



World Leader in Rating Technology

## 2017 ORC Club Certificate

### Rating Office

Žemaites 6  
LT-03117 Vilnius  
Lithuania  
+370 650 28392



### Certificate

Number **LT1537**  
Issued On **2017-05-19**  
ORC Ref **lt00000092**  
VPP Ver. **2017 1.00**  
Valid until **2017-12-31**

### Crew Weight

Declared **800kg**  
Default\* **799kg**  
Non Manual Pwr **No**

### Special Scoring

ToD ToT  
Non Spin GPH **630.5 0.9516**  
Non Spin OSN **614.2 0.9769**

### Sails Limitations

Headsails **6** Spinnakers **4**

### Spinnaker configuration

Symmetric: **Yes 110.88**  
Asymmetric: **Yes 104.35**  
Flying H/S: **No**  
Spin. Pole: **Yes**

### Class Division Length

**CDL = 9.994**

### Stability (Estimated)

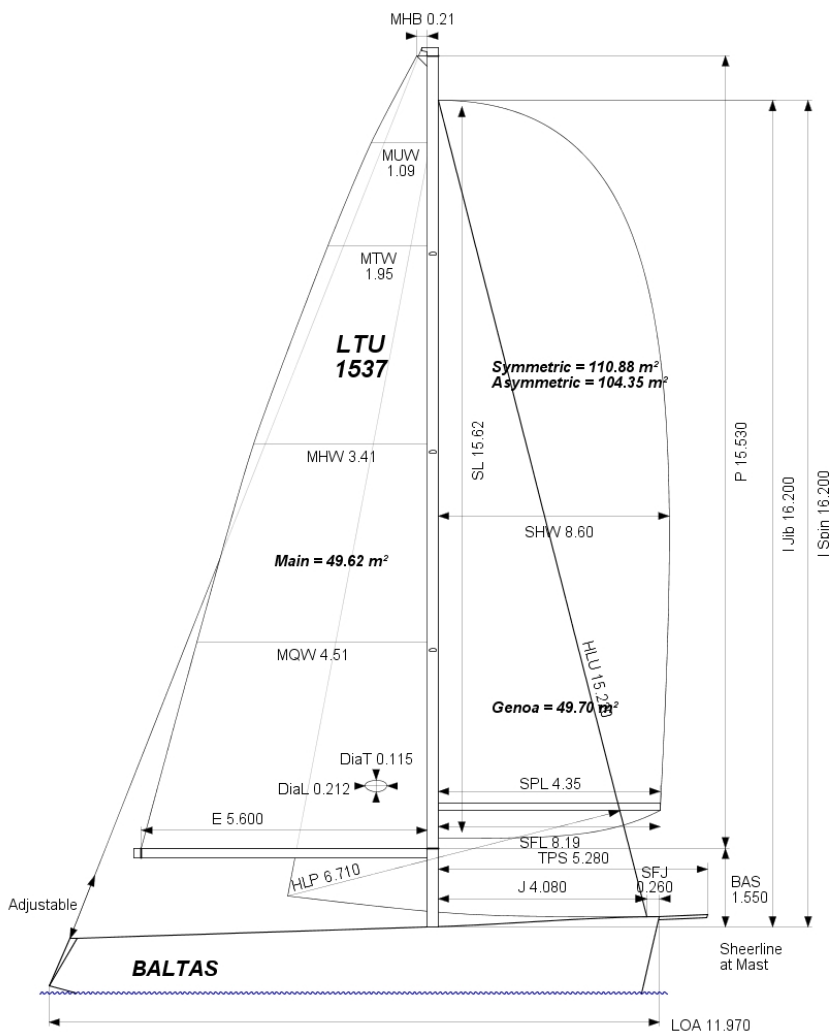
Limit Positive Stab.: **122.6°**  
Stability Index: **127.2**

