

<b>BOAT</b> Name <b>WASP</b> Sail Nr <b>USA 7192</b>	<b>GPH</b> <b>550.8</b>	<b>HULL</b> Length Overall <b>13.110m</b> Maximum Beam <b>3.914m</b> Displacement <b>8,546kg</b> Draft <b>2.269m</b> Plan Review IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.000%</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>J133</b> Designer <b>Johnstone</b> Builder <b>TPI</b> Series <b>01/2003</b> Age <b>01/2005</b> Age Allowance <b>0.487%</b> Offset File <b>US31188.OFF - 17/11/2003 14:05:00</b> Measurement by - <b>08/03/2020</b>		IMSL <b>11.996m</b> VCGD <b>-0.101m</b> Sink <b>25.68kg/mm</b> RL <b>10.663m</b> VCGM <b>-0.120m</b> WS <b>35.17m<sup>2</sup></b> LSM0 <b>11.926m</b> Displacement/Length ratio <b>5.0382</b>



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>538.3</b>			<b>606.0</b>		
Time on Time	<b>1.1147</b>			<b>1.1138</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>622.2</b>	<b>489.9</b>	<b>442.5</b>	<b>810.8</b>	<b>605.8</b>	<b>539.6</b>
Time on Time	<b>1.0848</b>	<b>1.3779</b>	<b>1.5253</b>	<b>0.8325</b>	<b>1.1142</b>	<b>1.2510</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>919.0</b>	<b>756.2</b>	<b>679.2</b>	<b>646.7</b>	<b>631.1</b>	<b>623.2</b>	<b>611.7</b>
52°	<b>598.3</b>	<b>501.7</b>	<b>465.3</b>	<b>453.5</b>	<b>447.9</b>	<b>444.7</b>	<b>441.0</b>
60°	<b>563.1</b>	<b>481.5</b>	<b>452.9</b>	<b>442.0</b>	<b>436.2</b>	<b>432.8</b>	<b>430.0</b>
75°	<b>535.7</b>	<b>468.5</b>	<b>443.4</b>	<b>429.0</b>	<b>419.6</b>	<b>413.5</b>	<b>407.0</b>
90°	<b>521.8</b>	<b>455.6</b>	<b>432.8</b>	<b>419.4</b>	<b>409.0</b>	<b>396.7</b>	<b>381.8</b>
110°	<b>534.6</b>	<b>459.6</b>	<b>430.8</b>	<b>408.6</b>	<b>387.9</b>	<b>371.5</b>	<b>350.1</b>
120°	<b>561.5</b>	<b>468.4</b>	<b>433.4</b>	<b>409.5</b>	<b>389.8</b>	<b>369.4</b>	<b>333.9</b>
135°	<b>637.1</b>	<b>501.7</b>	<b>448.4</b>	<b>421.7</b>	<b>395.7</b>	<b>370.0</b>	<b>321.6</b>
150°	<b>755.7</b>	<b>602.4</b>	<b>502.8</b>	<b>450.8</b>	<b>430.2</b>	<b>412.1</b>	<b>366.1</b>
Run VMG	<b>872.6</b>	<b>695.6</b>	<b>580.6</b>	<b>520.5</b>	<b>495.8</b>	<b>468.8</b>	<b>422.7</b>

**Certificate**  
Number **US6527**  
ORC Ref **0341000HPO**  
Issued On **04/05/2020**  
VPP Ver. **2020 1.01**  
Valid until **31/12/2020**

**Crew Weight**  
Default **885kg**  
Maximum **885kg**  
Minimum\* **664kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**  
ToD ToT  
Non Spin GPH **586.0 1.0239**  
Non Spin OSN **572.9 1.0474**

Selected Courses							
Windward / Leeward	<b>895.8</b>	<b>725.9</b>	<b>629.9</b>	<b>583.6</b>	<b>563.4</b>	<b>546.0</b>	<b>517.2</b>
Circular Random	<b>750.7</b>	<b>609.0</b>	<b>534.6</b>	<b>492.6</b>	<b>467.1</b>	<b>449.9</b>	<b>425.0</b>
Coastal / Long Distance	<b>893.5</b>	<b>681.1</b>	<b>568.7</b>	<b>509.3</b>	<b>479.9</b>	<b>453.3</b>	<b>407.4</b>
Non Spinnaker	<b>812.7</b>	<b>653.8</b>	<b>568.2</b>	<b>518.2</b>	<b>487.0</b>	<b>466.4</b>	<b>440.0</b>

