

<b>BOAT</b> Name <b>RED SHARK</b> Sail Nr <b>FRA-34883</b>	<b>GPH</b> <b>603.9</b>	<b>HULL</b> Length Overall <b>10.617m</b> Maximum Beam <b>3.594m</b> Displacement <b>4,618kg</b> Draft <b>2.163m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.111%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>A 35</b> Designer <b>NIVELT</b> Builder <b>ARCHAMBAULT</b> Series <b>01/2005</b> Age <b>04/2005</b> Age Allowance <b>0.455%</b> Offset File <b>F234.off - 19/03/2007 12:34:06</b> Measurement by - <b>12/12/2016</b>		IMSL <b>9.657m</b> VCGD <b>0.081m</b> Sink <b>17.90kg/mm</b> RL <b>9.191m</b> VCGM <b>0.126m</b> WS <b>23.26m<sup>2</sup></b> LSM0 <b>9.328m</b> Displacement/Length ratio <b>5.6897</b>



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>586.9</b>			<b>654.6</b>		
Time on Time	<b>1.0223</b>			<b>1.0311</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>689.4</b>	<b>535.8</b>	<b>477.3</b>	<b>889.1</b>	<b>656.2</b>	<b>572.7</b>
Time on Time	<b>0.9791</b>	<b>1.2599</b>	<b>1.4143</b>	<b>0.7592</b>	<b>1.0287</b>	<b>1.1787</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1015.8</b>	<b>839.4</b>	<b>738.8</b>	<b>696.5</b>	<b>681.6</b>	<b>675.8</b>	<b>661.9</b>
52°	<b>665.2</b>	<b>562.0</b>	<b>513.0</b>	<b>494.5</b>	<b>488.0</b>	<b>484.8</b>	<b>478.3</b>
60°	<b>629.1</b>	<b>538.5</b>	<b>500.5</b>	<b>483.0</b>	<b>474.7</b>	<b>470.7</b>	<b>465.1</b>
75°	<b>604.4</b>	<b>522.5</b>	<b>491.1</b>	<b>471.8</b>	<b>456.8</b>	<b>447.2</b>	<b>439.9</b>
90°	<b>607.7</b>	<b>514.3</b>	<b>480.8</b>	<b>466.3</b>	<b>450.9</b>	<b>433.2</b>	<b>409.3</b>
110°	<b>606.2</b>	<b>509.3</b>	<b>473.5</b>	<b>446.4</b>	<b>423.5</b>	<b>408.9</b>	<b>385.4</b>
120°	<b>625.7</b>	<b>519.4</b>	<b>478.8</b>	<b>450.1</b>	<b>421.9</b>	<b>394.7</b>	<b>361.2</b>
135°	<b>693.8</b>	<b>561.7</b>	<b>499.5</b>	<b>469.1</b>	<b>441.1</b>	<b>413.5</b>	<b>355.2</b>
150°	<b>820.7</b>	<b>652.5</b>	<b>552.8</b>	<b>499.3</b>	<b>470.8</b>	<b>445.0</b>	<b>393.9</b>
Run VMG	<b>947.7</b>	<b>753.5</b>	<b>637.7</b>	<b>566.8</b>	<b>517.0</b>	<b>483.4</b>	<b>434.1</b>

**Certificate**  
Number **348831**  
ORC Ref **ESP00002795**  
Issued On **05/02/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**  
Default **623kg**  
Maximum **720kg**  
Minimum\* **540kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>618.2</b>	<b>0.9706</b>
Double H.OSN	<b>603.0</b>	<b>0.9950</b>
Non Spin GPH	<b>642.3</b>	<b>0.9341</b>
Non Spin OSN	<b>623.0</b>	<b>0.9631</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>981.8</b>	<b>796.5</b>	<b>688.2</b>	<b>631.7</b>	<b>599.3</b>	<b>579.6</b>	<b>548.0</b>
Circular Random	<b>829.2</b>	<b>670.6</b>	<b>586.1</b>	<b>537.3</b>	<b>507.0</b>	<b>486.4</b>	<b>457.2</b>
Coastal / Long Distance	<b>978.4</b>	<b>748.4</b>	<b>623.2</b>	<b>555.5</b>	<b>518.9</b>	<b>488.3</b>	<b>437.4</b>
Non Spinnaker	<b>898.0</b>	<b>719.2</b>	<b>622.2</b>	<b>565.4</b>	<b>530.2</b>	<b>506.8</b>	<b>476.0</b>

