

<b>BOAT</b> Name <b>WEREWOLF</b> Sail Nr <b>GBR-745R</b>	<b>GPH</b> <b>514,5</b>	<b>HULL</b> Length Overall <b>13,901m</b> Maximum Beam <b>4,188m</b> Displacement <b>6.847kg</b> Draft <b>2,883m</b> IMS Reg. Division <b>Performance</b> Dynamic Allowance <b>0,001%</b> Fwd Accommodation <b>No</b> Hull Construction <b>Light</b> Carbon Rudder <b>Yes</b> Crew Arm Extension
<b>GENERAL</b> Class <b>COREL 45</b> Designer <b>B. FARR</b> Builder <b>CARROL</b> Series <b>06/1996</b> Age <b>01/1997</b> Age Allowance <b>0,487%</b> Offset File <b>US30708.off - 06/09/1996 12:52:00</b> Measurement by <b>Tacha Montaner - 15/12/2016</b>		IMSL <b>12,277m</b> VCGD <b>-0,564m</b> Sink <b>25,64kg/mm</b> RL <b>12,067m</b> VCGM <b>-0,568m</b> WS <b>34,76m<sup>2</sup></b> LSMO <b>11,974m</b> Displacement/Length ratio <b>3,9883</b>



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**Rating Office**  
R.F.E.V.  
Luis de Salazar,9  
28002 Madrid  
crucero@rfev.es



SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Time On Distance	<b>501,2</b>			<b>565,3</b>	
Time On Time	<b>1,1970</b>			<b>1,1940</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>585,6</b>	<b>458,0</b>	<b>401,5</b>	<b>762,0</b>	<b>569,6</b>	<b>493,3</b>
Time on Time	<b>1,1526</b>	<b>1,4737</b>	<b>1,6810</b>	<b>0,8858</b>	<b>1,1851</b>	<b>1,3684</b>

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>866,1</b>	<b>707,6</b>	<b>637,7</b>	<b>607,9</b>	<b>591,4</b>	<b>576,8</b>	<b>569,5</b>
52°	<b>561,6</b>	<b>467,1</b>	<b>438,7</b>	<b>427,8</b>	<b>421,2</b>	<b>414,3</b>	<b>404,4</b>
60°	<b>524,7</b>	<b>448,1</b>	<b>424,2</b>	<b>412,5</b>	<b>404,5</b>	<b>398,8</b>	<b>383,9</b>
75°	<b>492,1</b>	<b>434,8</b>	<b>407,8</b>	<b>387,8</b>	<b>376,6</b>	<b>369,5</b>	<b>356,3</b>
90°	<b>491,7</b>	<b>434,5</b>	<b>406,1</b>	<b>378,2</b>	<b>356,9</b>	<b>344,1</b>	<b>330,9</b>
110°	<b>518,7</b>	<b>436,8</b>	<b>402,6</b>	<b>382,6</b>	<b>363,8</b>	<b>348,2</b>	<b>302,7</b>
120°	<b>536,9</b>	<b>443,8</b>	<b>406,4</b>	<b>373,3</b>	<b>354,3</b>	<b>337,9</b>	<b>299,1</b>
135°	<b>597,6</b>	<b>478,0</b>	<b>428,7</b>	<b>396,6</b>	<b>364,0</b>	<b>330,9</b>	<b>280,2</b>
150°	<b>711,8</b>	<b>565,1</b>	<b>479,6</b>	<b>432,2</b>	<b>402,9</b>	<b>373,2</b>	<b>314,5</b>
Run VMG	<b>821,9</b>	<b>652,5</b>	<b>553,8</b>	<b>493,2</b>	<b>455,2</b>	<b>423,6</b>	<b>363,1</b>

**Certificate**  
Number **74501**  
ORC Ref **ESP00021173**  
Issued On **01/02/2017**  
VPP Ver. **2017 1.00**  
Valid until **31/12/2017**

**Crew Weight**  
Declared **890kg**  
Default\* **890kg**  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>520,3</b>	<b>1,1532</b>
Double H.OSN	<b>509,0</b>	<b>1,1789</b>
Non Spin GPH	<b>544,6</b>	<b>1,1017</b>
Non Spin OSN	<b>532,7</b>	<b>1,1263</b>

