

<b>BOAT</b> Name <b>Sitella</b> Sail Nr <b>USA 99</b>	<b>GPH</b> <b>542.2</b>	<b>HULL</b> Length Overall <b>13.305m</b> Maximum Beam <b>4.054m</b> Displacement <b>9,100kg</b> Draft <b>2.924m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.068%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>Xp 44</b> Designer <b>JEPPESEN</b> Builder <b>X YACHTS</b> Series <b>12/2010</b> Age <b>03/2016</b> Age Allowance <b>0.260%</b> Offset File <b>US6099A.OFF - 06/04/2018 20:14:32</b> Measurement by - <b>17/03/2016</b>		IMSLS <b>12.268m</b> VCGD <b>-0.152m</b> Sink <b>27.12kg/mm</b> RL <b>11.413m</b> VCGM <b>-0.120m</b> WS <b>37.21m<sup>2</sup></b> LSM0 <b>12.036m</b> Displacement/Length ratio <b>5.2191</b>



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2018**  
ORC International  
Certificate

**Rating Office**

Offshore  
Racing  
Congress



**Invalid for  
Racing**

**ORC**  
World Leader In Rating Technology

<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>526.8</b>			<b>591.7</b>		
Time on Time	<b>1.1389</b>			<b>1.1407</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>619.2</b>	<b>480.1</b>	<b>431.2</b>	<b>801.2</b>	<b>590.8</b>	<b>522.4</b>
Time on Time	<b>1.0901</b>	<b>1.4061</b>	<b>1.5653</b>	<b>0.8425</b>	<b>1.1426</b>	<b>1.2922</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>917.4</b>	<b>750.7</b>	<b>661.3</b>	<b>625.0</b>	<b>610.0</b>	<b>602.8</b>	<b>585.8</b>
52°	<b>604.5</b>	<b>502.9</b>	<b>458.0</b>	<b>442.0</b>	<b>435.9</b>	<b>432.8</b>	<b>426.1</b>
60°	<b>573.4</b>	<b>482.4</b>	<b>446.4</b>	<b>431.3</b>	<b>424.4</b>	<b>420.6</b>	<b>415.2</b>
75°	<b>550.8</b>	<b>469.5</b>	<b>438.4</b>	<b>421.3</b>	<b>408.8</b>	<b>400.8</b>	<b>393.8</b>
90°	<b>549.8</b>	<b>461.1</b>	<b>438.9</b>	<b>419.8</b>	<b>403.4</b>	<b>388.2</b>	<b>367.7</b>
110°	<b>537.2</b>	<b>451.0</b>	<b>420.3</b>	<b>405.4</b>	<b>392.2</b>	<b>380.0</b>	<b>356.4</b>
120°	<b>550.0</b>	<b>455.9</b>	<b>422.0</b>	<b>397.0</b>	<b>378.7</b>	<b>364.3</b>	<b>338.2</b>
135°	<b>623.2</b>	<b>490.6</b>	<b>439.1</b>	<b>412.4</b>	<b>385.7</b>	<b>359.2</b>	<b>309.6</b>
150°	<b>740.3</b>	<b>590.5</b>	<b>492.9</b>	<b>441.7</b>	<b>421.0</b>	<b>402.1</b>	<b>354.3</b>
Run VMG	<b>854.8</b>	<b>681.9</b>	<b>569.2</b>	<b>509.8</b>	<b>484.9</b>	<b>458.4</b>	<b>409.2</b>

**Certificate**

Number **US6099**  
ORC Ref **USAX0169COC**  
Issued On **09/04/2018**  
VPP Ver. **2018 1.00**  
Valid until **31/12/2018**

**Crew Weight**

Default **897kg**  
Maximum **1,091kg**  
Minimum\* **818kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>584.2</b>	<b>1.0270</b>
Non Spin OSN	<b>567.7</b>	<b>1.0568</b>

<b>Selected Courses</b>							
Windward / Leeward	<b>886.1</b>	<b>716.3</b>	<b>615.2</b>	<b>567.4</b>	<b>547.4</b>	<b>530.6</b>	<b>497.5</b>
Circular Random	<b>745.3</b>	<b>601.7</b>	<b>525.9</b>	<b>482.8</b>	<b>456.5</b>	<b>438.7</b>	<b>412.2</b>
Coastal / Long Distance	<b>883.0</b>	<b>672.5</b>	<b>557.0</b>	<b>496.5</b>	<b>467.2</b>	<b>441.9</b>	<b>396.8</b>
Non Spinnaker	<b>821.4</b>	<b>655.9</b>	<b>565.7</b>	<b>512.5</b>	<b>479.2</b>	<b>457.0</b>	<b>427.9</b>

