

<b>BOAT</b> Name <b>J-80 ONE DESIGN</b> Sail Nr <b>J80-</b>	<b>GPH</b> <b>661.5</b>	<b>HULL</b> Length Overall <b>8.032m</b> Maximum Beam <b>2.488m</b> Displacement <b>1.438kg</b> Draft <b>1.501m</b> IMS Reg. Division <b>Sportboat</b> Dynamic Allowance <b>0.150%</b> Fwd Accommodation <b>No</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension <b>0.00</b>
<b>GENERAL</b> Class <b>J-80 OD</b> Designer <b>JOHNSTONE</b> Builder <b>J-COMPOSITE</b> Series <b>01/1995</b> Age <b>01/2010</b> Age Allowance <b>0.487%</b> Offset File <b>j80.od - 11/04/2019 22:12:01</b> Measurement by <b>DSV - 02/09/2002</b>		IMSL <b>7.237m</b> VCGD <b>-0.150m</b> Sink <b>8.99kg/mm</b> RL <b>7.210m</b> VCGM <b>-0.076m</b> WS <b>11.89m<sup>2</sup></b> LSMO <b>6.967m</b> Displacement/Length ratio <b>4.2523</b>



**2019 (Test)**  
ORC International  
One Design Certificate

<b>Rating Office</b>
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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>644.9</b>			<b>726.7</b>		
Time on Time	<b>0.9303</b>			<b>0.9288</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>741.1</b>	<b>592.1</b>	<b>526.8</b>	<b>951.6</b>	<b>726.7</b>	<b>640.3</b>
Time on Time	<b>0.9108</b>	<b>1.1400</b>	<b>1.2814</b>	<b>0.7093</b>	<b>0.9288</b>	<b>1.0542</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1117.4</b>	<b>921.4</b>	<b>817.5</b>	<b>786.4</b>	<b>775.9</b>	<b>768.9</b>	<b>763.8</b>
52°	<b>730.0</b>	<b>619.6</b>	<b>577.9</b>	<b>563.3</b>	<b>557.1</b>	<b>554.3</b>	<b>545.3</b>
60°	<b>689.5</b>	<b>598.1</b>	<b>564.3</b>	<b>546.7</b>	<b>538.2</b>	<b>533.7</b>	<b>522.0</b>
75°	<b>661.6</b>	<b>583.3</b>	<b>551.9</b>	<b>526.3</b>	<b>507.3</b>	<b>497.6</b>	<b>490.2</b>
90°	<b>645.6</b>	<b>568.9</b>	<b>547.2</b>	<b>520.7</b>	<b>492.6</b>	<b>470.4</b>	<b>447.7</b>
110°	<b>631.3</b>	<b>555.4</b>	<b>514.7</b>	<b>488.5</b>	<b>472.0</b>	<b>452.9</b>	<b>419.3</b>
120°	<b>647.0</b>	<b>560.5</b>	<b>514.8</b>	<b>473.9</b>	<b>446.9</b>	<b>425.8</b>	<b>389.0</b>
135°	<b>722.9</b>	<b>592.1</b>	<b>539.6</b>	<b>495.0</b>	<b>452.1</b>	<b>408.6</b>	<b>332.6</b>
150°	<b>851.3</b>	<b>679.7</b>	<b>588.8</b>	<b>546.2</b>	<b>514.0</b>	<b>473.1</b>	<b>371.9</b>
Run VMG	<b>983.0</b>	<b>784.9</b>	<b>679.9</b>	<b>630.0</b>	<b>584.0</b>	<b>546.3</b>	<b>429.5</b>

<b>Certificate</b> Number <b>J80</b> ORC Ref <b>N/A</b> Issued on <b>11/04/2019</b> VPP Ver. <b>2019 1.01</b> <b>Invalid for Racing</b>
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<b>Crew Weight</b> Default <b>411kg</b> Maximum <b>350kg</b> Minimum* <b>263kg</b> <i>*when applied by the NoR and SI</i> Non Manual Pwr <b>No</b>
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<b>Special Scoring</b> ToD ToT Double H.GPH <b>675.7 0.8880</b> Double H.OSN <b>661.1 0.9076</b> Non Spin GPH <b>707.5 0.8481</b> Non Spin OSN <b>686.0 0.8747</b>
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Selected Courses							
Windward / Leeward	<b>1050.2</b>	<b>853.2</b>	<b>748.7</b>	<b>708.2</b>	<b>680.0</b>	<b>657.6</b>	<b>596.6</b>
Circular Random	<b>895.7</b>	<b>730.1</b>	<b>643.1</b>	<b>592.9</b>	<b>560.5</b>	<b>536.3</b>	<b>496.5</b>
Coastal / Long Distance	<b>1043.5</b>	<b>802.9</b>	<b>680.9</b>	<b>617.5</b>	<b>578.1</b>	<b>541.8</b>	<b>473.8</b>
Non Spinnaker	<b>982.5</b>	<b>789.6</b>	<b>685.9</b>	<b>625.3</b>	<b>587.5</b>	<b>561.7</b>	<b>525.7</b>

