


<b>BOAT</b>
Name <b>CREMISE</b> Sail Nr <b>ESP-5158</b>

<b>GPH</b>
<b>715,9</b>

<b>HULL</b>
Length Overall <b>9,905m</b>
Maximum Beam <b>2,974m</b>
Displacement <b>5.346kg</b>
Draft <b>1,683m</b>
IMS Reg. Division <b>Cruiser/Racer</b>
Dynamic Allowance <b>0,573%</b>
Fwd Accommodation <b>Yes</b>
Hull Construction <b>Solid</b>
Carbon Rudder <b>No</b>
Crew Arm Extension
IMSL <b>8,299m</b> VCGD <b>0,095m</b> Sink <b>14,75kg/mm</b>
RL <b>6,169m</b> VCGM <b>0,018m</b> WS <b>20,96m<sup>2</sup></b>
LSM0 <b>8,379m</b> Displacement/Length ratio <b>9,0877</b>



**2016**  
ORC International  
Certificate

<b>GENERAL</b>
Class <b>RANGER 32</b>
Designer <b>GARY MULL</b>
Builder
Series <b>04/1977</b>
Age <b>04/1977</b>
Age Allowance <b>0,488%</b>
Offset File <b>CREM11.OFF - 11/03/2002 15:48:00</b>
Measurement by <b>TMONTANER - 12/04/2005</b>

**Rating Office**  
R.F.E.V.  
Luis de salazar,9  
28002 Madrid



<b>SCORING OPTIONS</b>	<b>OFFSHORE</b>	<b>INSHORE</b>
	COASTAL / LONG DISTANCE	WINDWARD / LEEWARD
Time On Distance	<b>695,6</b>	<b>776,4</b>
Time On Time	<b>0,8626</b>	<b>0,8694</b>
Performance Line	PLT <b>0,858</b> PLD <b>161,8</b>	PLT <b>0,714</b> PLD <b>186,0</b>
Triple Number	Low <b>0,8180</b> Medium <b>1,0656</b> High <b>1,2026</b>	Low <b>0,6337</b> Medium <b>0,8586</b> High <b>1,0084</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1236,8</b>	<b>1037,1</b>	<b>928,5</b>	<b>850,2</b>	<b>811,3</b>	<b>791,5</b>	<b>779,1</b>
52°	<b>800,7</b>	<b>681,4</b>	<b>605,6</b>	<b>568,7</b>	<b>553,0</b>	<b>546,1</b>	<b>541,4</b>
60°	<b>753,4</b>	<b>641,3</b>	<b>578,1</b>	<b>551,0</b>	<b>536,7</b>	<b>529,8</b>	<b>524,8</b>
75°	<b>715,1</b>	<b>607,3</b>	<b>559,4</b>	<b>537,1</b>	<b>521,9</b>	<b>510,3</b>	<b>498,7</b>
90°	<b>718,7</b>	<b>611,0</b>	<b>557,8</b>	<b>537,0</b>	<b>523,1</b>	<b>509,3</b>	<b>485,4</b>
110°	<b>734,4</b>	<b>606,5</b>	<b>550,9</b>	<b>524,8</b>	<b>504,1</b>	<b>491,7</b>	<b>476,7</b>
120°	<b>753,3</b>	<b>621,2</b>	<b>557,0</b>	<b>529,1</b>	<b>507,6</b>	<b>486,2</b>	<b>459,6</b>
135°	<b>820,2</b>	<b>676,8</b>	<b>583,6</b>	<b>544,7</b>	<b>521,8</b>	<b>501,1</b>	<b>461,7</b>
150°	<b>957,4</b>	<b>764,0</b>	<b>651,5</b>	<b>577,3</b>	<b>543,9</b>	<b>522,8</b>	<b>484,3</b>
Run VMG	<b>1105,6</b>	<b>881,1</b>	<b>750,3</b>	<b>656,6</b>	<b>591,4</b>	<b>553,0</b>	<b>511,5</b>