**Sails Limitations**  
Headsails **6** Spinnakers **4**

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>43.5°</b>	<b>42.0°</b>	<b>41.1°</b>	<b>39.4°</b>	<b>38.6°</b>	<b>38.3°</b>	<b>37.9°</b>
Beat VMG	<b>3.92</b>	<b>4.76</b>	<b>5.30</b>	<b>5.57</b>	<b>5.70</b>	<b>5.78</b>	<b>5.89</b>
52°	<b>6.02</b>	<b>7.18</b>	<b>7.74</b>	<b>7.94</b>	<b>8.04</b>	<b>8.10</b>	<b>8.16</b>
60°	<b>6.39</b>	<b>7.48</b>	<b>7.95</b>	<b>8.15</b>	<b>8.25</b>	<b>8.32</b>	<b>8.37</b>
75°	<b>6.72</b>	<b>7.68</b>	<b>8.12</b>	<b>8.39</b>	<b>8.58</b>	<b>8.71</b>	<b>8.84</b>
90°	<b>6.90</b>	<b>7.90</b>	<b>8.32</b>	<b>8.58</b>	<b>8.80</b>	<b>9.07</b>	<b>9.43</b>
110°	<b>6.73</b>	<b>7.83</b>	<b>8.36</b>	<b>8.81</b>	<b>9.28</b>	<b>9.69</b>	<b>10.28</b>
120°	<b>6.41</b>	<b>7.69</b>	<b>8.31</b>	<b>8.79</b>	<b>9.24</b>	<b>9.75</b>	<b>10.78</b>
135°	<b>5.65</b>	<b>7.18</b>	<b>8.03</b>	<b>8.54</b>	<b>9.10</b>	<b>9.73</b>	<b>11.19</b>
150°	<b>4.76</b>	<b>5.98</b>	<b>7.16</b>	<b>7.99</b>	<b>8.37</b>	<b>8.74</b>	<b>9.83</b>
Run VMG	<b>4.13</b>	<b>5.18</b>	<b>6.20</b>	<b>6.92</b>	<b>7.26</b>	<b>7.68</b>	<b>8.52</b>
Gybe Angles	<b>143.0°</b>	<b>146.0°</b>	<b>146.5°</b>	<b>151.5°</b>	<b>151.5°</b>	<b>175.0°</b>	<b>143.8°</b>

**Class Division Length**  
CDL = **11.328**

**Storm Sails Areas**  
Heavy Weather Jib **41.36**  
Storm Jib (JL=11.38) **15.32**  
Storm Trysail **16.15**

**Owner**

<b>BOAT</b>	
Name <b>WASP</b>	Sail Nr <b>USA 7192</b>
File <b>US6527</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/Checkstays <b>0</b>
Carbon Mast <b>Yes</b>	Jib Furler <b>No</b>
Fiber Rigging <b>No</b>	Main Furler <b>No</b>
Non-Circular Rigging <b>No</b>	
Articulated Bowsprit <b>No</b>	

P <b>16.440</b>	E <b>5.611</b>	MDT1 <b>0.135</b>	MW <b>0.233</b>
IG <b>17.475</b>	J <b>5.231</b>	MDL1 <b>0.251</b>	GO <b>0.241</b>
ISP <b>18.453</b>	SFJ <b>0.000</b>	MDT2 <b>0.101</b>	BD <b>0.203</b>
BAS <b>1.695</b>	SPL	MDL2 <b>0.161</b>	MWT <b>240.50</b>
FSD <b>0.035</b>	TPS <b>7.282</b>	TL <b>0.830</b>	MCG <b>6.046</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Boom Inclining</b>	LCFD <b>6.772</b>		
Flotation date <b>08/03/2020</b>	SG <b>1.0060</b>		
FFM <b>1.357</b>	FF <b>1.356</b>	SFFP <b>0.994</b>	
FAM <b>1.031</b>	FA <b>1.056</b>	SAFP <b>12.274</b>	
W1 <b>127.7</b>	PD1 <b>238.2</b>	WD <b>5.433</b>	
W2 <b>127.7</b>	PD2 <b>240.5</b>	GSA <b>1.0</b>	
W3 <b>127.7</b>	PD3 <b>239.9</b>	RSA <b>1.0</b>	
W4 <b>127.7</b>	PD4 <b>241.1</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer	<b>7.238 / 7.477</b>		
Maximum beam station from stem	<b>7.702</b>		
RM Measured	<b>227.7kg-m</b>		
RM Default	<b>223.1kg-m</b>		
Limit of positive stability / Stab.Index	<b>121.9° / 126.5</b>		
Freeboard at mast at 5.231	<b>1.216</b>		



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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.463</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.115</b>		
Twin Screw <b>No</b>	PIPA <b>0.0038</b>		
ST1 <b>0.048</b>	ST3 <b>0.175</b>	ST5 <b>0.275</b>	
ST2 <b>0.175</b>	ST4 <b>0.112</b>	EDL <b>1.530</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>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.17	1.17	2.13	3.64	4.70	54.95	56.02	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	20.72	18.17	19.45	12.58	12.46	203.46	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>HBB</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>Flying</b>	<b>Meas.Date</b>	<b>Material</b>	<b>Comment</b>
0.10	2.01	3.98	7.43	9.34	9.85	19.36	121.53	N	Yes	20/03/2020	Carbon	73% HSF
0.12	1.00	1.93	3.88	5.90	8.05	17.26	68.24		No	07/03/2020	Carbon	

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date <b>20/03/2020</b>				
Comment				
<b>Internal Ballast total = 0.0</b>				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
1	Engine			Yanmar 4JH4L
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

