

<b>BOAT</b> Name <b>Cool Breeze</b> Sail Nr <b>USA 60432</b>	<b>GPH</b> <b>531.8</b>	<b>HULL</b> Length Overall <b>13.160m</b> Maximum Beam <b>3.721m</b> Displacement <b>8,295kg</b> Draft <b>2.820m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.000%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Cored</b> Carbon Rudder <b>No</b> Crew Arm Extension <b>0.00</b>
<b>GENERAL</b> Class <b>MILLS 43 CUSTOM</b> Designer <b>Mark Mills</b> Builder <b>Vision Yachts</b> Series <b>02/2008</b> Age <b>02/2008</b> Age Allowance <b>0.357%</b> Offset File <b>US42510.OFF - 22/10/2015 15:02:14</b> Measurement by - <b>01/11/2016</b>		IMSL <b>11.896m</b> VCGD <b>-1.129m</b> Sink <b>22.69kg/mm</b> RL <b>12.139m</b> VCGM <b>-1.085m</b> WS <b>34.49m<sup>2</sup></b> LSM0 <b>11.363m</b> Displacement/Length ratio <b>5.6538</b>



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>516.1</b>			<b>578.4</b>		
Time on Time	<b>1.1625</b>			<b>1.1671</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>605.8</b>	<b>472.3</b>	<b>418.8</b>	<b>783.3</b>	<b>578.6</b>	<b>507.5</b>
Time on Time	<b>1.1142</b>	<b>1.4292</b>	<b>1.6119</b>	<b>0.8617</b>	<b>1.1667</b>	<b>1.3301</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>896.1</b>	<b>732.5</b>	<b>644.9</b>	<b>606.1</b>	<b>588.8</b>	<b>579.9</b>	<b>563.5</b>
52°	<b>587.7</b>	<b>490.7</b>	<b>452.4</b>	<b>436.3</b>	<b>428.1</b>	<b>423.2</b>	<b>417.3</b>
60°	<b>554.8</b>	<b>472.6</b>	<b>442.5</b>	<b>426.7</b>	<b>415.8</b>	<b>409.4</b>	<b>402.9</b>
75°	<b>529.3</b>	<b>461.0</b>	<b>435.1</b>	<b>417.3</b>	<b>401.2</b>	<b>387.5</b>	<b>373.4</b>
90°	<b>534.3</b>	<b>456.9</b>	<b>434.6</b>	<b>416.1</b>	<b>397.6</b>	<b>379.0</b>	<b>348.2</b>
110°	<b>527.4</b>	<b>448.4</b>	<b>417.9</b>	<b>399.5</b>	<b>386.3</b>	<b>371.5</b>	<b>339.7</b>
120°	<b>540.3</b>	<b>452.5</b>	<b>420.3</b>	<b>392.6</b>	<b>370.2</b>	<b>354.1</b>	<b>321.6</b>
135°	<b>608.9</b>	<b>481.5</b>	<b>436.5</b>	<b>409.7</b>	<b>381.8</b>	<b>352.7</b>	<b>293.6</b>
150°	<b>726.1</b>	<b>577.2</b>	<b>486.0</b>	<b>438.8</b>	<b>418.8</b>	<b>398.3</b>	<b>341.7</b>
Run VMG	<b>838.4</b>	<b>666.5</b>	<b>561.1</b>	<b>506.3</b>	<b>482.3</b>	<b>454.6</b>	<b>394.6</b>

**Certificate**

Number **US6111**  
ORC Ref **USAX01UE4IN**  
Issued On **15/01/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**

Default **826kg**  
Maximum **1,020kg**  
Minimum\* **765kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>572.1</b>	<b>1.0488</b>
Non Spin OSN	<b>556.6</b>	<b>1.0779</b>

Selected Courses							
Windward / Leeward	<b>867.2</b>	<b>699.5</b>	<b>603.0</b>	<b>556.2</b>	<b>535.5</b>	<b>517.3</b>	<b>479.1</b>
Circular Random	<b>729.9</b>	<b>590.3</b>	<b>516.2</b>	<b>473.4</b>	<b>446.2</b>	<b>426.6</b>	<b>395.5</b>
Coastal / Long Distance	<b>864.4</b>	<b>657.5</b>	<b>547.5</b>	<b>488.1</b>	<b>457.6</b>	<b>430.7</b>	<b>380.7</b>
Non Spinnaker	<b>802.9</b>	<b>642.2</b>	<b>554.4</b>	<b>502.0</b>	<b>468.6</b>	<b>445.5</b>	<b>413.5</b>