<b>Certificate</b>
Number <b>515801</b>
ORC Ref <b>ESP00016057</b>
Issued On <b>11/02/2016</b>
VPP Ver. <b>2016 1.00</b>
Valid until <b>31/12/2016</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>1171,2</b>	<b>959,1</b>	<b>839,4</b>	<b>753,4</b>	<b>701,3</b>	<b>672,2</b>	<b>645,3</b>
Circular Random	<b>988,5</b>	<b>797,8</b>	<b>694,6</b>	<b>634,0</b>	<b>596,7</b>	<b>572,8</b>	<b>545,0</b>
Ocean for PCS	<b>981,9</b>	<b>782,9</b>	<b>672,6</b>	<b>606,6</b>	<b>565,4</b>	<b>538,2</b>	<b>503,3</b>
Non Spinnaker	<b>1042,3</b>	<b>836,0</b>	<b>723,1</b>	<b>655,9</b>	<b>614,0</b>	<b>586,9</b>	<b>555,0</b>

<b>Crew Weight</b>
Declared <b>480kg</b>
Default* <b>535kg</b>
Non Manual Pwr <b>No</b>

<b>Special Scoring</b>
ToD ToT
Double H.GPH <b>718,6 0,8350</b>
Double H.OSN <b>699,6 0,8576</b>
Non Spin GPH <b>745,9 0,8044</b>
Non Spin OSN <b>723,0 0,8298</b>
N/S Perf. Line <b>90,7 0,705</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>44,3°</b>	<b>42,6°</b>	<b>43,1°</b>	<b>43,3°</b>	<b>41,9°</b>	<b>41,2°</b>	<b>40,6°</b>
Beat VMG	<b>2,91</b>	<b>3,47</b>	<b>3,88</b>	<b>4,23</b>	<b>4,44</b>	<b>4,55</b>	<b>4,62</b>
52°	<b>4,50</b>	<b>5,28</b>	<b>5,94</b>	<b>6,33</b>	<b>6,51</b>	<b>6,59</b>	<b>6,65</b>
60°	<b>4,78</b>	<b>5,61</b>	<b>6,23</b>	<b>6,53</b>	<b>6,71</b>	<b>6,80</b>	<b>6,86</b>
75°	<b>5,03</b>	<b>5,93</b>	<b>6,44</b>	<b>6,70</b>	<b>6,90</b>	<b>7,05</b>	<b>7,22</b>
90°	<b>5,01</b>	<b>5,89</b>	<b>6,45</b>	<b>6,70</b>	<b>6,88</b>	<b>7,07</b>	<b>7,42</b>
110°	<b>4,90</b>	<b>5,94</b>	<b>6,53</b>	<b>6,86</b>	<b>7,14</b>	<b>7,32</b>	<b>7,55</b>
120°	<b>4,78</b>	<b>5,80</b>	<b>6,46</b>	<b>6,80</b>	<b>7,09</b>	<b>7,40</b>	<b>7,83</b>
135°	<b>4,39</b>	<b>5,32</b>	<b>6,17</b>	<b>6,61</b>	<b>6,90</b>	<b>7,18</b>	<b>7,80</b>
150°	<b>3,76</b>	<b>4,71</b>	<b>5,53</b>	<b>6,24</b>	<b>6,62</b>	<b>6,89</b>	<b>7,43</b>
Run VMG	<b>3,26</b>	<b>4,09</b>	<b>4,80</b>	<b>5,48</b>	<b>6,09</b>	<b>6,51</b>	<b>7,04</b>
Gybe Angles	<b>147,7°</b>	<b>151,9°</b>	<b>152,7°</b>	<b>157,6°</b>	<b>180,0°</b>	<b>180,0°</b>	<b>180,0°</b>

<b>Sails Limitations</b>
Headsails <b>5</b>
Spinnakers <b>3</b>

<b>Class Division Length</b>
CDL = <b>7,235</b>

<b>Storm Sails Areas</b>
Heavy Weather Jib <b>21,60</b>
Storm Jib (JL=8,22) <b>8,00</b>
Storm Trysail <b>5,86</b>