Selected Courses	844,0	680,1	595,8	550,5	523,3	500,2	466,3
Windward / Leeward	<b>844,0</b>	<b>680,1</b>	<b>595,8</b>	<b>550,5</b>	<b>523,3</b>	<b>500,2</b>	<b>466,3</b>
Circular Random	<b>706,5</b>	<b>571,7</b>	<b>499,7</b>	<b>457,3</b>	<b>429,8</b>	<b>409,8</b>	<b>380,3</b>
Ocean for PCS	<b>871,3</b>	<b>673,3</b>	<b>562,0</b>	<b>493,3</b>	<b>447,2</b>	<b>413,0</b>	<b>361,5</b>
Non Spinnaker	<b>759,6</b>	<b>609,8</b>	<b>528,2</b>	<b>479,4</b>	<b>447,8</b>	<b>425,6</b>	<b>395,2</b>

**Sails Limitations**

Headsails	Spinnakers
<b>7</b>	<b>5</b>

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>43,4°</b>	<b>42,6°</b>	<b>40,1°</b>	<b>39,0°</b>	<b>37,9°</b>	<b>37,1°</b>	<b>37,1°</b>
Beat VMG	<b>4,16</b>	<b>5,09</b>	<b>5,65</b>	<b>5,92</b>	<b>6,09</b>	<b>6,24</b>	<b>6,32</b>
52°	<b>6,41</b>	<b>7,71</b>	<b>8,21</b>	<b>8,41</b>	<b>8,55</b>	<b>8,69</b>	<b>8,90</b>
60°	<b>6,86</b>	<b>8,03</b>	<b>8,49</b>	<b>8,73</b>	<b>8,90</b>	<b>9,03</b>	<b>9,38</b>
75°	<b>7,32</b>	<b>8,28</b>	<b>8,83</b>	<b>9,28</b>	<b>9,56</b>	<b>9,74</b>	<b>10,10</b>
90°	<b>7,32</b>	<b>8,29</b>	<b>8,86</b>	<b>9,52</b>	<b>10,09</b>	<b>10,46</b>	<b>10,88</b>
110°	<b>6,94</b>	<b>8,24</b>	<b>8,94</b>	<b>9,41</b>	<b>9,90</b>	<b>10,34</b>	<b>11,89</b>
120°	<b>6,70</b>	<b>8,11</b>	<b>8,86</b>	<b>9,64</b>	<b>10,16</b>	<b>10,65</b>	<b>12,03</b>
135°	<b>6,02</b>	<b>7,53</b>	<b>8,40</b>	<b>9,08</b>	<b>9,89</b>	<b>10,88</b>	<b>12,85</b>
150°	<b>5,06</b>	<b>6,37</b>	<b>7,51</b>	<b>8,33</b>	<b>8,94</b>	<b>9,65</b>	<b>11,45</b>
Run VMG	<b>4,38</b>	<b>5,52</b>	<b>6,50</b>	<b>7,30</b>	<b>7,91</b>	<b>8,50</b>	<b>9,91</b>
Gybe Angles	<b>142,8°</b>	<b>142,1°</b>	<b>148,0°</b>	<b>155,2°</b>	<b>164,5°</b>	<b>180,0°</b>	<b>146,0°</b>

**Class Division Length**  
CDL = **12,173**

**Storm Sails Areas**

Heavy Weather Jib	<b>44,45</b>
Storm Jib (JL=11,79)	<b>16,46</b>
Storm Trysail	<b>22,25</b>

