

<b>BOAT</b>
Name <b>CENTINELA</b> Sail Nr <b>PER 41</b>

<b>GPH</b>
<b>613.3</b>

<b>HULL</b>	Length Overall	<b>12.330 m</b>
	Maximum Beam	<b>3.948 m</b>
	Displacement	<b>7,364 kg</b>
	Draft	<b>2.213 m</b>
	IMS Reg. Division	<b>Cruiser/Racer</b>
	Dynamic Allowance	<b>0.178%</b>
	Fwd Accommodation	<b>Yes</b>
	Hull Construction	<b>Solid</b>
	Carbon Rudder	<b>No</b>
	Trim Tab	<b>No</b>
	IMS L	<b>9.951</b> VCGD <b>-0.048</b> VCGM <b>-0.034</b>
	Sink	<b>21.23 kg/mm</b> Wetted Area <b>30.35 m<sup>2</sup></b>



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<b>GENERAL</b>
Class <b>Frers 40</b>
Designer <b>Frers</b>
Builder <b>Arribas</b>
Series <b>01/1990</b>
Age <b>01/1990</b>
Age Allowance <b>0.975%</b>
Offset File <b>sansat.off - 18/08/1991 12:54:58 p.m.</b>
Measurement by <b>G Liza / L Yarlaqu - 18/06/2010</b>

<b>SCORING OPTIONS</b>						
	<b>OFFSHORE</b>			<b>INSHORE</b>		
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time On Distance	<b>613.3</b>			<b>684.5</b>		
Time On Time	<b>0.9783</b>			<b>0.9862</b>		
Performance Line	PLT	PLD		PLT	PLD	
	<b>0.871</b>	<b>111.4</b>		<b>1.041</b>	<b>305.7</b>	
Triple Number	Low	Medium	High	Low	Medium	High
	<b>0.9612</b>	<b>1.2408</b>	<b>1.3980</b>	<b>0.7332</b>	<b>0.9965</b>	<b>1.1613</b>

**Rating Office**

Roberto Peschiera  
peschiera56@gmail.com  
Asociación de Veleros  
Oceánicos del Peru

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1027.8</b>	<b>846.1</b>	<b>758.4</b>	<b>714.4</b>	<b>686.8</b>	<b>669.0</b>	<b>665.4</b>
52°	<b>663.8</b>	<b>558.5</b>	<b>513.3</b>	<b>492.6</b>	<b>480.7</b>	<b>473.0</b>	<b>467.0</b>
60°	<b>620.5</b>	<b>534.8</b>	<b>495.3</b>	<b>474.6</b>	<b>463.9</b>	<b>456.7</b>	<b>448.9</b>
75°	<b>588.9</b>	<b>518.1</b>	<b>482.5</b>	<b>459.1</b>	<b>443.3</b>	<b>435.1</b>	<b>426.1</b>
90°	<b>584.3</b>	<b>505.2</b>	<b>468.9</b>	<b>450.8</b>	<b>441.7</b>	<b>428.2</b>	<b>410.0</b>
110°	<b>596.1</b>	<b>515.3</b>	<b>475.2</b>	<b>447.5</b>	<b>427.1</b>	<b>414.4</b>	<b>401.2</b>
120°	<b>635.2</b>	<b>534.9</b>	<b>487.6</b>	<b>456.8</b>	<b>432.6</b>	<b>413.4</b>	<b>387.2</b>
135°	<b>731.2</b>	<b>587.2</b>	<b>519.6</b>	<b>481.2</b>	<b>453.8</b>	<b>431.4</b>	<b>393.7</b>
150°	<b>874.7</b>	<b>691.4</b>	<b>581.2</b>	<b>521.6</b>	<b>484.8</b>	<b>458.2</b>	<b>417.6</b>
Run VMG	<b>1010.1</b>	<b>798.4</b>	<b>670.7</b>	<b>591.5</b>	<b>537.2</b>	<b>499.6</b>	<b>449.9</b>