**Sails Limitations**

Headsails	Spinnakers
<b>5</b>	<b>3</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>42.6°</b>	<b>41.0°</b>	<b>39.8°</b>	<b>38.5°</b>	<b>38.0°</b>	<b>37.7°</b>	<b>37.6°</b>
Beat VMG	<b>3.54</b>	<b>4.29</b>	<b>4.87</b>	<b>5.17</b>	<b>5.28</b>	<b>5.33</b>	<b>5.44</b>
52°	<b>5.41</b>	<b>6.41</b>	<b>7.02</b>	<b>7.28</b>	<b>7.38</b>	<b>7.43</b>	<b>7.53</b>
60°	<b>5.72</b>	<b>6.68</b>	<b>7.19</b>	<b>7.45</b>	<b>7.58</b>	<b>7.65</b>	<b>7.74</b>
75°	<b>5.96</b>	<b>6.89</b>	<b>7.33</b>	<b>7.63</b>	<b>7.88</b>	<b>8.05</b>	<b>8.18</b>
90°	<b>5.92</b>	<b>7.00</b>	<b>7.49</b>	<b>7.72</b>	<b>7.98</b>	<b>8.31</b>	<b>8.80</b>
110°	<b>5.94</b>	<b>7.07</b>	<b>7.60</b>	<b>8.07</b>	<b>8.50</b>	<b>8.80</b>	<b>9.34</b>
120°	<b>5.75</b>	<b>6.93</b>	<b>7.52</b>	<b>8.00</b>	<b>8.53</b>	<b>9.12</b>	<b>9.97</b>
135°	<b>5.19</b>	<b>6.41</b>	<b>7.21</b>	<b>7.67</b>	<b>8.16</b>	<b>8.71</b>	<b>10.14</b>
150°	<b>4.39</b>	<b>5.52</b>	<b>6.51</b>	<b>7.21</b>	<b>7.65</b>	<b>8.09</b>	<b>9.14</b>
Run VMG	<b>3.80</b>	<b>4.78</b>	<b>5.65</b>	<b>6.35</b>	<b>6.96</b>	<b>7.45</b>	<b>8.29</b>
Gybe Angles	<b>144.5°</b>	<b>147.9°</b>	<b>151.0°</b>	<b>157.5°</b>	<b>180.0°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**  
CDL = **9.425**

**Storm Sails Areas**  
Heavy Weather Jib **25.29**  
Storm Jib (JL=8.90) **9.37**  
Storm Trysail **11.00**

**Owner**

<b>BOAT</b>	
Name <b>RED SHARK</b>	Sail Nr <b>FRA-34883</b>
File <b>FRA34883</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Aft</b>	Spreaders <b>2</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>13.690</b>	E <b>4.590</b> MDT1 <b>0.114</b> MW <b>0.179</b>
IG <b>13.570</b>	J <b>4.110</b> MDL1 <b>0.179</b> GO <b>0.214</b>
ISP <b>15.360</b>	SFJ <b>0.000</b> MDT2 <b>0.108</b> BD <b>0.155</b>
BAS <b>1.650</b>	SPL <b>4.400</b> MDL2 <b>0.155</b> MWT <b>129.80</b>
FSP <b>0.068</b>	TPS <b>5.240</b> TL <b>0.355</b> MCG <b>4.780</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>15/01/2017</b>		SG <b>1.0250</b>	
FFM <b>1.362</b>	FF <b>1.361</b>	SFFP <b>0.101</b>	
FAM <b>0.949</b>	FA <b>0.950</b>	SAFP <b>10.245</b>	
W1 <b>66.0</b>	PD1 <b>586.0</b>	WD <b>11.310</b>	
W2 <b>66.0</b>	PD2 <b>577.3</b>	GSA <b>1.0</b>	
W3 <b>66.0</b>	PD3 <b>594.7</b>	RSA <b>1.0</b>	
W4 <b>66.0</b>	PD4 <b>586.0</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>5.915 / 6.152</b>	
Maximum beam station from stem		<b>7.628</b>	
RM Measured		<b>100.3kg-m</b>	
RM Default		<b>108.0kg-m</b>	
Limit of positive stability / Stab.Index		<b>112.2° / 109.5</b>	
Freeboard at mast at 4.110		<b>1.101</b>	