<b>Sails Limitations</b> Headsails <b>5</b> Spinnakers <b>3</b>
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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>42.5°</b>	<b>41.2°</b>	<b>38.9°</b>	<b>37.8°</b>	<b>37.5°</b>	<b>37.2°</b>	<b>38.1°</b>
Beat VMG	<b>3.22</b>	<b>3.91</b>	<b>4.40</b>	<b>4.58</b>	<b>4.64</b>	<b>4.68</b>	<b>4.71</b>
52°	<b>4.93</b>	<b>5.81</b>	<b>6.23</b>	<b>6.39</b>	<b>6.46</b>	<b>6.49</b>	<b>6.60</b>
60°	<b>5.22</b>	<b>6.02</b>	<b>6.38</b>	<b>6.59</b>	<b>6.69</b>	<b>6.75</b>	<b>6.90</b>
75°	<b>5.44</b>	<b>6.17</b>	<b>6.52</b>	<b>6.84</b>	<b>7.10</b>	<b>7.24</b>	<b>7.34</b>
90°	<b>5.58</b>	<b>6.33</b>	<b>6.58</b>	<b>6.91</b>	<b>7.31</b>	<b>7.65</b>	<b>8.04</b>
110°	<b>5.70</b>	<b>6.48</b>	<b>6.99</b>	<b>7.37</b>	<b>7.63</b>	<b>7.95</b>	<b>8.59</b>
120°	<b>5.56</b>	<b>6.42</b>	<b>6.99</b>	<b>7.60</b>	<b>8.06</b>	<b>8.45</b>	<b>9.25</b>
135°	<b>4.98</b>	<b>6.08</b>	<b>6.67</b>	<b>7.27</b>	<b>7.96</b>	<b>8.81</b>	<b>10.82</b>
150°	<b>4.23</b>	<b>5.30</b>	<b>6.11</b>	<b>6.59</b>	<b>7.00</b>	<b>7.61</b>	<b>9.68</b>
Run VMG	<b>3.66</b>	<b>4.59</b>	<b>5.29</b>	<b>5.71</b>	<b>6.16</b>	<b>6.59</b>	<b>8.38</b>
Gybe Angles	<b>144.7°</b>	<b>147.8°</b>	<b>149.9°</b>	<b>150.7°</b>	<b>176.3°</b>	<b>144.2°</b>	<b>140.7°</b>

<b>Class Division Length</b> CDL = <b>7.224</b>
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<b>Storm Sails Areas</b> Heavy Weather Jib <b>12.35</b> Storm Jib (JL=6.22) <b>4.58</b> Storm Trysail <b>6.10</b>
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<b>Owner</b>          I certify that I understand my responsibilities under ORC Rules and Regulations Signature
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<b>BOAT</b>	
Name <b>J-80 ONE DESIGN</b>	Sail Nr <b>J80-</b>
File <b>j80</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Enter VCG directly</b>			
Flotation date <b>31/03/2016</b>		SG <b>1.0250</b>	
VCGDe <b>-0.150</b>			
FFM <b>0.877</b>	FF <b>0.877</b>	SFFP <b>0.177</b>	
FAM <b>0.627</b>	FA <b>0.627</b>	SAFP <b>8.015</b>	
LCF from stem on CL / on sheer		<b>4.276 / 4.432</b>	
Maximum beam station from stem		<b>4.712</b>	
RM Measured		<b>27.0kg·m</b>	
RM Default		<b>27.7kg·m</b>	
Limit of positive stability / Stab.Index		<b>111.7° / 104.9</b>	
Freeboard at mast at 2.895		<b>0.744</b>	



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**IMS Measurement Certificate**

<b>RIG</b>			
Forestay Tension <b>Aft</b>	Spreaders <b>2</b>		Runners <b>0</b>
Inner Stay <b>None Fitted</b>	Jumper Struts <b>None</b>		Jib Furler <b>Yes</b>
Carbon Mast <b>No</b>	Main Furler <b>No</b>		Without Backstay <b>No</b>
Taper Hollows <b>No</b>	Articulated Bowsprit <b>No</b>		
Fiber Rigging <b>No</b>			
Lenticular Rigging <b>No</b>			
P <b>9.144</b>	E <b>3.810</b>	MDT1 <b>0.082</b>	MW <b>0.133</b>
IG <b>9.563</b>	J <b>2.895</b>	MDL1 <b>0.133</b>	GO <b>0.133</b>
ISP <b>10.073</b>	SFJ <b>0.000</b>	MDT2 <b>0.063</b>	BD <b>0.094</b>
BAS <b>1.300</b>	SPL <b>0.104</b>	MDL2 <b>0.104</b>	MWT <b>33.10</b>
FSP <b>0.054</b>	TPS <b>4.800</b>	TL <b>0.380</b>	MCG <b>3.210</b>

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

<b>PROPELLER</b>	
Type <b>No Propeller</b>	

<b>Certificate</b>
Number <b>J80</b>
ORC Ref <b>N/A</b>
Issued On <b>11/04/2019</b>
VPP Ver. <b>2019 1.01</b>
<b>Invalid for Racing</b>