<b>Certificate</b>
Number <b>PERI01</b>
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<b>Selected Courses</b>							
Windward / Leeward	<b>1038.5</b>	<b>835.6</b>	<b>725.6</b>	<b>661.0</b>	<b>619.2</b>	<b>591.1</b>	<b>564.0</b>
Circular Random	<b>844.0</b>	<b>682.1</b>	<b>595.2</b>	<b>544.5</b>	<b>513.1</b>	<b>492.5</b>	<b>467.8</b>
Ocean for PCS	<b>901.6</b>	<b>713.3</b>	<b>608.5</b>	<b>544.5</b>	<b>502.3</b>	<b>472.2</b>	<b>430.2</b>
Non Spinnaker	<b>909.9</b>	<b>727.9</b>	<b>628.6</b>	<b>569.5</b>	<b>532.4</b>	<b>508.0</b>	<b>478.8</b>

<b>Crew Weight</b>
Declared <b>723 kg</b>
Default* <b>723 kg</b>
Non Manual Power <b>No</b>

<b>Special Scoring</b>
ToD ToT
Double Handed <b>616.3 0.9736</b>
Non Spinnaker <b>648.7 0.9249</b>
N/S Perf. Line <b>71.0 0.763</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>44.4°</b>	<b>43.9°</b>	<b>40.9°</b>	<b>39.4°</b>	<b>38.5°</b>	<b>37.8°</b>	<b>38.3°</b>
Beat VMG	<b>3.50</b>	<b>4.25</b>	<b>4.75</b>	<b>5.04</b>	<b>5.24</b>	<b>5.38</b>	<b>5.41</b>
52°	<b>5.42</b>	<b>6.45</b>	<b>7.01</b>	<b>7.31</b>	<b>7.49</b>	<b>7.61</b>	<b>7.71</b>
60°	<b>5.80</b>	<b>6.73</b>	<b>7.27</b>	<b>7.59</b>	<b>7.76</b>	<b>7.88</b>	<b>8.02</b>
75°	<b>6.11</b>	<b>6.95</b>	<b>7.46</b>	<b>7.84</b>	<b>8.12</b>	<b>8.27</b>	<b>8.45</b>
90°	<b>6.16</b>	<b>7.13</b>	<b>7.68</b>	<b>7.99</b>	<b>8.15</b>	<b>8.41</b>	<b>8.78</b>
110°	<b>6.04</b>	<b>6.99</b>	<b>7.58</b>	<b>8.05</b>	<b>8.43</b>	<b>8.69</b>	<b>8.97</b>
120°	<b>5.67</b>	<b>6.73</b>	<b>7.38</b>	<b>7.88</b>	<b>8.32</b>	<b>8.71</b>	<b>9.30</b>
135°	<b>4.92</b>	<b>6.13</b>	<b>6.93</b>	<b>7.48</b>	<b>7.93</b>	<b>8.35</b>	<b>9.15</b>
150°	<b>4.12</b>	<b>5.21</b>	<b>6.19</b>	<b>6.90</b>	<b>7.43</b>	<b>7.86</b>	<b>8.62</b>
Run VMG	<b>3.56</b>	<b>4.51</b>	<b>5.37</b>	<b>6.09</b>	<b>6.70</b>	<b>7.21</b>	<b>8.00</b>
Gybe Angles	<b>142.6°</b>	<b>146.5°</b>	<b>151.4°</b>	<b>161.6°</b>	<b>166.7°</b>	<b>171.2°</b>	<b>173.3°</b>

<b>Sails Limitations</b>
Genoas <b>4</b>   Jibs <b>3</b>   Spinnakers <b>4</b>
Spinnaker configuration <b>Symmetric</b>

<b>Storm Sails Areas</b>
Heavy Weather Jib <b>38.03</b>
Storm Jib (JL=10.91) <b>14.09</b>
Storm Trysail <b>11.45</b>