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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.410</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.115</b>		
Twin Screw <b>No</b>	PIPA <b>0.0037</b>		
ST1 <b>0.065</b>	ST3 <b>0.211</b>	ST5 <b>0.283</b>	
ST2 <b>0.211</b>	ST4 <b>0.110</b>	EDL <b>1.545</b>	

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<b>COMMENTS</b>	

<b>MOVABLE BALLAST</b>	
N/A	

<b>CENTERBOARD</b>	
N/A	



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<b>SAILS (Maximum Areas)</b>									
<b>Mainsail</b>	<b>MHB</b>	<b>MUW</b>	<b>MTW</b>	<b>MHW</b>	<b>MQW</b>	<b>Area</b>	<b>Area (r)</b>	<b>Formula</b>	
	0.180	1.02	1.79	2.94	3.83	37.52	38.24	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
<b>Symmetric</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>				
	15.03	15.03	15.03	7.62	7.08	94.09		SL · (SFL + 4·SHW) / 6	
<b>Asymmetric on centerline</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>				
	14.91	12.95	13.93	6.66	8.62	81.86		AS · (SFL + 4·SHW) / 6	

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
<b>HHB</b>	<b>HUW</b>	<b>HTW</b>	<b>HHW</b>	<b>HQW</b>	<b>HLP</b>	<b>HLU</b>	<b>Area</b>	<b>Btn</b>	<b>Fly</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.10	0.66	1.21	2.24	3.24	4.25	13.74	30.34	Y		11/06/2018	Unknow	LIGERO/MED
0.10	0.67	1.23	2.27	3.27	4.32	13.21	29.56	Y		08/08/2017	Unknow	
0.10	0.60	1.12	2.13	3.21	4.28	13.23	28.57	Y	N	19/03/2016	Unknow	
0.14	0.72	1.27	2.13	3.17	4.22	13.07	28.52	Y		19/01/2017	Unknow	

<b>MEASUREMENT INVENTORY</b>				
Measurer <b>ESP 813</b>				
Date <b>15/01/2017</b>				
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
SaS	Tools	8.4	7.87	0.40 Sailor-Services
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