<b>Owner</b>

<b>BOAT</b>	
Name <b>CREMISE</b>	Sail Nr <b>ESP-5158</b>
File <b>E5158.dxt</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>04/10/2010</b>		SG <b>1,0250</b>	
FFM <b>1,110</b>	FF <b>1,115</b>	SFFP <b>0,540</b>	
FAM <b>0,930</b>	FA <b>0,930</b>	SAFP <b>9,080</b>	
W1 <b>49,550</b>	PD1 <b>416,2</b>	WD <b>10,270</b>	
W2 <b>49,550</b>	PD2 <b>415,2</b>	GSA <b>1,0</b>	
W3 <b>49,550</b>	PD3 <b>4117,4</b>	RSA <b>1,0</b>	
W4 <b>49,550</b>	PD4 <b>418,0</b>	PLM <b>9000,0</b>	
LCF from stem on CL / on sheer		<b>5,605 / 5,770</b>	
Maximum beam station from stem		<b>5,960</b>	
RM Measured		<b>74,6kg·m</b>	
RM Default		<b>79,1kg·m</b>	
Limit of positive stability / Stab.Index		<b>117,8° / 123,4</b>	
Freeboard at mast at 4,190		<b>1,017</b>	

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>1</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>11,190</b>	E <b>2,990</b>	MDT1 <b>0,127</b>	MW <b>0,153</b>
IG <b>12,650</b>	J <b>4,060</b>	MDL1 <b>0,198</b>	GO <b>0,153</b>
ISP <b>12,610</b>	SFJ <b>0,130</b>	MDT2 <b>0,120</b>	BD <b>0,150</b>
BAS <b>1,250</b>	SPL <b>4,060</b>	MDL2 <b>0,153</b>	MWT
FSP <b>0,060</b>	TPS <b>4,060</b>	TL <b>3,430</b>	MCG



World Leader in Rating Technology


## 2016 Measurements Datasheet

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

<b>PROPELLER</b>			
Installation <b>Shaft exposed</b>	PRD <b>0,380</b>		
Type <b>Folding 2 blades</b>	PBW		
Twin Screw <b>No</b>	PIPA <b>0,0047</b>		
PSA <b>19,400</b>	PHL <b>0,130</b>	ST3 <b>0,085</b>	ESL <b>0,680</b>
PSD <b>0,025</b>	ST1 <b>0,100</b>	ST4 <b>0,045</b>	
PHD <b>0,070</b>	ST2 <b>0,080</b>	ST5 <b>0,190</b>	

**Certificate**

Number **515801**  
 ORC Ref **ESP00016057**  
 Issued On **11/02/2016**  
 VPP Ver. **2016 1.00**  
 Valid until **31/12/2016**



<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,070	0,63	1,15	1,96	2,53	20,13	20,38	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	12,92	12,92	12,92	6,98	6,75	74,66	SL · (SFL + 4·SHW) / 6		
<b>Asymmetric</b>									
Not Available									

<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0,11	0,74	1,41	2,82	4,33	5,92	12,40	35,94			18/10/2012		