**Owner**

<b>BOAT</b>	
Name <b>WEREWOLF</b>	Sail Nr <b>GBR-745R</b>
File <b>GBR745R</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Boom Inclining</b>		
Flotation date <b>15/12/2016</b>	SG <b>1,0250</b>	
FFM <b>1,501</b>	FF <b>1,497</b>	SFFP <b>0,201</b>
FAM <b>1,125</b>	FA <b>1,132</b>	SAFP <b>13,110</b>
W1 <b>90,8</b>	PD1 <b>155,8</b>	WD <b>6,085</b>
W2 <b>90,8</b>	PD2 <b>155,7</b>	GSA <b>1,0</b>
W3 <b>90,8</b>	PD3 <b>154,4</b>	RSA <b>1,0</b>
W4 <b>90,8</b>	PD4 <b>154,8</b>	PLM <b>9000,0</b>
LCF from stem on CL / on sheer		<b>7,637 / 7,883</b>
Maximum beam station from stem		<b>8,733</b>
RM Measured		<b>280,4kg·m</b>
RM Default		<b>249,3kg·m</b>
Limit of positive stability / Stab.Index		<b>137,1° / 135,4</b>
Freeboard at mast at 5,450		<b>1,300</b>



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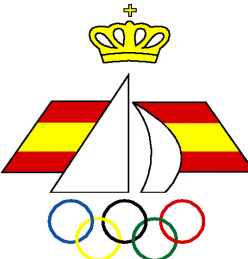
**2017**

**IMS Measurement Certificate**

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>3</b>		Runners <b>0</b>
Inner Stay <b>None Fitted</b>	Carbon Mast <b>Yes</b>		Jumper Struts <b>None</b>
Taper Hollows <b>No</b>	Fiber Rigging <b>Yes</b>		Jib Furler <b>No</b>
Lenticular Rigging <b>No</b>	Main Furler <b>No</b>		Without Backstay <b>No</b>
Articulated Bowsprit <b>No</b>			
P <b>18,810</b>	E <b>6,760</b>	MDT1 <b>0,135</b>	MW <b>0,250</b>
IG <b>18,029</b>	J <b>5,450</b>	MDL1 <b>0,250</b>	GO <b>0,285</b>
ISP <b>19,349</b>	SFJ <b>0,000</b>	MDT2 <b>0,095</b>	BD <b>0,293</b>
BAS <b>1,929</b>	SPL <b>5,970</b>	MDL2 <b>0,160</b>	MWT <b>250,00</b>
FSP <b>0,072</b>	TPS	TL <b>2,450</b>	MCG <b>6,200</b>

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

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0,423</b>	
Type <b>Folding 2 blades</b>	PBW <b>0,114</b>	
Twin Screw <b>No</b>	PIPA <b>0,0037</b>	
ST1 <b>0,042</b>	ST3 <b>0,180</b>	ST5 <b>0,280</b>
ST2 <b>0,180</b>	ST4 <b>0,110</b>	EDL <b>0,698</b>

<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
	0,000	1,43	2,56	4,40	0,00	76,39 78,07 $P/8 \cdot (E + 2 \cdot MQW + 2 \cdot MHW + 1.5 \cdot MTW + MUW + 0.5 \cdot MHB)$
Symmetric	SLU	SLE	SL	SHW	SFL	Area Formula
	19,90	19,90	19,90	11,00	10,76	181,62 $SL \cdot (SFL + 4 \cdot SHW) / 6$
Asymmetric	Not Available					

<b>HEADSAILS</b>												
Area = $0.1125 \cdot HLU \cdot (1.445 \cdot HLP + 2 \cdot HQW + 2 \cdot HHW + 1.5 \cdot HTW + HUW + 0.5 \cdot HHB)$												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0,96	1,60	2,96			5,59	18,20	52,94	Y			Carbon	