**Sails Limitations**

Headsails	Spinnakers
<b>7</b>	<b>5</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>42.4°</b>	<b>41.0°</b>	<b>39.9°</b>	<b>38.4°</b>	<b>37.8°</b>	<b>37.5°</b>	<b>36.8°</b>
Beat VMG	<b>3.92</b>	<b>4.80</b>	<b>5.44</b>	<b>5.76</b>	<b>5.90</b>	<b>5.97</b>	<b>6.15</b>
52°	<b>5.96</b>	<b>7.16</b>	<b>7.86</b>	<b>8.15</b>	<b>8.26</b>	<b>8.32</b>	<b>8.45</b>
60°	<b>6.28</b>	<b>7.46</b>	<b>8.06</b>	<b>8.35</b>	<b>8.48</b>	<b>8.56</b>	<b>8.67</b>
75°	<b>6.54</b>	<b>7.67</b>	<b>8.21</b>	<b>8.55</b>	<b>8.81</b>	<b>8.98</b>	<b>9.14</b>
90°	<b>6.55</b>	<b>7.81</b>	<b>8.20</b>	<b>8.58</b>	<b>8.92</b>	<b>9.27</b>	<b>9.79</b>
110°	<b>6.70</b>	<b>7.98</b>	<b>8.57</b>	<b>8.88</b>	<b>9.18</b>	<b>9.47</b>	<b>10.10</b>
120°	<b>6.54</b>	<b>7.90</b>	<b>8.53</b>	<b>9.07</b>	<b>9.51</b>	<b>9.88</b>	<b>10.64</b>
135°	<b>5.78</b>	<b>7.34</b>	<b>8.20</b>	<b>8.73</b>	<b>9.33</b>	<b>10.02</b>	<b>11.63</b>
150°	<b>4.86</b>	<b>6.10</b>	<b>7.30</b>	<b>8.15</b>	<b>8.55</b>	<b>8.95</b>	<b>10.16</b>
Run VMG	<b>4.21</b>	<b>5.28</b>	<b>6.32</b>	<b>7.06</b>	<b>7.42</b>	<b>7.85</b>	<b>8.80</b>
Gybe Angles	<b>143.1°</b>	<b>145.8°</b>	<b>146.5°</b>	<b>151.6°</b>	<b>151.7°</b>	<b>175.3°</b>	<b>143.3°</b>

**Class Division Length**

CDL = **11.842**

**Storm Sails Areas**

Heavy Weather Jib **44.80**  
Storm Jib (JL=11.85) **16.60**  
Storm Trysail **18.66**

**Owner**

<b>BOAT</b>	
Name <b>Sitella</b>	Sail Nr <b>USA 99</b>
File <b>US6099</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>Yes</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>17.912</b>	E <b>5.950</b> MDT1 <b>0.132</b> MW <b>0.260</b>
IG <b>18.162</b>	J <b>4.993</b> MDL1 <b>0.260</b> GO <b>0.275</b>
ISP <b>19.857</b>	SFJ <b>0.285</b> MDT2 <b>0.118</b> BD <b>0.300</b>
BAS <b>1.745</b>	SPL <b>0.000</b> MDL2 <b>0.191</b> MWT <b>272.00</b>
FSP <b>0.080</b>	TPS <b>6.327</b> TL <b>1.600</b> MCG <b>6.485</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Current Inclining</b>		
Flotation date <b>16/05/2016</b>		SG <b>1.0200</b>
FFM <b>1.511</b>	FF <b>1.513</b>	SFFP <b>0.744</b>
FAM <b>1.225</b>	FA <b>1.226</b>	SAFP <b>13.259</b>
W1 <b>112.0</b>	PD1 <b>489.0</b>	WD <b>14.195</b>
W2 <b>112.0</b>	PD2 <b>485.9</b>	GSA <b>1.0</b>
W3 <b>112.0</b>	PD3 <b>502.3</b>	RSA <b>1.0</b>
W4 <b>112.0</b>	PD4 <b>500.6</b>	PLM <b>9000.0</b>
LCF from stem on CL / on sheer		<b>7.399 / 7.656</b>
Maximum beam station from stem		<b>9.119</b>
RM Measured		<b>253.3kg-m</b>
RM Default		<b>261.4kg-m</b>
Limit of positive stability / Stab.Index		<b>127.6° / 131.8</b>
Freeboard at mast at 5.278		<b>1.351</b>



**2018**  
IMS Measurement  
Certificate

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

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0.457</b>	
Type <b>Folding 3 blades</b>	PBW <b>0.120</b>	
Twin Screw	PIPA <b>0.0041</b>	
ST1 <b>0.050</b>	ST3 <b>0.180</b> ST5 <b>0.320</b>	
ST2 <b>0.180</b>	ST4 <b>0.112</b> EDL <b>2.650</b>	

<b>Certificate</b>	
Number <b>US6099</b>	
ORC Ref <b>USAX0169COC</b>	
Issued On <b>09/04/2018</b>	
VPP Ver. <b>2018 1.00</b>	
Valid until <b>31/12/2018</b>	