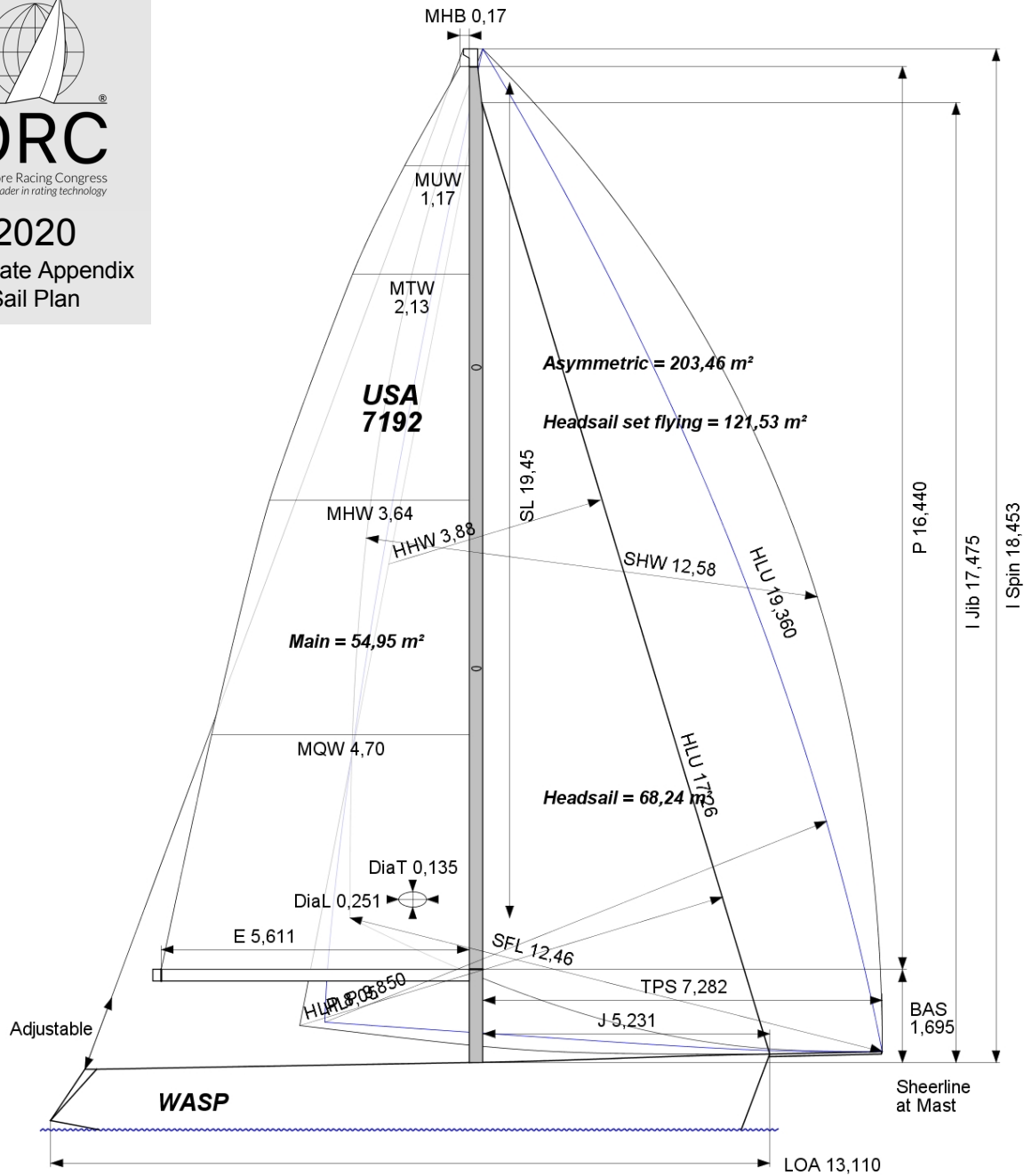
<b>MEASUREMENT INVENTORY</b>								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
4	Tank	Waste	PVC	45.0	1.50	0.50	0-0	CL
3	Tank	Water	PVC	91.0	6.10	0.00	0-0	Stbd
2	Tank	Waste	PVC	91.0	9.80	0.70	0-0	Port
1	Tank	Fuel	Alloy	200.0	9.80	0.00	200-0	Stbd CL
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				
3	Battery	50.0	6.40	0.50 2x 12V AGM Decca 8A31DTM house, port				
2	Battery	50.0	7.80	0.00 2x 12V AGM Decca 8A31DTM house, port				
1	Battery	25.0	9.80	0.00 12V AGM Optima SC40 DM engine, CL				



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**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M1	0.17	1.17	2.13	3.64	4.70	54.96		07/03/2020	North	Unknown	

**HEADSAILS (2)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
A0	0.10	2.01	3.98	7.43	9.34	9.85	19.36	188%	121.53	N	Yes		20/03/2020	Quantum	Carbon	73% HSF
Genoa	0.12	1.00	1.93	3.88	5.90	8.05	17.26	154%	68.24		No		07/03/2020	North	Carbon	

**SYMMETRIC SPINNAKERS (0)**

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
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**ASYMMETRIC SPINNAKERS (1)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A2	20.72	18.17	19.45	12.58	12.46	203.46	asym		07/03/2020	North	Nylon	