### Owner

UAB "Savas"  
Klaipėdos plentas 46-19

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

Signature



<b>BOAT</b>		<b>GPH</b>		<b>HULL</b>		
Name <b>Baltas</b> Sail Nr <b>LTU 1537</b>		<b>606.6</b>		Data File <b>Baltas LTU1537</b>	LOA <b>11.970m</b>	
				Offset File <b>DE39SQ19.OFF</b>	MB <b>3.786m</b>	
				Displacement <b>8,144kg</b>	Draft <b>1.969m</b>	
<b>CLASS</b>		<b>IMS Division Cruiser/Racer</b>				
Class <b>Dehler 39 SQ</b>		Dynamic All. <b>0.077%</b>				
Designer <b>Judel/Vrolijk</b>		Fwd Accom. <b>Yes</b>				
Builder <b>Dehler</b>		Construction <b>Cored</b>				
Series <b>12-1999</b>		Fiber Rigging <b>No</b>				
Age Date <b>06-2007</b>		Aramid Core <b>No</b>				
Age Allowance <b>0.487%</b>		Carbon Rudder <b>No</b>				
		Light Stanchions <b>No</b>				
		IMSL <b>11.140m</b>	VCGD <b>-0.297m</b>	Sink <b>24.06kg/mm</b>		
		RL <b>8.846m</b>	VCGM <b>-0.085m</b>	WS <b>32.43m²</b>		
		LSM0 <b>11.097m</b> Displacement/Length ratio <b>5.9597</b>				
<b>COMMENTS</b>		Water Ballast <b>0</b> Trim Tab <b>No</b>				
8153 5,28						
<b>PROPELLER</b>		<b>CENTERBOARD</b>				
Installation <b>Strut</b>	PRD <b>0.434</b>	<b>N/A</b>				
Type <b>Folding 3 blades</b>	PBW <b>0.122</b>					
	PIPA <b>0.0042</b>					
<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time On Distance	<b>590.8</b>			<b>662.3</b>		
Time On Time	<b>1.0156</b>			<b>1.0192</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>699.6</b>	<b>537.1</b>	<b>472.3</b>	<b>912.9</b>	<b>669.6</b>	<b>569.8</b>
Time on Time	<b>0.9648</b>	<b>1.2568</b>	<b>1.4291</b>	<b>0.7394</b>	<b>1.0080</b>	<b>1.1846</b>

<b>BOAT</b>	
Name <b>Baltas</b>	Sail Nr <b>LTU 1537</b>
File <b>Baltas LTU1537</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Club Estimated VCG</b>			
Flotation date <b>15-07-2010</b>		SG	
FFM	FF	1.485	SFFP 0.258
FAM	FA	1.059	SAFP 11.419
LCF from stem on CL / on sheer		6.707 / 6.965	
Maximum beam station from stem		7.585	
RM Measured		207.2kg·m	
RM Default		201.2kg·m	
Limit of positive stability / Stab.Index		122.6° / 127.2	
Freeboard at mast at 4.340		1.284	

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>3</b>		
Inner Stay <b>None Fitted</b>	Runners <b>0</b>		
Carbon Mast <b>No</b>	Jumper Struts <b>None</b>		
Taper Hollows <b>No</b>	Jib Furler <b>No</b>		
Fiber Rigging <b>No</b>	Main Furler <b>No</b>		
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>		
Articulated Bowsprit <b>No</b>			
P <b>15.530</b>	E <b>5.600</b>	MDT1 <b>0.115</b>	MW
IG <b>16.200</b>	J <b>4.080</b>	MDL1 <b>0.212</b>	GO <b>0.220</b>
ISP <b>16.200</b>	SFJ <b>0.260</b>	MDT2 <b>0.115</b>	BD
BAS <b>1.550</b>	SPL <b>4.350</b>	MDL2 <b>0.212</b>	MWT <b>278.00</b>
FSP <b>0.060</b>	TPS <b>5.280</b>	TL	MCG <b>8.580</b>



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## 2017 Measurements Datasheet

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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.434</b>		
Type <b>Folding 3 blades</b>	PBW <b>0.122</b>		
Twin Screw <b>No</b>	PIPA <b>0.0042</b>		
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.330</b>	
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>2.100</b>	

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<b>COMMENTS</b>	
8153 5,28	

<b>MOVEABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS INVENTORY</b>																
<b>MANSAL (1)</b>																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
NS	0.210	1.09	1.95	3.41	4.51	49.62		07-07-2015	North Sails	Carbon	black wt tafetta					
<b>HEADSAILS (3)</b>																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G3	0.08	0.78	1.57	3.19	4.89	6.71	15.22	164%	49.71						Carbon	Unknown
G01	0.09	0.73	1.42	2.88	4.46	6.08	15.46	149%	45.87	Y			07-07-2015	North Sails	Carbon	black wt tafetta
G2	0.09	0.52	1.02	2.01	3.09	4.26	15.36	104%	31.88			R.Stropus	27-05-2013		Nylon	Unknown
<b>SYMMETRIC SPINNAKERS (3)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
SNS	15.62	15.62	15.62	8.60	8.19	110.88		07-07-2015	North Sails	Nylon	white					
S	15.26	15.26	15.26	8.74	8.52	110.58	LBS #7	01-06-2008	Titanium	Nylon						
S1	15.49	15.49	15.49	7.93	7.52	101.30	LBS#7	29-04-2012		Nylon						
<b>ASYMMETRIC SPINNAKERS (1)</b>																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
AS	14.68	16.68	15.68	8.11	7.49	104.35	asym	LBS#7	01-06-2008	North Sails	Unknown					

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date <b>15-07-2010</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
1	Engine			Volvo Penta 2000
Id	Item	Weight	Distance	Description

<b>MEASUREMENT INVENTORY</b>								
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank fuel		st steel	100.0				10.0
Id	Item	Weight	Distance	VCG	Description			
2	Battery	30.0	8.50	0.00				
1	Battery	30.0	8.50	0.00				



