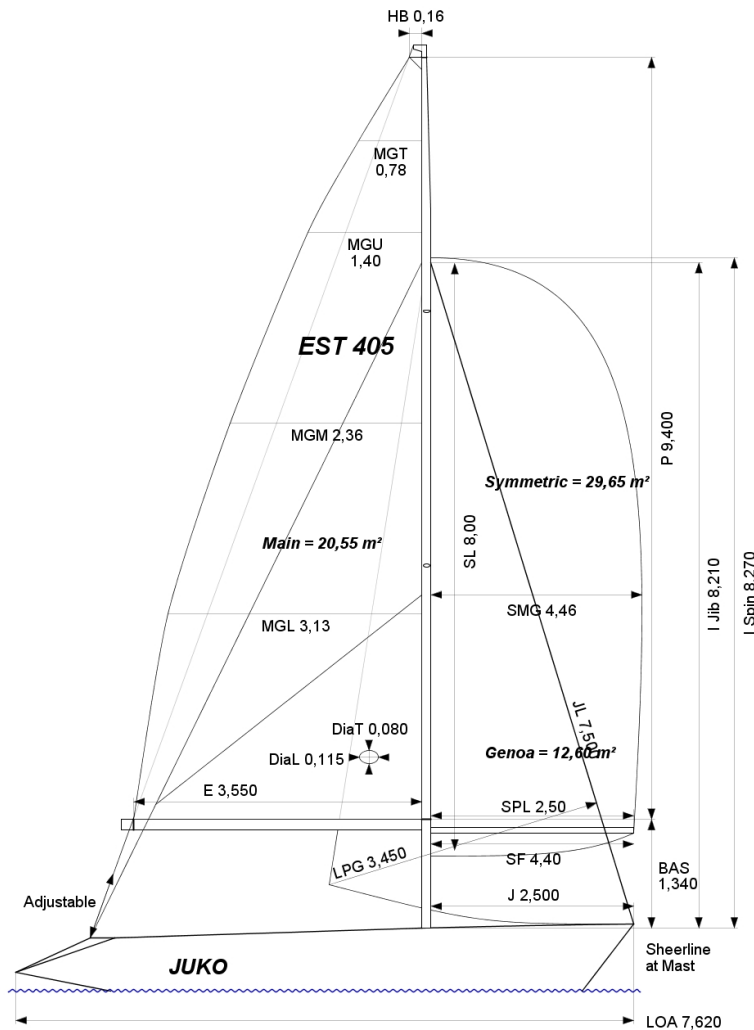
LPS (Estimated): **117,0°**  
Stability Index: **109,2**  
OSR Category: **N/A**

### Owner

Ilja Radjuhhiin  
Härma 5-104  
Tallinn, Estonia  
JK Baltsail

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

Signature



BOAT	GPH	HULL
Name <b>JUKO</b> Sail Nr <b>EST 405</b>	<b>716,2</b>	Data File <b>Est0405.dxt</b> LOA <b>7,620 m</b> Offset File <b>Juko.off</b> MB <b>2,692 m</b> Displacement <b>1 600 kg</b> Draft <b>1,934 m</b>
CLASS		IMS Division <b>Performance</b> Dynamic All. <b>0,115%</b> Fwd Accom. <b>Yes</b> Construction <b>Solid</b> Fiber <b>No</b> Aramid Core <b>No</b> Carbon Mast <b>No</b> Carbon Rudder <b>No</b> Anchor Wgt Anchor LCG
Class <b>Polaris</b> Designer <b>SET</b> Builder <b>SET</b> Series <b>01.1984</b> Age Date <b>01.1990</b> Age Allowance <b>0,975%</b>		IMS L <b>6,146</b> Wetted Area <b>10,80 m²</b> VCGM <b>-0,079</b>
COMMENTS		
PROPELLER	CENTERBOARD	
Type <b>No Propeller</b>	<b>N/A</b>	
SCORING OPTIONS		
	OFFSHORE COASTAL / LONG DISTANCE	INSHORE WINDWARD / LEEWARD
Time On Distance	<b>716,2</b>	<b>783,5</b>
Time On Time	<b>0,8378</b>	<b>0,8615</b>
Performance Line	PLT <b>0,791</b> PLD <b>143,3</b>	PLT <b>1,029</b> PLD <b>402,0</b>
Triple Number	Low <b>0,8372</b> Medium <b>1,0554</b> High <b>1,1811</b>	Low <b>0,6497</b> Medium <b>0,8763</b> High <b>0,9980</b>



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## ORC Club Certificate Appendix

### BOAT

Name	<b>JUKO</b>	Certificate Number	<b>EST405</b>
Sail Nr	<b>EST 405</b>	Issued On	<b>8.05.2010</b>

### TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1134,8</b>	<b>934,2</b>	<b>852,0</b>	<b>809,7</b>	<b>786,2</b>	<b>771,6</b>	<b>769,3</b>
52°	<b>737,0</b>	<b>655,2</b>	<b>613,9</b>	<b>585,7</b>	<b>573,4</b>	<b>565,4</b>	<b>557,8</b>
60°	<b>707,3</b>	<b>638,0</b>	<b>600,2</b>	<b>570,4</b>	<b>554,7</b>	<b>546,7</b>	<b>538,2</b>
75°	<b>687,6</b>	<b>620,0</b>	<b>577,4</b>	<b>548,8</b>	<b>536,1</b>	<b>519,7</b>	<b>508,4</b>
90°	<b>673,1</b>	<b>609,4</b>	<b>570,2</b>	<b>538,4</b>	<b>514,8</b>	<b>505,2</b>	<b>483,4</b>
110°	<b>696,9</b>	<b>627,0</b>	<b>585,1</b>	<b>552,0</b>	<b>524,0</b>	<b>496,6</b>	<b>452,4</b>
120°	<b>732,0</b>	<b>645,7</b>	<b>599,4</b>	<b>564,3</b>	<b>535,1</b>	<b>509,1</b>	<b>452,9</b>
135°	<b>856,7</b>	<b>694,3</b>	<b>630,7</b>	<b>590,5</b>	<b>558,4</b>	<b>531,1</b>	<b>481,0</b>
150°	<b>1017,7</b>	<b>789,5</b>	<b>678,9</b>	<b>624,1</b>	<b>586,7</b>	<b>556,2</b>	<b>506,2</b>
Run VMG	<b>1175,1</b>	<b>911,7</b>	<b>761,8</b>	<b>677,6</b>	<b>626,1</b>	<b>589,8</b>	<b>534,9</b>

### Selected Courses

Windward / Leeward	<b>1176,0</b>	<b>940,5</b>	<b>819,9</b>	<b>753,7</b>	<b>714,2</b>	<b>688,1</b>	<b>659,0</b>
Circular Random	<b>972,7</b>	<b>791,8</b>	<b>696,0</b>	<b>640,5</b>	<b>605,8</b>	<b>582,2</b>	<b>550,4</b>
Ocean for PCS	<b>1036,7</b>	<b>826,1</b>	<b>710,4</b>	<b>640,3</b>	<b>594,1</b>	<b>560,6</b>	<b>511,4</b>
Non Spinnaker	<b>1024,8</b>	<b>827,8</b>	<b>722,5</b>	<b>661,2</b>	<b>623,0</b>	<b>597,5</b>	<b>564,5</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>43,6°</b>	<b>38,8°</b>	<b>36,9°</b>	<b>35,6°</b>	<b>34,5°</b>	<b>33,9°</b>	<b>34,3°</b>
Beat VMG	<b>3,17</b>	<b>3,85</b>	<b>4,23</b>	<b>4,45</b>	<b>4,58</b>	<b>4,67</b>	<b>4,68</b>
52°	<b>4,88</b>	<b>5,49</b>	<b>5,86</b>	<b>6,15</b>	<b>6,28</b>	<b>6,37</b>	<b>6,45</b>
60°	<b>5,09</b>	<b>5,64</b>	<b>6,00</b>	<b>6,31</b>	<b>6,49</b>	<b>6,59</b>	<b>6,69</b>
75°	<b>5,24</b>	<b>5,81</b>	<b>6,24</b>	<b>6,56</b>	<b>6,72</b>	<b>6,93</b>	<b>7,08</b>
90°	<b>5,35</b>	<b>5,91</b>	<b>6,31</b>	<b>6,69</b>	<b>6,99</b>	<b>7,13</b>	<b>7,45</b>
110°	<b>5,17</b>	<b>5,74</b>	<b>6,15</b>	<b>6,52</b>	<b>6,87</b>	<b>7,25</b>	<b>7,96</b>
120°	<b>4,92</b>	<b>5,58</b>	<b>6,01</b>	<b>6,38</b>	<b>6,73</b>	<b>7,07</b>	<b>7,95</b>
135°	<b>4,20</b>	<b>5,18</b>	<b>5,71</b>	<b>6,10</b>	<b>6,45</b>	<b>6,78</b>	<b>7,48</b>
150°	<b>3,54</b>	<b>4,56</b>	<b>5,30</b>	<b>5,77</b>	<b>6,14</b>	<b>6,47</b>	<b>7,11</b>
Run VMG	<b>3,06</b>	<b>3,95</b>	<b>4,73</b>	<b>5,31</b>	<b>5,75</b>	<b>6,10</b>	<b>6,73</b>
Gybe Angles	<b>145,5°</b>	<b>147,5°</b>	<b>164,5°</b>	<b>173,5°</b>	<b>176,3°</b>	<b>176,8°</b>	<b>177,0°</b>