**Sails Limitations**

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

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>42.6°</b>	<b>41.2°</b>	<b>39.4°</b>	<b>37.6°</b>	<b>36.5°</b>	<b>36.0°</b>	<b>35.0°</b>
Beat VMG	<b>4.02</b>	<b>4.91</b>	<b>5.58</b>	<b>5.94</b>	<b>6.11</b>	<b>6.21</b>	<b>6.39</b>
52°	<b>6.13</b>	<b>7.34</b>	<b>7.96</b>	<b>8.25</b>	<b>8.41</b>	<b>8.51</b>	<b>8.63</b>
60°	<b>6.49</b>	<b>7.62</b>	<b>8.14</b>	<b>8.44</b>	<b>8.66</b>	<b>8.79</b>	<b>8.94</b>
75°	<b>6.80</b>	<b>7.81</b>	<b>8.27</b>	<b>8.63</b>	<b>8.97</b>	<b>9.29</b>	<b>9.64</b>
90°	<b>6.74</b>	<b>7.88</b>	<b>8.28</b>	<b>8.65</b>	<b>9.05</b>	<b>9.50</b>	<b>10.34</b>
110°	<b>6.83</b>	<b>8.03</b>	<b>8.61</b>	<b>9.01</b>	<b>9.32</b>	<b>9.69</b>	<b>10.60</b>
120°	<b>6.66</b>	<b>7.96</b>	<b>8.57</b>	<b>9.17</b>	<b>9.72</b>	<b>10.17</b>	<b>11.19</b>
135°	<b>5.91</b>	<b>7.48</b>	<b>8.25</b>	<b>8.79</b>	<b>9.43</b>	<b>10.21</b>	<b>12.26</b>
150°	<b>4.96</b>	<b>6.24</b>	<b>7.41</b>	<b>8.21</b>	<b>8.60</b>	<b>9.04</b>	<b>10.54</b>
Run VMG	<b>4.29</b>	<b>5.40</b>	<b>6.42</b>	<b>7.11</b>	<b>7.46</b>	<b>7.92</b>	<b>9.12</b>
Gybe Angles	<b>142.6°</b>	<b>144.6°</b>	<b>147.6°</b>	<b>152.1°</b>	<b>151.6°</b>	<b>176.0°</b>	<b>142.4°</b>

**Class Division Length**

CDL = **12.018**

**Storm Sails Areas**

Heavy Weather Jib **42.53**  
Storm Jib (JL=11.54) **15.75**  
Storm Trysail **18.36**

**Owner**

<b>BOAT</b>	
Name <b>Cool Breeze</b>	Sail Nr <b>USA 60432</b>
File <b>US6111</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Fixed</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>Yes</b>
Articulated Bowsprit <b>No</b>	
P <b>17.480</b>	E <b>6.000</b> MDT1 <b>0.130</b> MW <b>0.262</b>
IG <b>17.748</b>	J <b>5.080</b> MDL1 <b>0.262</b> GO <b>0.262</b>
ISP <b>19.610</b>	SFJ <b>0.120</b> MDT2 <b>0.085</b> BD <b>0.350</b>
BAS <b>1.875</b>	SPL <b>0.000</b> MDL2 <b>0.230</b> MWT <b>164.00</b>
FSP <b>0.076</b>	TPS <b>6.970</b> TL <b>1.800</b> MCG <b>6.020</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Current Inclining</b>			
Flotation date <b>22/10/2015</b>		SG <b>1.0220</b>	
FFM <b>1.357</b>	FF <b>1.359</b>	SFFP <b>0.500</b>	
FAM <b>1.138</b>	FA <b>1.139</b>	SAFP <b>12.967</b>	
W1 <b>109.3</b>	PD1 <b>500.2</b>	WD <b>16.100</b>	
W2 <b>109.3</b>	PD2 <b>500.2</b>	GSA <b>1.0</b>	
W3 <b>109.3</b>	PD3 <b>500.2</b>	RSA <b>1.0</b>	
W4 <b>109.3</b>	PD4 <b>500.2</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>7.040 / 7.251</b>	
Maximum beam station from stem		<b>8.486</b>	
RM Measured		<b>277.0kg-m</b>	
RM Default		<b>204.3kg-m</b>	
Limit of positive stability / Stab.Index		<b>158.9° / 164.6</b>	
Freeboard at mast at 5.200		<b>1.218</b>	



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

<b>PROPELLER</b>			
Installation <b>Strut</b>	PRD <b>0.522</b>		
Type <b>Folding 2 blades</b>	PBW <b>0.115</b>		
Twin Screw <b>No</b>	PIPA <b>0.0040</b>		
ST1 <b>0.068</b>	ST3 <b>0.182</b>	ST5 <b>0.273</b>	
ST2 <b>0.182</b>	ST4 <b>0.115</b>	EDL <b>1.460</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	
	0.180	1.52	2.53	3.96	5.11	64.56	66.14	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		
	21.61	18.36	19.98	12.45	11.89	205.48	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
0.82	1.52	2.78	3.96	5.21	17.56	47.73						2018 headsail