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# 2017

## ORC Club Certificate Appendix

BOAT	
Name <b>Baltas</b>	Certificate Number <b>LT1537</b>
Sail Nr <b>LTU 1537</b>	Issued On <b>2017-05-19</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1033.6</b>	<b>864.7</b>	<b>768.7</b>	<b>709.9</b>	<b>681.8</b>	<b>666.5</b>	<b>653.7</b>
52°	<b>666.9</b>	<b>563.3</b>	<b>505.1</b>	<b>479.7</b>	<b>468.9</b>	<b>463.2</b>	<b>458.0</b>
60°	<b>624.7</b>	<b>529.4</b>	<b>485.5</b>	<b>465.9</b>	<b>454.7</b>	<b>448.6</b>	<b>442.6</b>
75°	<b>588.9</b>	<b>504.5</b>	<b>472.1</b>	<b>453.9</b>	<b>439.3</b>	<b>427.1</b>	<b>414.9</b>
90°	<b>587.4</b>	<b>502.4</b>	<b>469.5</b>	<b>449.0</b>	<b>435.7</b>	<b>419.6</b>	<b>393.7</b>
110°	<b>622.7</b>	<b>513.3</b>	<b>469.0</b>	<b>445.8</b>	<b>423.8</b>	<b>403.8</b>	<b>383.2</b>
120°	<b>644.1</b>	<b>529.7</b>	<b>476.0</b>	<b>451.1</b>	<b>429.5</b>	<b>406.9</b>	<b>368.0</b>
135°	<b>715.0</b>	<b>580.9</b>	<b>502.6</b>	<b>467.3</b>	<b>445.8</b>	<b>424.9</b>	<b>382.8</b>
150°	<b>847.6</b>	<b>670.9</b>	<b>567.4</b>	<b>501.0</b>	<b>468.4</b>	<b>447.9</b>	<b>408.5</b>
Run VMG	<b>978.7</b>	<b>774.6</b>	<b>654.9</b>	<b>573.7</b>	<b>519.2</b>	<b>479.9</b>	<b>438.3</b>

Selected Courses							
Windward / Leeward	<b>1006.2</b>	<b>819.7</b>	<b>711.8</b>	<b>641.8</b>	<b>600.5</b>	<b>573.2</b>	<b>546.0</b>
Circular Random	<b>838.9</b>	<b>676.4</b>	<b>588.6</b>	<b>536.7</b>	<b>504.1</b>	<b>482.2</b>	<b>454.6</b>
Ocean for PCS	<b>1035.0</b>	<b>797.8</b>	<b>663.1</b>	<b>579.8</b>	<b>525.1</b>	<b>486.4</b>	<b>431.9</b>
Non Spinnaker	<b>881.0</b>	<b>706.6</b>	<b>611.2</b>	<b>554.4</b>	<b>518.5</b>	<b>494.5</b>	<b>464.0</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>44.5°</b>	<b>43.3°</b>	<b>43.7°</b>	<b>42.7°</b>	<b>41.4°</b>	<b>40.7°</b>	<b>40.1°</b>
Beat VMG	<b>3.48</b>	<b>4.16</b>	<b>4.68</b>	<b>5.07</b>	<b>5.28</b>	<b>5.40</b>	<b>5.51</b>
52°	<b>5.40</b>	<b>6.39</b>	<b>7.13</b>	<b>7.50</b>	<b>7.68</b>	<b>7.77</b>	<b>7.86</b>
60°	<b>5.76</b>	<b>6.80</b>	<b>7.41</b>	<b>7.73</b>	<b>7.92</b>	<b>8.02</b>	<b>8.13</b>
75°	<b>6.11</b>	<b>7.14</b>	<b>7.63</b>	<b>7.93</b>	<b>8.20</b>	<b>8.43</b>	<b>8.68</b>
90°	<b>6.13</b>	<b>7.17</b>	<b>7.67</b>	<b>8.02</b>	<b>8.26</b>	<b>8.58</b>	<b>9.14</b>
110°	<b>5.78</b>	<b>7.01</b>	<b>7.68</b>	<b>8.07</b>	<b>8.49</b>	<b>8.92</b>	<b>9.39</b>
120°	<b>5.59</b>	<b>6.80</b>	<b>7.56</b>	<b>7.98</b>	<b>8.38</b>	<b>8.85</b>	<b>9.78</b>
135°	<b>5.03</b>	<b>6.20</b>	<b>7.16</b>	<b>7.70</b>	<b>8.07</b>	<b>8.47</b>	<b>9.40</b>
150°	<b>4.25</b>	<b>5.37</b>	<b>6.34</b>	<b>7.19</b>	<b>7.69</b>	<b>8.04</b>	<b>8.81</b>
Run VMG	<b>3.68</b>	<b>4.65</b>	<b>5.50</b>	<b>6.28</b>	<b>6.93</b>	<b>7.50</b>	<b>8.21</b>
Gybe Angles	<b>144.6°</b>	<b>149.4°</b>	<b>151.1°</b>	<b>155.2°</b>	<b>170.1°</b>	<b>180.0°</b>	<b>180.0°</b>