<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
N/A	

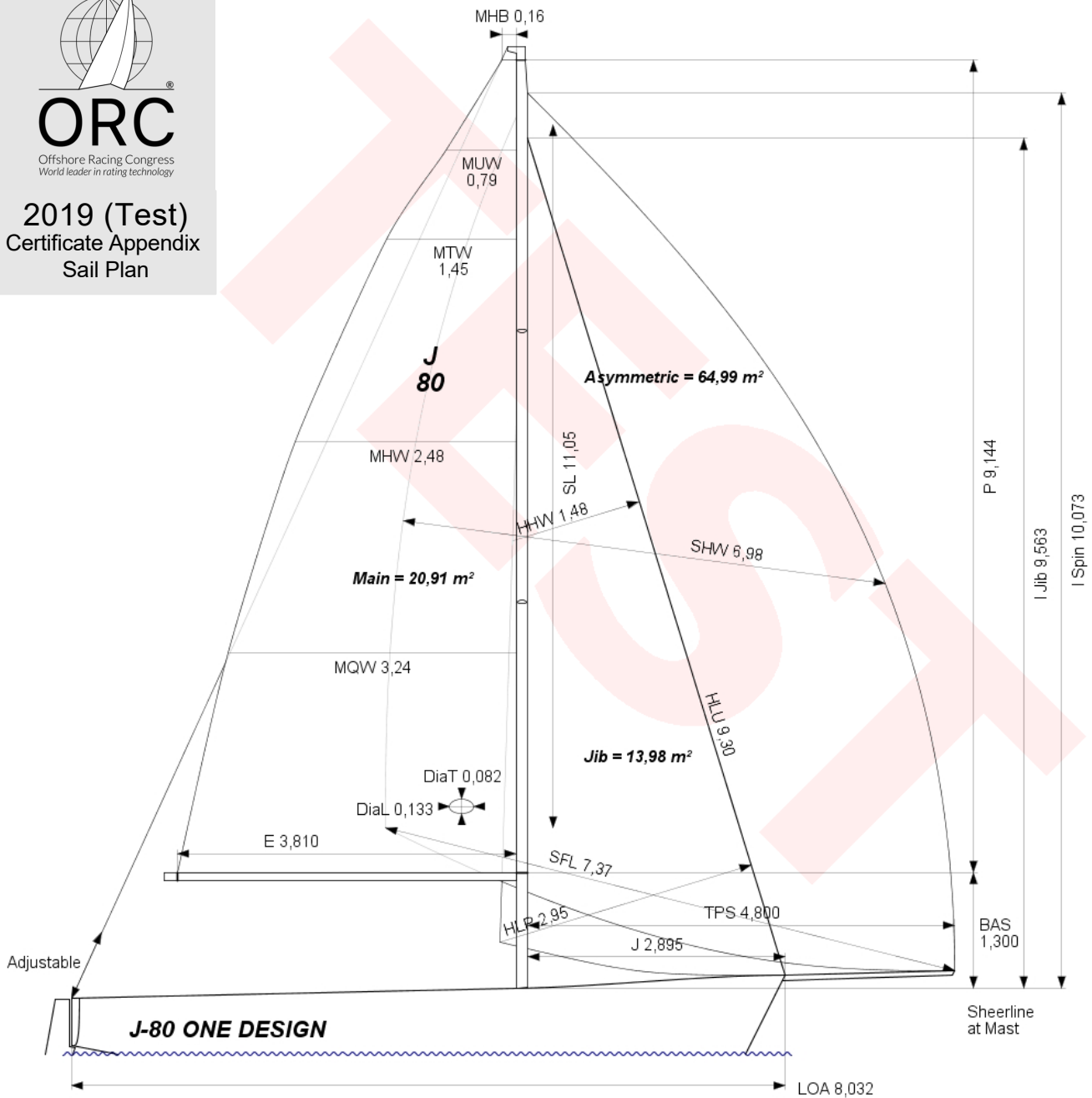
<b>SAILS (Maximum Areas)</b>												
<b>Mainsail</b>	<b>MHB</b>	<b>MUW</b>	<b>MTW</b>	<b>MHW</b>	<b>MQW</b>	<b>Area</b>	<b>Area (r)</b>	<b>Formula</b>				
	0.160	0.79	1.45	2.48	3.24	20.91	21.53	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)				
<b>Symmetric</b>												
Not Available												
<b>Asymmetric on centerline</b>	<b>SLU</b>	<b>SLE</b>	<b>SL</b>	<b>SHW</b>	<b>SFL</b>	<b>Area</b>	<b>Formula</b>					
	12.20	9.90	11.05	6.98	7.37	64.99	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>
0.08			1.48		2.95	9.30	13.98					* Copied from legacy *



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**2019 (Test)  
Certificate Appendix  
Sail Plan**



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.16	0.79	1.45	2.48	3.24	20.92					* Copied from legacy

**HEADSAILS (1)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
ORC	0.08			1.48		2.95	9.30	102%	13.98							* Copied from legacy *

**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
ORC	12.20	9.90	11.05	6.98	7.37	65.00	asym	OD			Polyester	