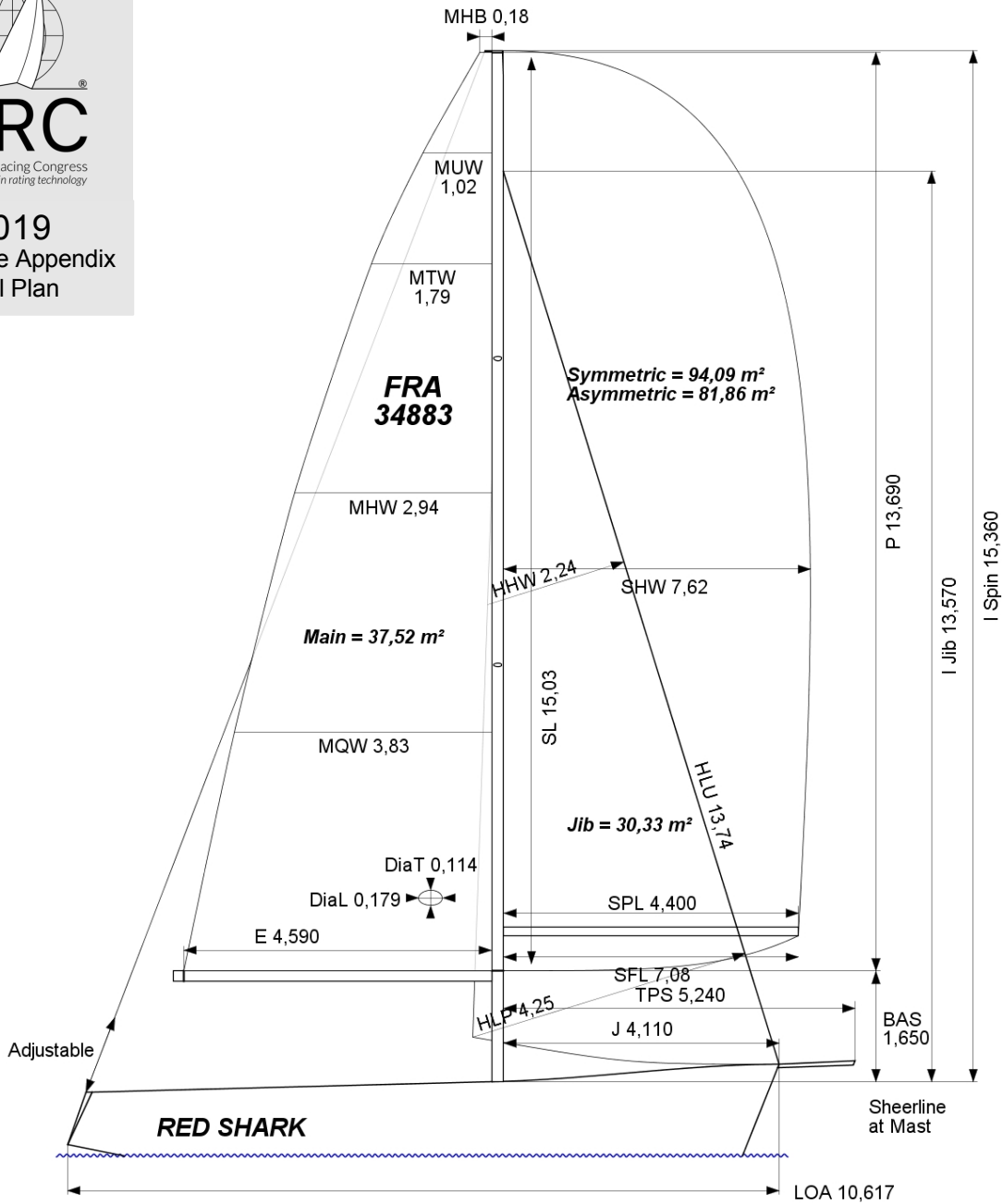
<b>MEASUREMENT INVENTORY</b>				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>



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Sail Plan



**SAILS INVENTORY**

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
NORTH 3DI	0.18	1.02	1.79	2.94	3.83	37.52		25/07/2017	NORTH	Unknown						
MN A	0.19	0.97	1.70	2.88	3.78	36.84		19/01/2017		Unknown						
HEADSAILS (4)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
l/m	0.10	0.66	1.21	2.24	3.24	4.25	13.74	103%	30.34	Y			11/06/2018	NS	Unknown	LIGERO/MED
north	0.10	0.67	1.23	2.27	3.27	4.32	13.21	105%	29.56	Y			08/08/2017	NS	Unknown	
LIGHT	0.10	0.60	1.12	2.13	3.21	4.28	13.23	104%	28.57	Y	N		19/03/2016		Unknown	
F1	0.14	0.72	1.27	2.13	3.17	4.22	13.07	103%	28.52	Y			19/01/2017		Unknown	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
SIMETRICO	15.03	15.03	15.03	7.62	7.08	94.09		19/01/2017		Nylon						
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
001	14.91	12.95	13.93	6.66	8.62	81.87	asym		09/08/2017		Unknown					