<b>COMMENTS</b>

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

<b>BILGEBOARD</b>		
BS	BT	BA
BF	BX	
BC	BY	



World Leader In Rating Technology

<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.100	1.26	2.26	3.87	5.03	63.70	64.91	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		
	22.30	20.33	21.32	12.36	11.31	215.81	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)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.10	0.83	1.54	2.80	4.03	5.34	18.10	50.02	Y	N			

<b>MEASUREMENT INVENTORY</b>				
Measurer	Date	Comment		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
a	Anchor	0.0	0.00	
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

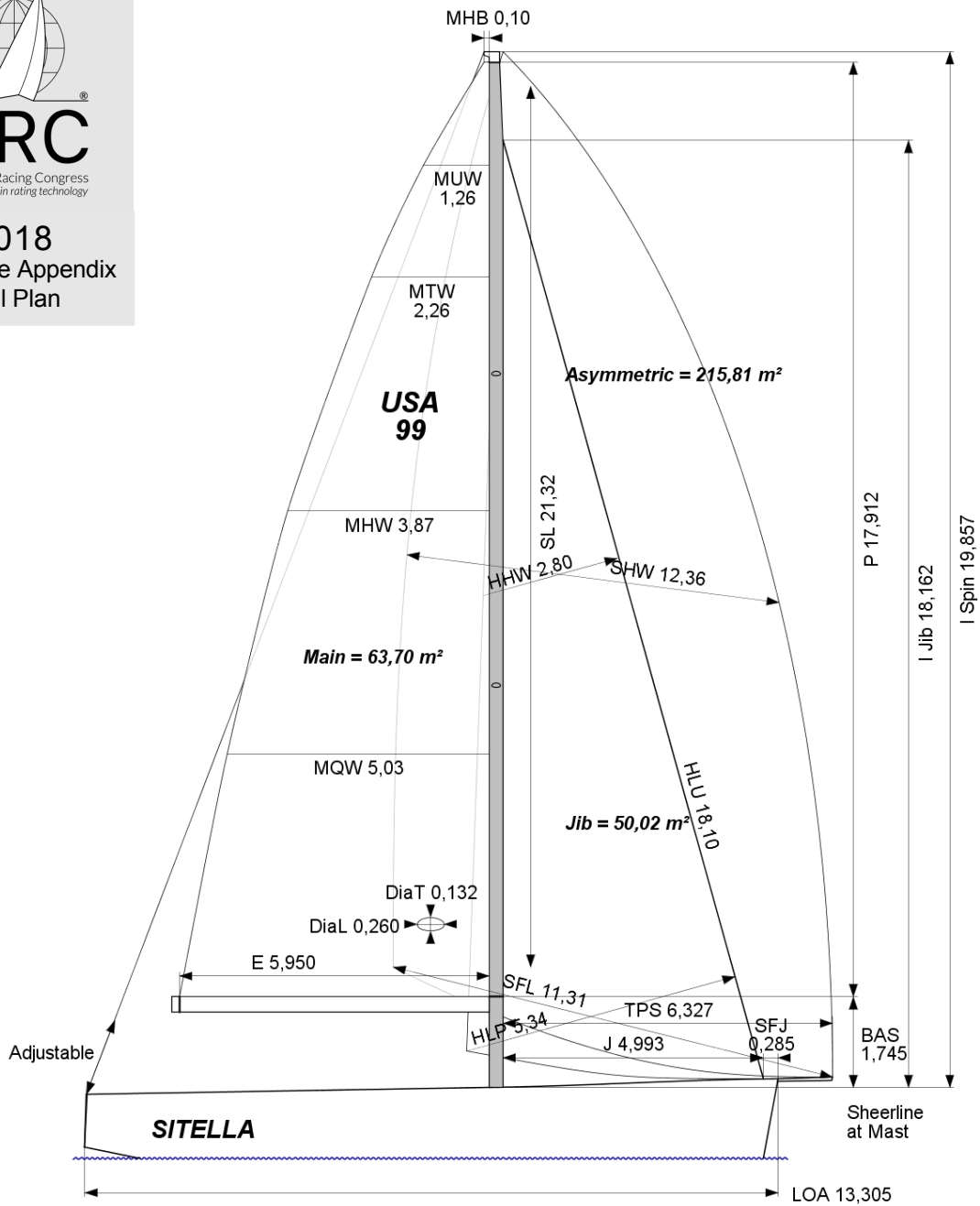
<b>MEASUREMENT INVENTORY</b>								
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>
	Tank				0.00	0.00	0.0	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>				



**ORC**

Offshore Racing Congress  
World leader in rating technology

**2018**  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1569614	0.10	1.26	2.26	3.87	5.03	63.70			Quantum		

**HEADSAILS (1)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1569622	0.10	0.83	1.54	2.80	4.03	5.34	18.10	107%	50.02	Y	N			Quantum		

**SYMMETRIC SPINNAKERS (0)**

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

**ASYMMETRIC SPINNAKERS (1)**

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
1710348	22.30	20.33	21.31	12.36	11.31	215.82	asym			David Flynn		David Flynn Quantum ASYM