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

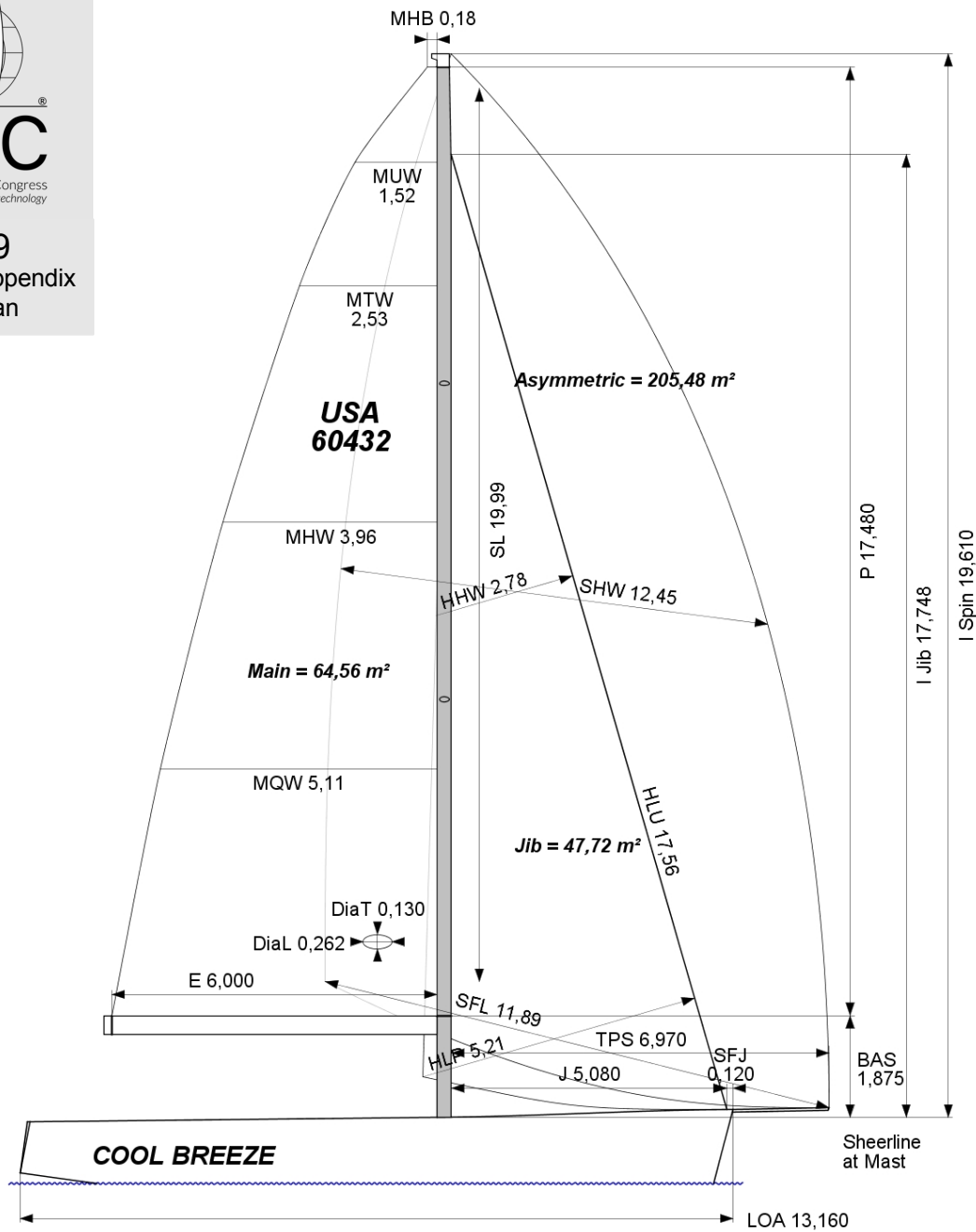
<b>MEASUREMENT INVENTORY</b>									
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>	
	Tank				0.00	0.00	0-0		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>					



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Sail Plan



**SAILS INVENTORY**

MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1956666	0.18	1.52	2.53	3.96	5.11	64.56			john	fries	2018 Mainsail					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovr/tp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1956675		0.82	1.52	2.78	3.96	5.21	17.56	103%	47.73					JOHN		2018 headsail
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				
1956685	21.61	18.36	19.98	12.45	11.89	205.48	asym			JOHN		2018 ASYM				