**Owner**

Miguel Caillaux  
Los Durazos 138,  
Monterrico  
Surco  
mcaillauxz@gmail.com

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

Signature

<b>BOAT</b>	
Name <b>CENTINELA</b>	Sail Nr <b>PER 41</b>
File <b>PER41.dxt</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>17/06/2010</b>		SG <b>1.0260</b>	
FFM <b>1.227</b>	FF <b>1.227</b>	SFFP <b>0.600</b>	
FAM <b>1.015</b>	FA <b>1.015</b>	SAFP <b>10.810</b>	
W1 <b>100.00</b>	PD1 <b>529.0</b>	WD <b>11.929</b>	
W2 <b>100.00</b>	PD2 <b>529.0</b>	GSA <b>1.0</b>	
W3 <b>100.00</b>	PD3 <b>529.0</b>	RSA <b>1.0</b>	
W4 <b>100.00</b>	PD4 <b>529.0</b>	PLM <b>9000.0</b>	
Maximum beam station from stern			<b>7.351</b>
RM Measured / Default			<b>177.6 / 165.6</b>
Limit of positive stability			<b>114.8°</b>
Stability Index			<b>116.0</b>
Freeboard at mast at 4.920			<b>1.044</b>



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<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>3</b>		
Inner Forestay <b>Adjustable</b>	Runners <b>2</b>		
Carbon Mast <b>No</b>	Jumpers <b>None</b>		
Taper Hollows <b>Yes</b>	Jib Furler <b>No</b>		
Fiber Rigging <b>No</b>	w/o Backstay <b>No</b>		
P <b>14.600</b>	E <b>4.480</b>	MDT1 <b>0.122</b>	TL <b>2.590</b>
IG <b>16.689</b>	J <b>4.920</b>	MDL1 <b>0.224</b>	MWT
ISP <b>16.604</b>	SFJ <b>0.000</b>	MDT2 <b>0.121</b>	MCG
SPS <b>5.954</b>	SPL <b>4.845</b>	MDL2 <b>0.175</b>	CPW <b>2.300</b>
BAS <b>1.734</b>	TPS	MW <b>0.172</b>	BD <b>0.160</b>
BAL <b>0.450</b>	FSP <b>0.066</b>	GO <b>0.200</b>	BWT

<b>PROPELLER</b>			
Installation <b>Shaft</b>	PRD <b>0.460</b>		
Type <b>Feathering 2 blades</b>	PBW <b>0.155</b>		
Twin Screw <b>No</b>	PIPA <b>0.0058</b>		
PSA <b>19.000</b>	PHL <b>0.145</b>	ST3 <b>0.170</b>	ESL <b>1.080</b>
PSD <b>0.032</b>	ST1 <b>0.012</b>	ST4 <b>0.057</b>	
PHD <b>0.071</b>	ST2 <b>0.131</b>	ST5 <b>0.245</b>	

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**AVOP**

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

<b>WATER BALLAST</b>	
N/A	

<b>COMMENTS</b>	
Ex San Saturio	

<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>									
Mainsail	HB	MGT	MGU	MGM	MGL	MSW	Area	Area (r)	Formula
	0.155	0.98	1.67	2.87	3.76	20.20	38.88	39.48	$P/8 \cdot (E + 2 \cdot MGL + 2 \cdot MGM + 1.5 \cdot MGU + MGT + 0.5 \cdot HB)$
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0.08	0.83	1.65	3.42	5.26	16.51	7.17	57.69	$0.1125 \cdot JL \cdot (1.445 \cdot LPG + 2 \cdot JGL + 2 \cdot JGM + 1.5 \cdot JGU + JGT + 0.5 \cdot JH)$
Symmetric	SL	SMG	SF						
	15.90	9.18	8.96					121.05	$SL \cdot (SF + 4 \cdot SMG) / 6$