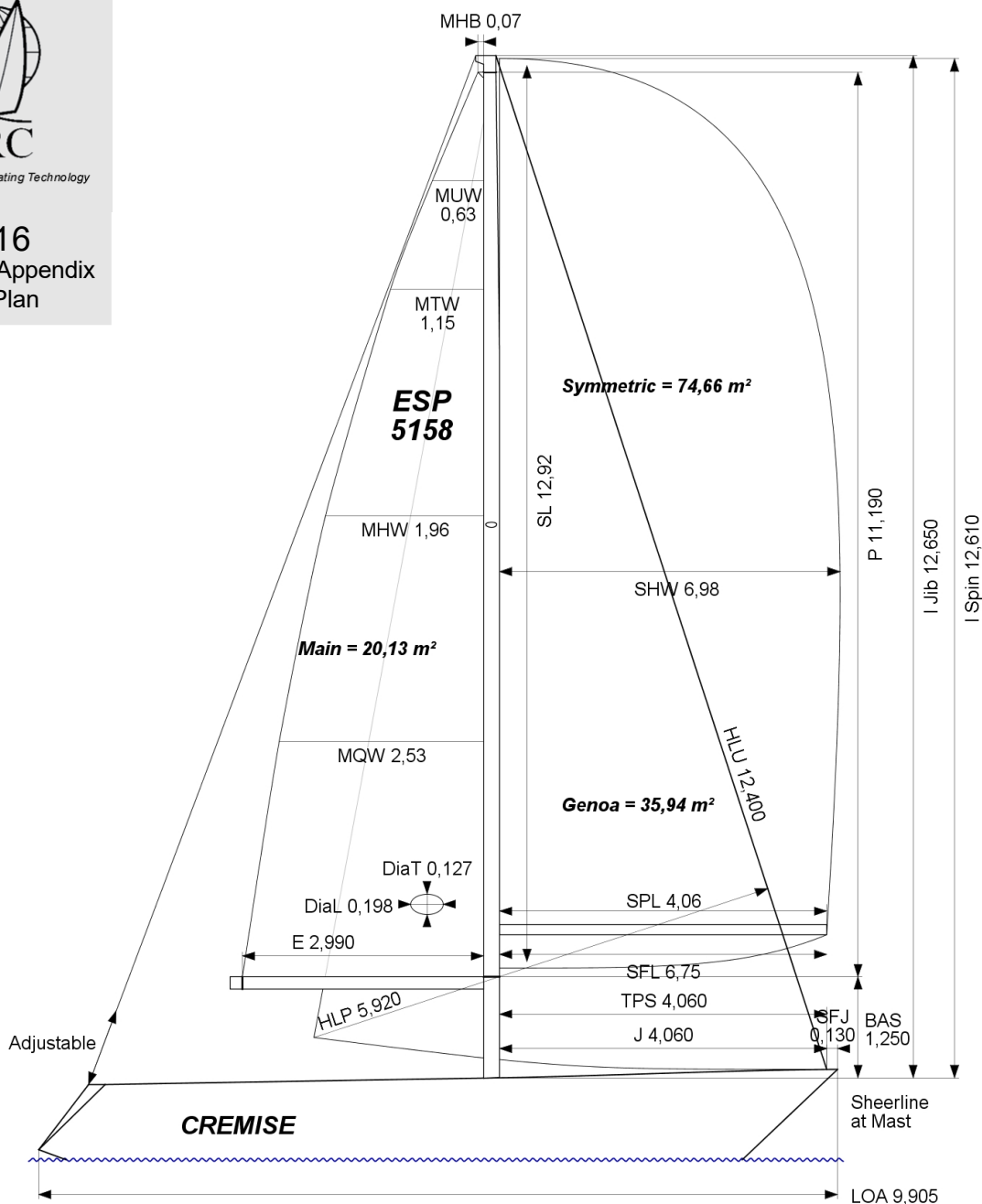
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>JJBELTRAN</b>				
Date <b>04/10/2010</b>				
Comment				
Id	Item	Weight	Distance	VCG Description
+	Anchor	17,0	4,08	ANCLA
+	Chain	3,0	4,08	CADENA
+	Tools	7,0	5,90	
Id	Item	Maker	Model	
1	Engine	BUOKH	DU2011	
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>				
Id	Item	Weight	Distance	VCG Description
1	Battery	44,0	6,81	2 BATERIAS



World Leader in Rating Technology

2016  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,070	0,63	1,15	1,96	2,53	20,09	jjbeltran	18/10/2012			

**HEADSAILS**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
001	0,11	0,74	1,41	2,82	4,33	5,92	12,40	146%	35,94			jjbeltran	18/10/2012			

**SYMMETRIC SPINNAKERS**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	12,92	12,92	12,92	6,98	6,75	74,66					* Copied from legacy *

**ASYMMETRIC SPINNAKERS**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
----	-----	-----	----	-----	-----	------	------	----------	-----------	-------------	----------	---------