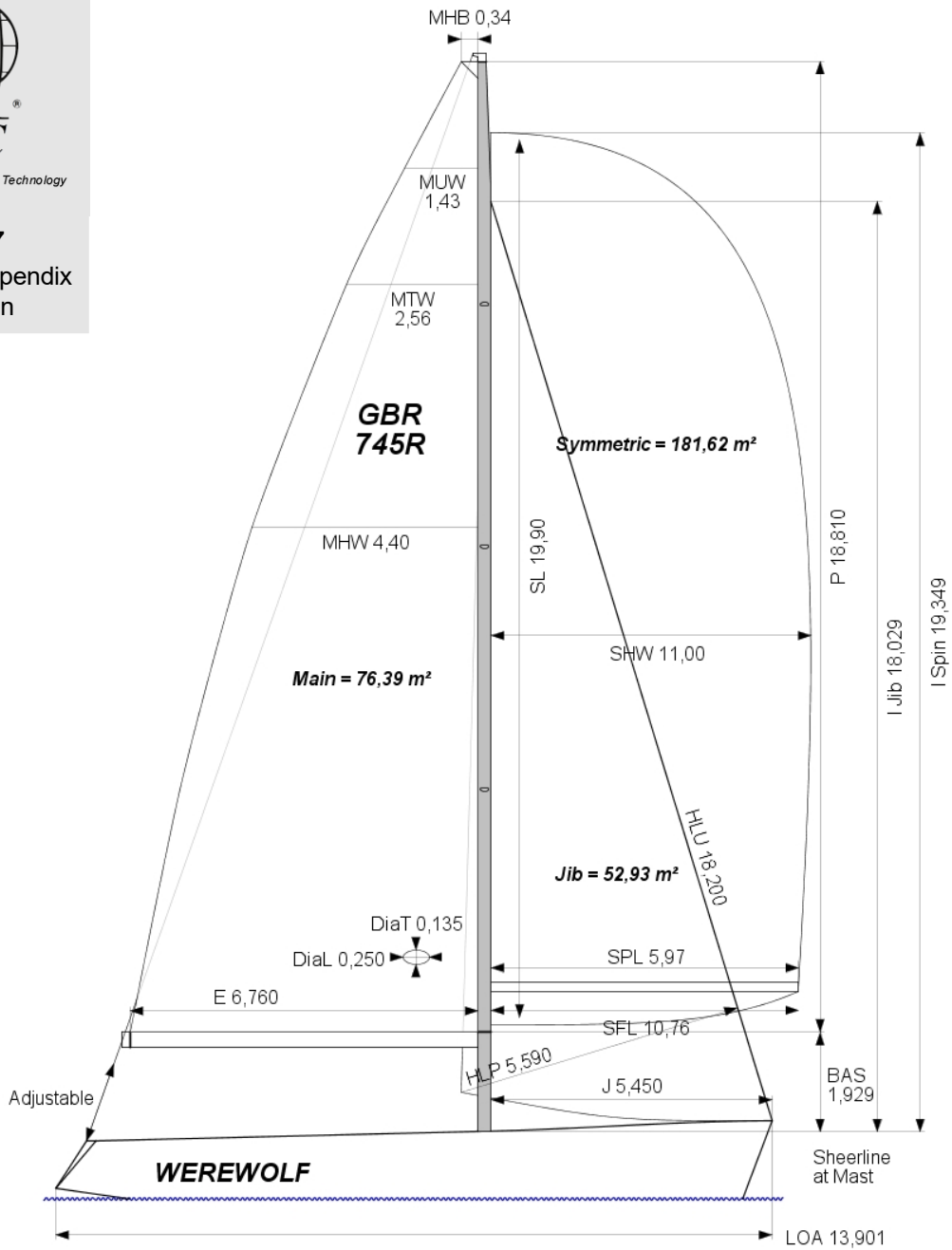
<b>MEASUREMENT INVENTORY</b>				
Measurer <b>Tacha Montaner ESP-222</b>				
Date <b>15/12/2016</b>				
Comment <b>Boom Inclining</b>				
Id	Item	Weight	Distance	VCG Description
Id	Item	Weight	Description	

<b>MEASUREMENT INVENTORY</b>									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank	Fuel			75,0	10,00	0,00	75,0	
Id	Item	Weight	Distance	VCG	Description				



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Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQU	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1		1,43	2,56	4,40		76,39	IRC Endorsed			Unknown	

**HEADSAILS (1)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1		0,96	1,60	2,96		5,59	18,20	103%	52,94	Y		IRC			Carbon	

**SYMMETRIC SPINNAKERS (1)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	19,90	19,90	19,90	11,00	10,76	181,62	IRC Endorsed			Nylon	

**ASYMMETRIC SPINNAKERS (0)**

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