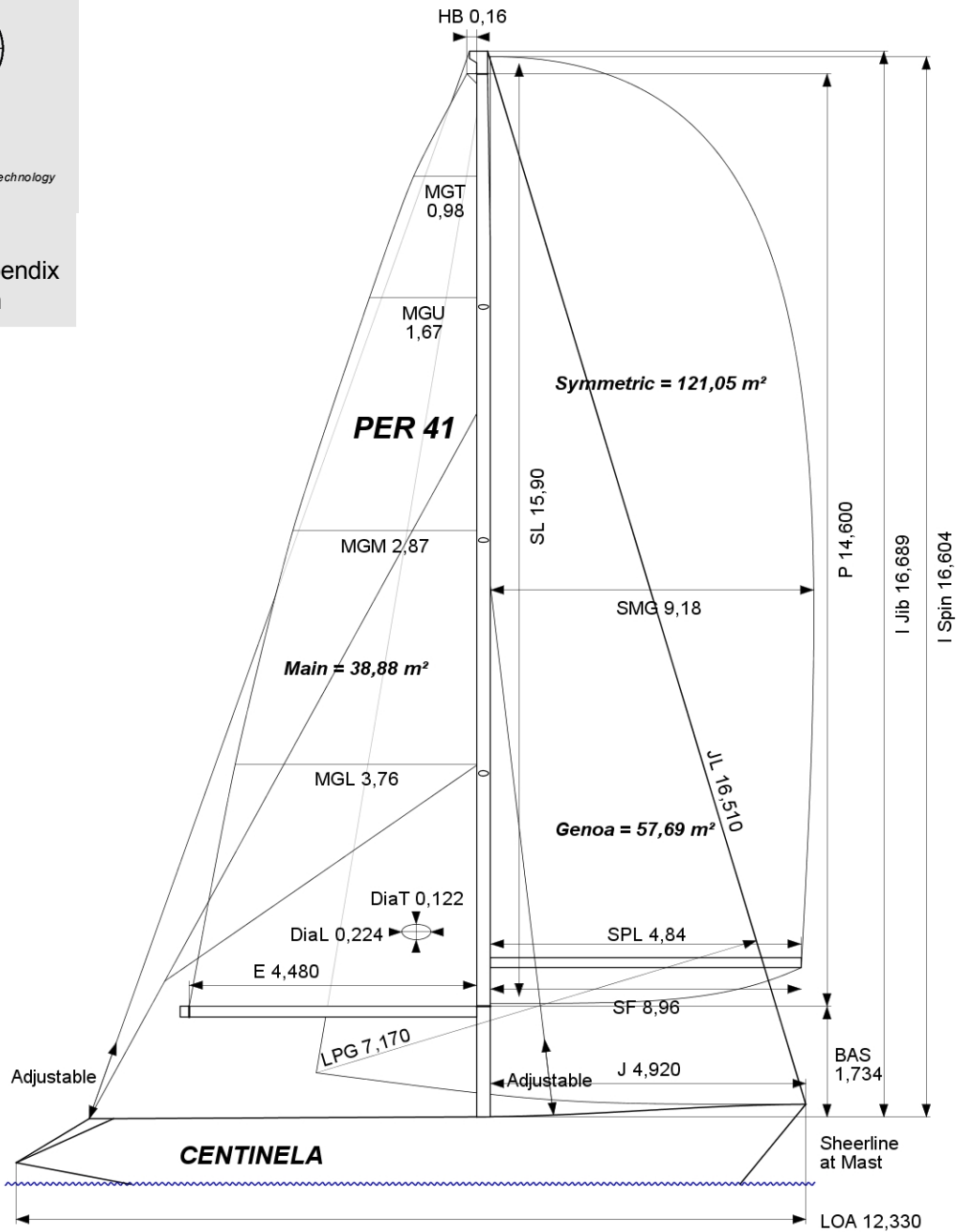
<b>MEASUREMENT INVENTORY</b>			
Measurer Date Comment			
Id	Item	Weight	Distanc Description
OR	Anchor	30.0	1.13 *Legacy Anchor*
Id	Item	Weight	Description

<b>MEASUREMENT INVENTORY</b>			
Id	Item	Weight	Distanc Description



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Sail Plan



**SAILS INVENTORY**

**MANSAIL**

Id	HB	MGT	MGU	MGM	MGL	MSW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M1	0.155	0.98	1.67	2.87	3.76	20.20	38.88	G LIZA	18/06/2010	QUANTUM	Kevlar	

**JIBS / GENOAS**

Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Overlp	Area	Measurer	Meas.Date	Manufacture	Material	Comment
G1	0.08	0.83	1.65	3.42	5.26	7.17	16.51	146%	57.70	G LIZA	18/06/2010	QUANTUM	Kevlar	

**SYMMETRIC SPINNAKERS**

Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S1	15.90	9.18	8.96	121.05	G LIZA	18/06/2010		Dacron	

**ASYMMETRIC SPINNAKERS**

Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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